President's Message

Our mission is to provide you with an academically rich, multicultural learning experience that will prepare you not only to realize your goals and pursue meaningful lifework, but also to be a socially responsible contributor to your community — locally and globally.
General Information

- Academic Calendar
- Admission/Undergraduate
- Admission/Graduate & Post-Bacc
- Degree Information/Baccalaureate
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- Facilities
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Please check the current [Class Schedule](#) for any calendar updates. This calendar is not an employee work calendar. Note: the final examination period extends through the final weekend of the quarter for classes meeting only on weekends.

### Fall Quarter 2011

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 19-20</td>
<td>Opening of fall quarter; faculty meetings, late advising</td>
</tr>
<tr>
<td>Sept. 21</td>
<td>Classes begin</td>
</tr>
<tr>
<td>Nov. 4</td>
<td>Last day to submit thesis to Academic Programs and Graduate Studies Office</td>
</tr>
<tr>
<td>Nov. 11</td>
<td>Veterans Day observed (University closed)</td>
</tr>
<tr>
<td>Nov. 24-25</td>
<td>Thanksgiving recess (University closed)</td>
</tr>
<tr>
<td>Dec. 4</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>Dec. 5-11</td>
<td>Final examinations</td>
</tr>
<tr>
<td>Dec. 11</td>
<td>End of quarter</td>
</tr>
<tr>
<td>Dec. 12-Jan. 8</td>
<td>Academic recess</td>
</tr>
</tbody>
</table>

### Winter Quarter 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 9</td>
<td>Opening of winter quarter; Classes begin</td>
</tr>
<tr>
<td>Jan. 16</td>
<td>Martin Luther King, Jr. Day (University closed)</td>
</tr>
<tr>
<td>Feb. 24</td>
<td>Last day to submit thesis to Academic Programs and Graduate Studies Office</td>
</tr>
<tr>
<td>Mar. 18</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>Mar. 19-25</td>
<td>Final examinations</td>
</tr>
<tr>
<td>Mar. 25</td>
<td>End of quarter</td>
</tr>
<tr>
<td>Mar. 26-Apr. 1</td>
<td>Academic recess</td>
</tr>
<tr>
<td>Mar. 30</td>
<td>Cesar Chavez Day (University closed)</td>
</tr>
</tbody>
</table>

### Spring Quarter 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr. 2</td>
<td>Opening of spring quarter; Classes begin</td>
</tr>
<tr>
<td>May 18</td>
<td>Last day to submit thesis to Academic Programs and Graduate Studies Office</td>
</tr>
<tr>
<td>May 28</td>
<td>Memorial Day observed (University closed)</td>
</tr>
<tr>
<td>June 10</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>June 11-17</td>
<td>Final examinations</td>
</tr>
<tr>
<td>June 15, 16, 17</td>
<td>Commencement Ceremonies</td>
</tr>
<tr>
<td>June 17</td>
<td>End of quarter</td>
</tr>
<tr>
<td>June 18-24</td>
<td>Academic recess</td>
</tr>
</tbody>
</table>

### Summer Quarter 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 25</td>
<td>Opening of summer quarter; Classes begin</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day Observed (University closed)</td>
</tr>
<tr>
<td>Aug. 18</td>
<td>Last day to submit thesis to Academic Programs and Graduate Studies Office</td>
</tr>
<tr>
<td>Sep. 2</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>Sept. 3</td>
<td>Labor Day (University closed)</td>
</tr>
<tr>
<td>Sept. 4-10</td>
<td>Final examinations</td>
</tr>
<tr>
<td>Sept. 10</td>
<td>End of quarter</td>
</tr>
<tr>
<td>Sept. 11-23</td>
<td>Academic recess</td>
</tr>
</tbody>
</table>
Admission/Undergraduate

- How do I become a Cal State East Bay student?
- Who must complete an application?
- What are Cal State East Bay’s admission procedures and policies?
- When should I apply?
- Does the university have any special provisions for enrollment and admission?
- How will I be notified that my application has been received?
- What information is necessary for evaluation of admission eligibility?
- How will I be informed of the admission decision?
- What are the minimum admission requirements for freshmen?
- What are the minimum admission standards for transfer students?
- How will my transfer units be evaluated?
- Are there special admission and eligibility requirements for international students?
- What are the enrollment requirements for transitory (visiting) students?

Cal State East Bay welcomes your application to study at our university. There are three steps to the application process for most prospective students:

1. Complete an online CSU application for admission at [http://www.csumentor.edu](http://www.csumentor.edu).
2. Submit all supplementary documents required such as transcripts and standardized test scores.
3. Cal State East Bay will determine your eligibility based on criteria discussed in this chapter.
4. We notify you of the university’s decision.

**How do I become a Cal State East Bay student?**

- Prospective students, applying for part-time or full-time undergraduate programs of study, in day or evening classes, must file a complete undergraduate application and pay a $55 application fee. The $55 nonrefundable application fee should be in the form of a check or money order payable to “The California State University” or you may use a credit card if you are submitting an online application. The application fee may not be transferred or used to apply to another term. An alternate major may be indicated on the application. The applications of persons denied admission to an impacted and/or closed campus may be re-routed to another campus at no cost, but only if the applicant is CSU eligible.
- Electronic versions of the CSU undergraduate and graduate applications are accessible on the World Wide Web at [http://www.csumentor.edu](http://www.csumentor.edu). The CSUMentor system allows students to browse through general information about CSU's twenty-three campuses, view multimedia campus presentations, send and receive electronic responses to specific questions, and apply for admission and financial aid. Applications may be obtained online. They are also available at any California high school or community college, or from the Admissions Office at any of the California State University campuses.

The CSU encourages the use of the online application at [http://www.csumentor.edu](http://www.csumentor.edu). The university has a limited number of paper applications available for students with legitimate computer access problems, or those who have a legitimate need to work with paper in order to successfully be able to apply to the university.

- Complete all required information, including your Social Security number. (The university uses this number to accurately identify student records and evaluate financial aid applications.) Be certain to accurately enter your academic information. Any misrepresentation could result in an offer of admission being rescinded.
- After you have sent all application materials and fees, you can check the status of your Cal State East Bay application at [https://my.csueastbay.edu](https://my.csueastbay.edu). Cal State East Bay corresponds with applicants by mail and by e-mail, so be sure information on your application is complete and accurate.
- The bachelor's degree major in Nursing also requires a departmental application. If you want to pursue a major in nursing, see the Nursing chapter for special admission requirements.
- The bachelor's degree major in Business Administration also requires a departmental application. If you wish to pursue a major in Business Administration, see the Business Administration chapter for special admissions requirements.
- Time to read this catalog and become familiar with the specific policies and procedures of Cal State East Bay and the CSU system. This will help you to understand your rights and responsibilities, as well as the rights and responsibilities of the university.

**Who must complete an application?**

All students in the following categories must complete an undergraduate admission application:

- High school graduates
- Community college transfer students
- Cal State East Bay students who have not been enrolled for three consecutive quarters
- Students who have a degree from a college or university and want a second baccalaureate degree
- Students who have been enrolled only in Special Sessions, Continuing Education, and Open University
- Students who have attended Cal State East Bay as visiting students from another university
- Students who want to audit classes
- Students who were previously admitted to Cal State East Bay for a particular quarter but did not enroll

**If you are uncertain whether you are required to apply, you can contact Enrollment Management at (510) 885-2784.**

If you have a baccalaureate degree and wish to pursue post-baccalaureate study or a graduate degree, you must submit an application and application fee, even if you are a Cal State East Bay graduate.

The following regulations and procedures govern admission to both the Hayward Hills and Concord campuses. They are subject to change without prior notice if necessary so that university policies are consistent with those established by the Trustees of The California State University.
What are Cal State East Bay's admission procedures and policies?

Requirements for admission to California State University, East Bay are in accordance with Title 5, Chapter 1, Subchapter 3, of the California Code of Regulations. Complete information is available at www.csumentor.edu/planning.

Electronic versions of the CSU undergraduate and graduate applications are accessible on the World Wide Web at http://www.csumentor.edu. The CSUMentor system allows students to browse through general information about CSU's twenty-three campuses, view multimedia campus presentations, send and receive electronic responses to specific questions, and apply for admission and financial aid.

Applying online via www.csumentor.edu is expected unless electronic submission is impossible. An acknowledgement will be sent when online applications have been submitted. Application in "hard copy" form may be obtained online via www.csumentor.edu as a portable data format (PDF). Application forms (in PDF) may also be downloaded from www.calstate.edu/sas/publications. [Paper applications should be mailed to the campus admission office(s).]

We advise all prospective students to supply complete and accurate information on the admission application, residence questionnaire, and financial aid forms. In addition, you must, when requested, submit authentic and official transcripts of all previous academic work attempted. Failure to file complete, accurate, and authentic application documents may result in denial or rescission of admission, cancellation of academic credit, suspension, or expulsion (Section 41301, Article 1.1 of Title 5, California Code of Regulations).

Declaration of Objective

When you apply for undergraduate admission you can state an objective (major and degree) to be pursued. You may also be admitted as an "Undeclared Student." In addition, once you have been enrolled at the university, faculty and staff of the Academic Advising and Career Education Center are available to assist you in selecting a major and degree program. The responsibility for meeting the specific requirements of a program or major rests with you, but your advisor or the department chair of your selected major will help you determine the courses remaining for completion of major requirements. Academic Advising and Career Education may also assist you in determining your General Education requirements.

Impacted Programs

The CSU will announce during the fall filing period those campuses or programs that are impacted. Detailed information on campus and programs impaction will be available at the following websites:

- www.csumentor.edu
- www.calstate.edu/impactioninfo.shtml
- http://www.calstate.edu/sas/impaction-campus-info.shtml

Campuses will communicate its supplementary admission criteria for all impacted programs to high schools and community colleges in their service area and will disseminate this information to the public through appropriate media. This information will also be published at the CSU campus individual website and made available online at www.calstate.edu.

Some programs are impacted at every campus where they are offered; others are impacted only at a few campuses. If you are applying for admission to an impacted program you must file your application during the initial filing period. If you wish to be considered for admission to impacted programs at more than one campus, you should file an application at each campus for which you see admission consideration.

The Nursing major (Clinical portion) and Business Administration are the only impacted programs at Cal State East Bay. Supplementary admission criteria are listed in the undergraduate Nursing and Business Administration chapters.

Supplementary Admission Criteria

Each campus with impacted programs uses supplementary admission criteria in screening applicants. Supplementary criteria may include rank-ordering of freshman applicants based on the CSU Eligibility Index Table (see "Eligibility Index" later in this chapter), or rank-ordering of transfer applicants based on the overall transfer grade point average, completion of specified prerequisite courses, and a combination of campus-developed criteria. Applicants for freshman admission to impacted campuses or programs are required to submit scores on either the SAT or the ACT. For fall admission, applicants should take tests as early as possible, and no later than November or December of the preceding year.

The supplementary admission criteria used by the individual campuses to screen applicants for freshman admission to impacted programs are made available by the campuses to all applicants seeking admission to an impacted program. Details regarding the supplemental admissions criteria are also provided at http://www.calstate.edu/sas/impactioninfo.shtml.

Use of Social Security Number

You are required to include your correct social security number in designated places on your application for admission pursuant to the authority contained in Section 41201, Title 5, California Code of Regulations, and Section 6109 of the Internal Revenue Code (26 U.S.C. 6109). The university uses social security numbers to identify students and their records, including identification for purposes of financial aid eligibility and disbursement and repayment of financial aid and other debts payable to the institution. Also, the Internal Revenue Service requires the university to file information that includes your social security number and other information such as the amount paid for qualified tuition, related expenses, and interest on educational loans. That information is used by the IRS to help determine whether you, or a person claiming you as a dependent, may take a credit or deduction to reduce federal income taxes.

If you are a taxpayer who claims Hope Scholarship or Lifetime Learning tax credit, you are required to provide Cal State East Bay with your name, address, and Taxpayer Identification Number.

When should I apply?

Application Filing Periods

The application filing periods are listed on Application and Document Deadlines page of the university's website.

Cal State East Bay accepts applications until its capacity is reached. (Many campuses limit undergraduate admission in an enrollment category due to overall enrollment limits.) If applying after the initial filing period, consult the campus admission office for current information. Similar information is also available at http://www.csumentor.edu/filing_status/Default.asp.

Does the university have any special provisions for enrollment and admission?

High School Students
High school students may be considered for enrollment in certain special programs if recommended by the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high school graduates. Admission to a special program is valid only for the specific program and does not constitute a right to continued enrollment.

Transfer Policies of CSU campuses

Authority for decisions regarding the transfer of undergraduate credits is delegated to each California State University (CSU) campus. Most commonly, college level credits earned from an institution of higher education accredited by a regional accrediting agency recognized by the United States Department of Education is accepted for transfer to campuses of the CSU.

The CSU General Education-Breadth (GE-Breadth) program allows California community college transfer students to fulfill lower-division general education requirements for any CSU campus prior to transfer. Up to 39 of the 48 GE-Breadth units required can be transferred from and certified by a California college. “Certification” is the official notification from a California community college that a transfer student has completed courses fulfilling lower-division general education requirements. The CSU GE-Breadth certification course list for particular community colleges can be accessed at www.assist.org.

Campuses may enter into articulation agreements on either a course for course or program to program basis. Such articulations are common between CSU campuses and any or all of the California community colleges, but may exist between CSU campuses and other institutions. Established CSU/CCC articulations may be found on www.assist.org.

No more than 70 semester units may be transferred to a CSU campus from an institution which does not offer bachelor's degrees or their equivalents, e.g., community colleges. Given the university's 30-unit residency requirement, no more than 90 total units may be transferred into the university from all sources.

Non-Matriculated Enrollment

More than 1,000 courses taught by regular Cal State East Bay faculty are available to you through Open University. To enroll in an Open University course, you must obtain, complete, and remit an Open University application form each term you wish to attend. Forms are available on the website under "Student Records Forms."

Hardship Petitions

Cal State East Bay has established procedures for consideration of qualified applicants who would be faced with extreme hardship if not admitted. Contact Planning, Enrollment Management, and Student Affairs for information on policies governing hardship admission. See also the "Admissions Appeals" section under "How will I be informed of the admission decision?" in this chapter.

Educational Opportunity Program

The Educational Opportunity Program offers a variety of support services designed to ensure student success at Cal State East Bay. These services include admission assistance, a Summer Bridge program for first-time freshmen, an EOP orientation, academic advisement, personal and career counseling, referral services, and an EOP grant for eligible students.

EOP accepts students who qualify for regular admission, as well as a limited number of students who do not meet regular admission criteria. Only low-income and educationally disadvantaged undergraduate students who need admission assistance and support services to succeed at CSUEB are admitted to EOP. They must demonstrate academic potential and motivation to succeed, be California residents, and meet the income eligibility criteria.

To apply for admission to the program, prospective students must complete the online CSUMentor CSU Application for Undergraduate Admission and check the appropriate box for EOP services. EOP applications are available at http://www.csumentor.edu (the CSUMentor website). Once the Cal State East Bay application is submitted (online), EOP applicants will have access to an online EOP link to the EOP Applicant Information Form and two EOP recommendation letters for online processing for Fall term.

EOP is a high-demand program which only accepts applications for Fall term from applicants new to the CSU system. Currently enrolled and/or previously enrolled students (not formerly in an EOP CSU program) are not eligible to apply. Applicants who submit all required documents will be reviewed and if qualified, will be admitted on a first-come, first-served basis. All EOP freshmen receiving exception admission are required to attend the EOP Summer Bridge program as a condition of their admission for Fall term.

For assistance or for further information about the EOP Admissions Program, please visit the EOP Office at the Library Complex (LI), Room 2500, visit Educational Opportunity Program, email us at eopadmissions@csueastbay.edu or call 510-885-4683.

Veterans

Veterans who meet the admission requirements may attend under full veterans' benefits. Information concerning veterans' programs can be obtained from Enrollment Management.

First-time freshmen and lower division applicants who are California resident veterans of the U.S. Armed Forces, but who do not meet regular entrance requirements may be considered for undergraduate admission if, in our judgment, the veteran has the potential to perform satisfactorily at the collegiate level. To be considered under this provision, you must have served 181 days active duty since 1955 with a discharge or separation under conditions other than dishonorable.

If you wish to be considered under this provision, your application for admission must include supporting documents, including separation papers (DD 214), and a letter petitioning special consideration. Transcripts and test scores are also required.

Adult Students

If you are twenty-five years of age or older, you may also be considered for admission as an adult student if you meet all of the following conditions:

1. You possess a high school diploma (or the equivalent as demonstrated on the Tests of General Educational Development or the California High School Proficiency Examination).
2. You have not enrolled in college as a full-time student for more than one term during the past five years. Part-time enrollment is permissible.
3. If you have attended college in the last five years, you have earned a "C" average or better in all college work attempted.

Your admission will be based upon a judgment as to whether or not you are as likely to succeed as a regularly admitted freshman or transfer student. An assessment of basic skills in the English language and mathematical computation will also be considered in the admission decision.

If you are seeking enrollment as an adult student, you must submit a statement to Planning, Enrollment Management, and Student Affairs.
outlining the factors and experiences which you feel indicate your probable academic success.

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How will I be notified that my application has been received?

On-time applicants may expect to receive an acknowledgment from the campuses to which they applied within two to four weeks of filing an application. This notice may also include a request that applicants submit additional records necessary to evaluate your academic qualifications. An applicant may be assured of admission if the evaluation of relevant qualifications indicates that he or she meets CSU admission requirements, and in the case of admission impaction, Cal State East Bay requirements for admission to an impacted program. Unless specific written approval/confirmation is received, an offer of admission is not transferable to another term or to another campus.

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What information is necessary for evaluation of admission eligibility?

Once an applicant receives an acknowledgment from Cal State East Bay that their application has been received, they will be requested to submit required documents (i.e., transcripts, test scores, etc.), if they have not previously done so. It is the applicant's responsibility to see that all official transcripts are sent directly to Planning, Enrollment Management, and Student Affairs from each previous institution attended. Neither evaluation nor determination of eligibility is possible until all required documents have been received.

1. First-time freshmen must submit transcripts of high school work (grades 9-12). Scores from the ACT or SAT examinations are required, unless exempt (see next paragraph). If the applicant is still in high school, they must submit transcripts of work as instructed and a final transcript after graduation.

First-time freshmen or lower division transfer applicants, whose high school grade point average is at least 3.00 (3.61 for nonresidents) have the test score requirement waived. The applicant's high school grade point average calculation will include only those grades earned in approved college preparatory courses taken during the 10th, 11th, and 12th grades.

2. If the applicant is applying for undergraduate transfer, graduate, or post-baccalaureate admission, they must submit an official transcript from each college or university previously attended, regardless of length of attendance, even if no work was completed.

3. If the applicant is a transfer student with fewer than 90 transferable quarter units (60 semester units) the applicant must, in addition to item #2 above, file one official transcript showing courses and grades earned during high school (grades 9-12), as well as scores from the ACT or SAT examinations. If the applicant's high school grade point average is at least 3.00 (3.61 for nonresidents) the test score requirement will be waived.

4. If the applicant is an international student or non-U.S. citizen, they may be required to submit additional records. See "Are there special admission and eligibility requirements for international students?" in this chapter.

Note: The university has the obligation to determine whether a transcript will be accepted as official. All transcripts and records submitted for admission or readmission become the property of the university. Students may access their academic records according to policies and procedures established by the campus. Applicants must submit transcripts from all colleges and universities they have attended so their entire academic experience can be evaluated. Failure to do so will be grounds for denial of admission or readmission or for dismissal from the university.

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How will I be informed of the admission decision?

After eligibility has been established, the applicant will receive a letter of admission to the university for the term indicated. The applicants will also be informed of residency status.

Applicants may be assured of admission if the evaluation of relevant qualifications indicates that they meet CSU admission requirements, and campus requirements for admission to an impacted program. Unless specific written approval/confirmation is received, an offer of admission is not transferable to another term or to another campus.

The university reserves the right, however, to select its students and to deny admission to the university, or to any of its programs, based upon the university's determination, at its sole discretion, of an applicant's suitability and the best interests of the university.

Re-Routing

If for some reason an applicant cannot be accommodated at Cal State East Bay, their application will be redirected to their second choice unless they are seeking admission to a system-wide impacted program or the alternate campus has reached its capacity in your chosen program of study.

Admissions Appeals

If they do not meet published admission eligibility standards, they may petition the Admissions Appeals Committee for reconsideration. The petition may be by form or letter, and must include a statement of extenuating factors which includes the potential hardship to be incurred if admission is denied, as well as the reason an applicant's past record is not indicative of present capabilities. There is a limit on the number of exceptions to published admission criteria which the campus may grant. The Committee, therefore, considers a number of factors, normally favoring applicants who are close to qualifying and upper division students.

If the applicant comes from a disadvantaged background or is a veteran, they may be considered under other criteria.

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What are the minimum admission requirements for freshmen?

Generally, first-time freshman applicants will qualify for regular admission if they meet the following requirements:

- have graduated from high school, have earned a Certificate of General Education Development (GED) or have passed the California High School Proficiency Examination; and
- have a qualifiable minimum eligibility index (see the Eligibility Index Table in this section); and
- have completed, with grades of "C" or better, each of the courses in the comprehensive pattern of college preparatory subject requirements, also known as the "a-g" pattern. (See "Subject Requirements" later in this section.) Courses must be completed prior to your enrollment in The California State University (special high school programs are exempted from this rule).

Eligibility Index

The eligibility index is the combination of the high school grade point average and scores on either the American College Test (ACT) or the SAT
(Math and Critical Reading sections only). Grade point averages (GPA) are based on grades earned in courses taken during the final three years of high school. Included in the calculation of the GPA are grades earned in all college preparatory "a-g" subject requirements, and bonus points for approved honors courses (excluding physical education and military science).

Up to eight semesters of honors courses taken in the last three years of high school (including up to two approved courses taken in the tenth grade) can be accepted. Each unit of "A" in an honors course will receive a total of 5 points; "B," 4 points; and "C," 3 points. Up to two 11th grade IB, AP or honors courses with 11th or 12th grade course content taken in 10th grade also receive bonus points.

A CSU Eligibility Index (EI) can be calculated by multiplying your grade point average by 800 and adding your total score on the SAT (the mathematics and critical reading scores). If you took the ACT, multiply your grade point average by 200 and add ten times the ACT composite score. Persons who are California high school graduates (or residents of California for tuition purposes), need a minimum index of 2900 using the SAT or 694 using the ACT. The Eligibility Index Table illustrates several combinations of required test scores and averages. If you apply for admission before you graduate from high school, you should compute your GPA using grades earned in courses completed after the 9th grade. Do not include grades you expect to earn in courses during the remainder of the 12th grade.

For admission to terms during the 2011-2012 college year, the university has no plans to include the writing scores from either of the admissions tests in the computation of the CSU Eligibility Index.

Persons who neither graduated from a California high school nor are a resident of California for tuition purposes, need a minimum index of 3502 (SAT) or 842 (ACT). Graduates of secondary schools in foreign countries must be judged to have academic preparation and abilities equivalent to applicants eligible under this section. (See Are there special admission and eligibility requirements for international students? in this chapter.)

An applicant with a grade point average of 3.00 or above (3.61 for nonresidents), is not required to submit test scores. However, all applicants for admission are urged to take the SAT or ACT and provide the scores of such tests to each CSU to which they seek admission. Campuses use these test results for advising and placement purposes and may require them for admission to impacted majors or programs. Impacted CSU campuses require SAT or ACT scores of all applicants for freshman admission.

An applicant will qualify for regular admission when the university verifies that you have graduated from high school, have a qualifiable minimum eligibility index and have completed the comprehensive pattern of college preparatory "a-g" subjects. Applicants applying to an impacted program must also meet all supplementary criteria.

Note: The CSU uses only the ACT score or the SAT mathematics and critical reading scores in its admission eligibility equation. The SAT or ACT writing scores are not currently used by CSU campuses.

### Eligibility Index Table for California High School Graduates or Residents of California

<table>
<thead>
<tr>
<th>GPA</th>
<th>Act Score</th>
<th>SAT Score (Math and Critical Reading total)</th>
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</thead>
<tbody>
<tr>
<td>2.99</td>
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Subject Requirements

The California State University requires that first-time freshmen applicants complete, with grades of "C" or better, a comprehensive pattern of college preparatory study totaling 15 units. A "unit" is one year of study in high school.

- English: four years
- Mathematics: three years (algebra, geometry, and intermediate algebra)
- Social Science: two years, including one year of U.S. history or U.S. history and government
- Laboratory Science: two years (one year of biological and one year of physical science, both must include laboratory instruction)
- Foreign Language: two years in the same foreign language (subject to waiver for applicants demonstrating equivalent competence)
- Visual and Performing Arts: one year in the same discipline (art, dance, drama/theater, or music)

Electives: one year (selected from English, advanced mathematics, social science, history, laboratory science, foreign language, and visual and performing arts or other courses approved and included on the UC/CSU "A-G" list.)

Foreign Language Subject Requirement

The foreign language subject requirement may be satisfied by demonstrating competence in a language other than English at a level equivalent to, or higher than, that expected of students who complete two years of foreign language study. Consult your school counselor, or Planning, Enrollment Management, Ad Student Affairs for more information.

Test Requirements

Prospective freshman and transfer applicants who have fewer than 60 semester or 90 quarter units of transferable college credit are strongly encouraged to submit scores, unless exempt, (see Eligibility Index Table) from either the SAT of the College Board or the ACT. If they are required to submit test scores, they should take the test no later than early December if applying for fall admission. Persons who apply to our impacted program (Nursing, Clinical portion, and Business Administration), check with the department for further requirements. Test scores are also used for advising and placement purposes. Registration forms and dates for the SAT or ACT are available from school or college counselors, or from Cal State East Bay's Testing Office (510) 885-3661. You may also write or call:

The College Board (SAT)
Registration Unit, Box 6200
Princeton, New Jersey 08541-6200
(609) 771-7588
www.collegeboard.org

ACT
Registration Unit, P.O. Box 414
Iowa City, Iowa 52240
(319) 337-1270
www.act.org

Honors Courses

Grades, in up to eight semester courses designated as honors courses in approved subjects (taken in the last two years of high school), receive additional points in grade point average calculations. Each unit of "A" in approved courses will receive a total of 5 points; "B," 4 points; "C," 3 points; "D," 1 point; and none for "F" grades. (Beginning fall 2003, up to two 11th grade IB, AP, or honors courses with 11th or 12th grade course content taken in 10th grade may also receive bonus points.)

Provisional Admission

Cal State East Bay may provisionally or conditionally admit first-time freshman applicants based on their academic preparation through the junior year of high school and planned for the senior year. The campus will monitor the final two years of study to ensure that admitted students complete their secondary school studies satisfactorily, including the required college preparatory subjects, and graduate from high school. Students are required to submit an official transcript after graduation to certify that all course work has been satisfactorily completed. Official high school transcripts must be received prior to deadline set by the university. In no case may documentation of high school graduation be received any later than the census date for a student's first term of CSU enrollment. A campus may rescind admission decisions, cancel financial aid awards, withdraw housing contracts and cancel any university registration for students who are found not to be eligible after the final transcript has been evaluated.

Applicants will qualify for regular (non-provisional) admission when the university verifies that they have graduated and received a diploma from high school, have a qualifiable minimum eligibility index, have completed the comprehensive pattern of college preparatory "a-g" subjects, and, if applying to an impacted program or campus, have met all supplementary criteria.

Admission with Honors

To qualify for Admission with Honors, applicants must also fully satisfy the Subject Requirements for admission to Cal State East Bay. Students admitted with Honors are eligible for the CSUEB University Honors Program (see the University Honors Program section in the Student Services chapter of this catalog).

First-Time Freshmen. Admission with Honors is conferred on a student whose high school GPA is at least 3.50, counting all subjects used to determine admissibility beginning with the tenth grade.

Lower Division Transfers. Admission with Honors is conferred on a student whose high school record is at least equivalent to that of a first-time freshman receiving honors. In addition, the student must have a combined all-college GPA in transferable courses of at least 3.50, based on work completed.

Upper Division Transfers. Admission with Honors is conferred on a student whose combined all-college GPA is at least 3.50 based on transferable work completed.

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What are the minimum admission standards for transfer students?

Students who have completed fewer than 60 transferable semester college units (or fewer than 90 quarter units) are considered lower division transfer students. Students who have completed 60 or more transferable semester college units (90 or more quarter units) are considered upper division transfer students. Students who complete college units during high school or during the summer immediately following high school graduation are considered first-time freshmen and must meet those admission requirements. Transferable courses are those designated for
baccalaureate credit by the college or university offering the courses and accepted as such by the campus to which the applicant seeks admission.

**Lower Division Transfer Requirements**

Generally, a student qualifies for admission as a lower division transfer student at Cal State East Bay if they have a grade point average of at least 2.0 ("C" or better) in all transferable units attempted and attained and is in good standing at the last college or university attended, and meet any of the following standards:

- Meet the freshman admission requirements (grade point and subject requirements) in effect for the term of application (see "What are the minimum admission requirements for freshmen?")

  or

- Were eligible for admission as a freshman at the time of high school graduation (except for the subject requirements), have been in continuous attendance at an accredited college since high school graduation, and have made up the missing subjects.

Applicants who graduated from high school prior to 1988 should contact Planning, Enrollment Management, and Student Affairs to inquire about alternative admission programs. (Due to enrollment pressures, many CSU campuses do not admit lower division transfer applicants.)

**Note:** Due to enrollment pressures many CSU campuses do not admit lower division transfer applicants.

**Making Up Missing College Preparatory Subject Requirements**

Lower division applicants who did not complete the subject requirements while in high school may make up missing subjects in any of the following ways.

1. Complete appropriate courses with a "C" or better in adult school or high school summer sessions.
2. Complete appropriate college courses with a "C" or better. (One college course of at least three semester or four quarter units is considered equivalent to one year of high school study.)
3. Earn acceptable scores on specified examinations, e.g., SAT subject tests.

Contact Planning, Enrollment Management, and Student Affairs for further information about alternative ways to satisfy the subject requirements. (Due to enrollment pressures, many CSU campuses do not admit lower division transfer applicants.)

**Upper Division Transfer Requirements**

Generally, applicants will qualify for admission as an upper division transfer student if each of the following are met:

1. Have a grade point average of at least 2.0 ("C" or better) in at least 60 semester (90 quarter) units of transferable college credit.
2. In good standing at the last college or university attended.
3. Completed at least 60 semester (90 quarter) units that must be selected from transferable college courses in English, arts and humanities, social science, science and mathematics. The 60 semester (90 quarter) units must also include at least 30 units of courses, which meet CSU general education requirement, including all of the general education requirements in oral and written communication in the English language and critical thinking and the requirement in mathematics/quantitative reasoning (usually 3 semester/4.5 quarter units) OR the Intersegmental General Education Transfer Curriculum (IGETC) requirements in English communication and mathematical concepts and quantitative reasoning. Each course satisfying General Education Requirements in written communication, oral communication, critical thinking and mathematics must be completed with a grade of C or higher.

**Provisional Admission**

Cal State East Bay may provisionally or conditionally admit transfer applicants based on their academic preparation and courses planned for completion. The campus will monitor the final terms to ensure that those admitted complete all required courses satisfactorily. All accepted applicants are required to submit an official transcript of all college-level work completed. The university will rescind admission for all students who are found not to be eligible after the final transcript has been evaluated. In no case may such documents be received and validated by the university any later than a student's registration for his/her second term of CSU enrollment.

**How will my transfer units be evaluated?**

Credits earned in accredited community colleges will be evaluated by Planning, Enrollment Management, and Student Affairs in accordance with the following provisions:

1. Not more than 105 quarter (70 semester) units of credit may be allowed for community college work; community college credit earned after the student has earned 105 quarter units at one or more community colleges will be used for determining grade point averages and may be used to satisfy subject requirements, but may not be applied toward the total units required for the bachelor's degree.
2. No credit may be allowed for professional courses in education taken in a community college, other than an introduction to education course.
3. Cal State East Bay and California community colleges have articulation agreements regarding course equivalencies. If you are planning to transfer to Cal State East Bay you should consult with your community college counselors as to whether or not particular courses meet specific requirements.
4. Certification of part or all of the lower division General Education-Breadth Requirements completed may be submitted by the California community college from which the student is transferring. Students should request a G.E. certification at the time they request a transcript to be sent to Cal State East Bay. Twelve upper division G.E. units must be completed at Cal State East Bay.
5. Certification of the completion of the Cal State East Bay requirements in U.S. History and Institutions will also be accepted from your community college.

Credit from institutions not regionally accredited will not be used in determining admission eligibility, nor will it normally be used to meet graduation requirements. However, after completing 30 quarter units in residence, you may petition Planning, Enrollment Management, and Student Affairs to have such units accepted for baccalaureate credit. Course content, the quality of performance, the nature of the institution, and the appropriateness of the courses to the Cal State East Bay curriculum will be considered in evaluating any petition.

**Academic Advising and Career Education (AACE)**

AACE is located in the Student Services Building, 2nd Floor. Academic advisors are available to discuss and explain your transfer evaluation or the degree audit you will receive from Planning, Enrollment Management, and Student Affairs. An official evaluation or an update of a prior evaluation is available by appointment. (See the Student Services chapter in this catalog for additional information on AACE.)
Credit for Continuing Education and Correspondence School Work

Students may count a maximum of 36 quarter (24 semester) units of extension credit and correspondence school work toward a baccalaureate degree at Cal State East Bay. Any such units not earned at Cal State East Bay must be earned in courses which would be acceptable for Cal State East Bay degrees and must come from accredited institutions which would accept the units toward their own degrees.

No extension or correspondence school credit may be applied toward the residency requirement for undergraduates or graduates. Courses taken in Cal State East Bay special sessions may be applied toward residency. All transferable extension and correspondence work will be used for determination of the undergraduate grade point average.

Credit for Experience and Prior Learning

No unit credit is allowed toward the bachelor's or master's degrees for practical experience. An exemption allowed for experience will not carry units of advanced standing or diminish the number of units required for graduation.

Credit for Military Training and USAFI

Cal State East Bay grants credit for military training in accordance with the recommendation of the American Council on Education. Students who entered military service before meeting the usual requirements for graduation, may receive nine units of elective credit toward the baccalaureate degree based upon the completion of a minimum of one year of uninterrupted active service. Commissioned officers may receive an additional nine units, which may be considered upper division credit. In order to receive such credit applicants must present written certification from a recognized military authority, such as papers from a military separation center or an official copy of a diploma from a service school or USAFI transcript. Cal State East Bay is a Servicemember Opportunity College (SOC).

Credit for Non-collegiate Instruction

Cal State East Bay grants undergraduate degree credit for successful completion of non-collegiate instruction, either military or civilian, appropriate to the baccalaureate, that has been recommended by the American Council on Education (ACE) College Credit Recommendation Service or by the National Program on Non-Collegiate Sponsored Instruction (NCSI). The number of units allowed are those recommended in the national guides published by these organizations.

Lower division, occupationally-oriented courses designed to train technicians are not acceptable for university credit. Credit granted for non-collegiate instruction is not generally applied to general education or major requirements.

Advanced Placement

Cal State East Bay grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. Scores of three or better will be accepted. Students will be granted 4-12 quarter units of college credit for each test completed, depending upon the specific discipline. (See the Registration chapter for additional information.)

Are there special admission and eligibility requirements for international students?

Admission Requirements

Cal State East Bay must assess the academic preparation of international students. For this purpose, “international students” include those who hold U.S. visas as students, exchange visitors, or in other nonimmigrant classifications. California residents and U.S. citizens with international transcripts are also classified as "international students” for admission evaluation purposes.

There are separate requirements for the admission of international students. Verification of English proficiency, financial resources, and academic performance are all important considerations for admission. Each applicant must have a declared educational objective (major) when the application is filed.

Priority in admission is given to residents of California for majors that are impacted or for programs with limited openings.

Application Filing Periods and Deadlines for International Students

The university has established deadlines to ensure that all application materials will be processed in time to allow international students to make the necessary passport, visa, travel, and other arrangements to reach the campus before the start of the quarter of admission. Current deadlines applicable to international student admission can be found on the university website or by contacting the International Admissions Office (iac@csueastbay.edu).

First-time Freshmen

If you received your preparatory education outside the U.S., you must have completed the equivalent of 12 years of elementary and secondary schooling with the equivalent of a “B” average or higher. ACT or SAT test scores are not required of international students who completed their secondary schooling outside the U.S. International students who graduated from a U.S. high school must meet the same requirements as U.S. citizens.

Transfer students

1. If you are a transfer applicant with fewer than 60 semester (90 quarter) units of transferable work completed at the time of planned enrollment, you must have a 2.0 GPA or higher in all transferable units attempted. You must also meet the eligibility requirements for first-time freshmen applicants. (See “What are the minimum admission requirements for freshmen?” earlier in this chapter.)

2. If you are a transfer applicant with 60 semester (90 quarter) units or more, you must have a 2.4 GPA or higher in all transferable units attempted.

Transfer students with university-level work earned outside the U.S. will be accepted if the overall grade point average of that work is equivalent to the stated minimum grade point average requirements for admission. Transfer credit for university-level course work earned outside of the U.S. will be awarded after a course-by-course evaluation by the International Admissions Office.

Academic Records

Certificates, diplomas, mark sheets, transcripts, and test scores must be sent directly from the issuing institution to the International Admissions Office to be considered official. The International Admissions Office reserves the right to determine what constitutes an official document.

Certified English translations must accompany all non-English original documents. Documents submitted are the property of Cal State East Bay and will not be returned.

English Language Requirement

All undergraduate applicants whose native language is not English and who have not attended schools at the secondary level or above for at least three years full time where English is the principal language of instruction must present a score of 525 or above on the Test of English as
a Foreign Language (TOEFL). Some majors may require a score higher than 525. Applicants taking the Computer Based Test of English as a Foreign Language must present a score of 71 or above. Some majors and some campuses may require a higher score. A few campuses may also use alternative methods of assessing English fluency: Pearson Test of English Academic (PTE Academic), the International English Language Testing System (IELTS), and the International Test of English Proficiency (ITEP).

Each campus will post the tests it accepts on its website and will notify students after they apply about the tests it accepts and when to submit scores.

**Financial Certification**

International students who wish to apply for a student visa must demonstrate financial support before a letter of admission or an “I-20” or “DS-2019” form will be issued. The following forms must be submitted: I-20 Letter of Consent, Declaration of Finances, and Health Insurance Compliance. These forms can be downloaded from the “Apply Online” option on the university website.

**Enrollment Requirements for F-1/J-1 Visa Students**

If you are an undergraduate on a student visa, you are required by the U.S. Citizenship and Immigration Services to take a minimum study load of 12 units per quarter.

When enrolled at Cal State East Bay, international students are expected to comply with all regulations of the U.S. Citizenship and Immigration Services pertaining to international students as well as those of the university.

F-1/J-1 international students should contact the Center for International Education (cie@csueastbay.edu) for information on matters affecting visa status, eligibility for employment, and any special academic requirements for international students.

**Other Non-U.S. Citizens**

Admission eligibility for students who are not U.S. citizens or permanent residents, and are not on student visas, will be based upon the same standards applied to international students who are on student visas. You are expected to have proficiency in the English language sufficient to meet the academic standards of individual courses and the university English proficiency requirements. Evidence of proficiency in English is the same as for international students. (See "English Proficiency Requirement for Undergraduate Applicants" section above.)

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**What are the enrollment requirements for transitory (visiting) students?**

**High School Students**

See "Does the university have any special provisions for enrollment and admission?" in this chapter.

**Intrasystem and Intersystem Enrollment Programs**

Students enrolled at any CSU campus have access to courses at other CSU campuses on a space-available basis unless those campuses or programs are impacted or admission to the desired program or admission categories are closed. This access is offered without students being required to be formally admitted to the host campus and sometimes without paying additional fees. Although courses taken on any CSU campus will transfer to the student's home CSU campus as at least elective credit, the student should consult their home campus academic advisor to determine how such courses may apply to their specific degree program before enrolling at the host campus.

There are two programs for enrollment with the CSU, and one for enrollment between the CSU and the University of California or California community colleges. Additional information about these programs is available from Enrollment Management.

**CSU Concurrent Enrollment:** matriculated students in good standing may enroll on a space available basis at both their home CSU campus and a host CSU campus during the same term. Credit earned at the host campus is reported at the student's request to the home campus and included on the student's transcript at the home campus.

**CSU Visitor Enrollment:** matriculated students in good standing may take one course per term at another CSU campus for one term. Credit earned at the host campus is reported at the student's request to the home campus and included on the student's transcript at the home campus.

**Intersystem Cross-Enrollment:** matriculated CSU, UC, or community college students may enroll for one course per term at another CSU, UC, or community college and request that a transcript of record be sent to the home campus.

**Cross-Registration Program with the University of California, Berkeley (UCB)**

The purpose of this program is to increase your educational opportunities by maximizing the use of existing programs and courses available in the East Bay region. The following conditions apply:

1. No course of instruction available to you at Cal State East Bay may be taken in the other system. Enrollment is limited to one course per term.
2. Students may seek to enroll in a course offered at UCB upon the recommendation of their academic advisor and department chair. These advisors should insure the completion of any prerequisites before application is made. (Forms are available from Enrollment Management.)
3. Students may seek to enroll in a course offered at UCB only with the permission of the course instructor, and the approval of the appropriate department chair and school/college dean. Each university gives first registration priority to its own students; therefore, concurrent enrollment may not be available in courses with limited spaces. A Cal State East Bay student should return the completed form and card to 120 Sproul Hall at UCB.
4. Students must be in good standing, be matriculated in a degree program (undergraduate or graduate) and have a full-time schedule (12 quarter units for undergraduates and 8 units of graduate level courses for graduate status) at Cal State East Bay in order to participate in the program. Cross-registration with UCB is normally not permitted during your first term of enrollment at Cal State East Bay. (Note that UCB is on the early Semester Calendar and Cal State East Bay is on the Quarter Calendar.)
5. Each campus has appointed a coordinator of the cooperative program who verifies the satisfaction of conditions 1-4 for each prospective participating student. Planning, Enrollment Management, and Student Affairs coordinates the program at Cal State East Bay.
6. No additional costs are charged to the student at Cal State East Bay. However, you will be billed the Cal State East Bay rates for the total academic load in the combined registrations. Because of the interval involved in sending transcripts, there will be a time lag in the appearance of grades on Cal State East Bay's permanent records.
7. Cross-registration is only possible in the fall and winter quarters because UCB is on the semester system.
8. Cross-registration will be cancelled at any time if the student becomes ineligible for participation.

**Cross-Registration with Other Bay Area Two-Year and Four-Year Institutions**
Programs have also been established to permit students from Cal State East Bay and those from Chabot College, Cogswell College, College of Alameda, Contra Costa College, Diablo Valley College, Holy Names College, John F. Kennedy University, Laney College, Las Positas College, Los Medanos College, Merritt College, Mills College, The National Hispanic University, Ohlone College, and Solano College to take coursework at another school which is not available at their home campus. Contact the counseling center or registrar at the host campus (or Enrollment Management at Cal State East Bay) for information on eligibility requirements, limitations and other privileges or restrictions.

Footnotes

1. Complete the "Application for Registration as an Auditor Only" available from the Cal State East Bay Student Enrollment Information Center on the first floor of the Student Services Building.

2. Reflects re-centering (recalibration) of SAT tests taken in April 1995 and thereafter. Qualifying scores for SAT tests taken prior to April 1995 that have not been re-centered can be determined by subtracting 100 from the SAT scores shown in the table.
Admission/Graduate and Post-Baccalaureate

Graduate and Post-Baccalaureate Admission

Admission to the University

All graduate and post-baccalaureate applicants (e.g., Ed.D., joint Ph.D. and Ed.D. applicants, master's degree applicants, those seeking educational credentials or certificates, and where permitted, and holders of baccalaureate degrees interested in taking courses for personal or professional growth) must file a complete graduate application as described in the graduate and post-baccalaureate admission materials at www.csumentor.edu. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the $55 nonrefundable application fee. (Note: Applicants seeking a second bachelor's degree should submit an undergraduate application for admission unless specifically requested to do otherwise.) Since applicants for post-baccalaureate programs may be limited to the choice of a single campus on each application, re-routing to alternate campuses or later changes of campus choice are guaranteed. To be assured of initial consideration by more than one campus, it is necessary to submit separate applications (including fees) to each.

Applications submitted by way of www.csumentor.edu are expected unless submission of an electronic application is impossible. An electronic version of the CSU graduate application is available on the World Wide Web at www.csumentor.edu. If you cannot apply online, you may pick up a paper application in the Student Enrollment Information Center, Student Services and Administration Building (SSA), 1st Floor, the Academic Programs and Graduate Studies Student Services Office (SSA, 1st Floor), or from the Graduate Studies Office of any California State University campus. You can also send an e-mail request for an application to the Office of Graduate Admissions at: gradprograms@csueastbay.edu.

Graduate and post-baccalaureate applicants may apply for a degree objective, a credential or certificate objective, or where approved, may have no program objective. Depending on the objective, the CSU will consider an application for admission as follows:

General Requirements

The minimum requirements for admission to graduate and post-baccalaureate studies at a California State University campus are in accordance with university regulations as well as Title 5, Chapter 1, Subchapter 3 of the California Code of Regulations. Specifically, a student shall at the time of enrollment:

1. have completed a four-year college course of study and hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association, or shall have completed equivalent academic preparation as determined by appropriate campus authorities;
2. be in good academic standing at the last college or university attended;
3. have earned a grade point average of at least 2.5 on the last degree completed by the candidate or have attained a grade point average of at least 2.5 (A=4.0) in the last 60 semester (90 quarter) units attempted; and
4. satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, including qualifying examinations, as appropriate campus authorities may prescribe. In unusual circumstances, a campus may make exceptions to these criteria.

Application Filing Periods

The application filing periods for graduate and unclassified post-baccalaureate applicants are listed on Application and Document Deadlines page of the university's website.

Admission to a Graduate Program

Most graduate degree programs at Cal State East Bay also require that you complete a separate departmental application. These programs may require that you meet additional admission requirements above and beyond those required for admission to the university. Contact the department offering the program to obtain a departmental application form and information on departmental application deadlines and admission requirements. Also see the chapter describing the graduate program in this catalog.

If you wish to pursue a graduate Interdisciplinary Studies Major, contact the Academic Programs and Graduate Studies Student Services Office (Student Services and Administration Building, 1st Floor, 510-885-3286) as soon as possible, preferably before you submit your admission application. You cannot be admitted as an Interdisciplinary Studies Major until your program of study has been approved.

For information on changing major, degree, or credential objectives after you have been admitted, see the Change of Educational Objective section in the Graduate Degree Information chapter.

Admission Categories

Students who meet the minimum requirements for graduate and post-baccalaureate studies may be considered for admission in one of the four following categories:

Graduate Classified – To pursue a graduate degree, applicants are required to fulfill all of the professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus; or

Graduate Conditionally Classified – Applicants may be admitted to a graduate degree program in this category if, in the opinion of appropriate campus authority, deficiencies may be remedied by additional preparation; or

Post-Baccalaureate Classified, e.g. admission to an education credential program – Persons wishing to enroll in a credential or certificate program, will be required to satisfy additional professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus; or
Post-Baccalaureate Unclassified – To enroll in undergraduate courses as preparation for advanced degree programs or to enroll in graduate courses for professional or personal growth, applicants must be admitted as post-baccalaureate unclassified students. By meeting the general requirements, applicants are eligible for admission as post-baccalaureate unclassified students. Admission in this status does not constitute admission to, or assurance of consideration for admission to, any graduate degree or credential program (Most CSU campuses do not offer admission to unclassified post-baccalaureate students).

(These and other CSU admissions requirements are subject to change as policies are revised and laws are amended. The CSU website, www.calstate.edu, and the CSU admissions portal, www.csumentor.edu, are good sources of the most up-to-date information.)

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International Admission Requirements

Cal State East Bay must assess the academic preparation of international students. For this purpose, "international students" include those who hold U.S. temporary visas as students, exchange visitors, and those in other non-immigrant classifications. California residents and U.S. citizens with international transcripts are also classified as "international students" for admission evaluation purposes. Graduate applicants must hold a degree equivalent to a four-year bachelor's degree obtained from a recognized university. You must also have the equivalent of a 2.50 grade point average, or higher, in your last two years of college-level courses.

There are separate requirements for the admission of international students. Verification of your English proficiency (see below), financial resources, and academic performance are all important considerations in your admission.

Application Filing Periods and Deadlines for International Students

The university has established deadlines to ensure that all application materials will be processed in time to allow you to make the necessary passport, visa, travel and other arrangements to reach the campus before the start of the quarter of admission. Current deadlines applicable to international student admission can be found on the university website or by contacting the International Admissions Office (iao@csueastbay.edu).

Each applicant must have a declared educational objective when the application is filed. International students on F-1 student visas may be admitted as "Conditionally Classified Graduate," "Classified Graduate," or "Classified Post-Baccalaureate" students. They may not be admitted as "Unclassified Post-Baccalaureate" students, unless they have an approved course of study acceptable to the Office of Academic Programs and Graduate Studies.

Note: Some graduate programs may require admission tests such as the GMAT or GRE and a supplemental application. Please consult the individual graduate department for any additional application or admission requirements.

Academic Records

Certificates, diplomas, mark sheets, transcripts, and test scores must be sent directly from the issuing institution to the International Admissions Office to be considered official. The International Admissions Office reserves the right to determine what constitutes an official document. Certified English translations must accompany all non-English original documents. Documents submitted are the property of Cal State East Bay and will not be returned.

English Proficiency Requirement for Post-Baccalaureate and Graduate Applicants

All graduate and post-baccalaureate applicants, regardless of citizenship, whose native language is not English and whose preparatory education was principally in a language other than English, must demonstrate competence in English by presenting one of the following:

TOEFL (Test of English as a Foreign Language)
Graduate: 550 (paper-based); 213 (computer-based); 79 (internet-based)

IELTS (International English Language Testing System)
Graduate: 6.5

Note: All test scores must be sent directly from the testing institution.

The English proficiency requirement for post-baccalaureate and graduate applicants may be waived by presenting the following: an official transcript showing graduation with a bachelor's degree from a U.S. college or university, an official transcript from an international college or university indicating English is the principal language of instruction, or an official letter from the college or university certifying that English was the language of instruction.

Financial Certification

International students who wish to apply for a student visa must demonstrate financial support before a letter of admission or an "I-20" or "DS-2019" form will be issued. The following forms must be submitted: I-20 Letter of Consent, Declaration of Finances, Verification of Finances, and Health Insurance Compliance. These forms can be downloaded from the "Apply Online" option on the university website.

Enrollment Requirements for F-1/J-1 Visa Students

If you are a graduate on a student visa, you are required by the U.S. Citizenship and Immigration Services to take a minimum 8 quarter units per quarter that will count towards your degree as a "Graduate" student, a "Classified Post-Baccalaureate" student, or an "Unclassified Post-Baccalaureate" student with an approved course of study. For additional information, see Post-Baccalaureate Classification in the Graduate Degree Information chapter. Enrollment in courses through Open University in the Division of Continuing and International Education may not count for visa certification purposes.

International Students should contact the Center for International Education (cie@csueastbay.edu) for information on matters affecting visa status, eligibility for employment, and any special academic requirements for international students.

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Transitory Admission Requirements

Graduate students are eligible for Intrasystem Concurrent Enrollment, Intrasystem Visitor Enrollment, and Cross-Registration with the University of California, Berkeley, and selected other East Bay colleges.

Intrasystem Concurrent Enrollment

If you are enrolled at any campus of the California State University, you may apply to attend another campus while concurrently enrolled at your home campus.

Eligibility Requirements: (1) You have completed at least one term at the home campus as a matriculated student, or will be enrolled concurrently in such status, (2) you are, or have been, enrolled in an authorized graduate program at your home campus, and (3) you are in good standing at the last college attended.
Intrasystem Visitor Enrollment
If you are a student of any campus of The California State University, you may apply for admission as a visiting student at another campus for a period of one term.

Eligibility Requirements: (1) You have completed at least one term at the home campus as a matriculated student, (2) you are, or have been, enrolled in an authorized graduate program at the home campus, and (3) you are in good standing at the last college attended.

For additional information on Intrasystem Concurrent Enrollment and Intrasystem Visitor Enrollment, as well as information on the Cross-registration program with the University of California, Berkeley, and selected other East Bay colleges, see "What Are the Enrollment Requirements for Transitory (Visiting) Students" in the Undergraduate Admission chapter.

Fees: Graduate

The California State University is one of the most economical public universities in the nation and Cal State East Bay's fees are among the lowest in the California State University system. Resident students currently pay only 38% of the total cost of their education. If fee revisions occur, they will be published in the Class Schedule. Legal residents of California are not charged tuition, only fees.

The CSU makes every effort to keep student costs to a minimum. Fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU must reserve the right, even after initial fee payments are made, to increase or modify any listed fee, without notice, until the date when instruction for a particular semester or quarter has begun. All CSU listed fees should be regarded as estimates that are subject to change upon approval by The Board of Trustees.

Schedule of Graduate and Post-Baccalaureate Registration Fees, 2011-2012
Any student who holds a bachelor's degree, which includes students pursuing a second bachelor's degree, and all categories of graduate and post-baccalaureate students (except qualified students pursuing a teaching credential, see the next section) pay the following fees when registering at Cal State East Bay. (Legal residents of California are not charged tuition.)

Application Fee (nonrefundable), payable by check or money order at time application is made: $55

| Graduate/Post-Baccalaureate Registration Fees, Effective Fall 2011
tabular data |
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<tbody>
<tr>
<td></td>
<td>0.1 to 6.0</td>
<td>6.1 or more</td>
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<tr>
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<td>Student Body Fee</td>
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<td>43</td>
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<tr>
<td>Facilities Fee</td>
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<td>2</td>
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<tr>
<td>University Union Fee</td>
<td>55</td>
<td>55</td>
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<tr>
<td>University Union Recreational Fee</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Instructionally Related Activities Fee</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Health Services Fee</td>
<td>75</td>
<td>75</td>
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<tr>
<td>Athletics Fee</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Academic Excellence Fee, effective Winter 2012</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Photo I.D. Photo I.D. (quarterly fee)</td>
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<tr>
<td>Total Hayward</td>
<td>$1,629</td>
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<tr>
<td>Total Concord Only</td>
<td>$1,569</td>
<td>$2,513</td>
</tr>
<tr>
<td>Total Online Only</td>
<td>$1,437</td>
<td>$2,381</td>
</tr>
</tbody>
</table>

*Note: The Tuition Fee for graduate and post-baccalaureate students for the academic year (three quarters) is $3,906 for 0.1 to 6.0 units a quarter and $6,738 for 6.1 or more units a quarter. (Please see Errata page for corrections to this content.)

Graduate Business Professional Fee, 2011-2012
The Graduate Business Professional Fee is charged in addition to the Tuition Fee and campus fees. The per-unit fee of $169.00 is charged for required courses taken by students who have been admitted and enrolled in one of the following Professional Business Graduate Programs: Master of Business Administration (MBA), MS Business Administration, MS Taxation. The fee is also charged for prerequisite courses taken by students who have an admission status and are enrolled in one of these programs.

Schedule of Education Doctorate Registration Fees, 2011-2012
Students pursuing the Education Doctorate degree pay the following fees when registering at Cal State East Bay. (Legal residents of California are not charged tuition.)

| Education Doctorate Registration Fees, Effective Fall 2011
tabular data |
<table>
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<tbody>
<tr>
<td></td>
<td>0.1 to 22.0 Units</td>
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<td>Facilities Fee</td>
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<tr>
<td>University Union Fee</td>
<td>55</td>
</tr>
<tr>
<td>University Union Recreational Fee</td>
<td>60</td>
</tr>
<tr>
<td>Instructionally Related Activities Fee</td>
<td>16</td>
</tr>
</tbody>
</table>
Health Services Fee | 75
Athletics Fee | 35
Academic Excellence Fee, effective Winter 2012 | 40
Photo I.D. (quarterly fee) | 1
Total | $3,827

*Note: The Tuition Fee for Education Doctorate students for Fall 2011 through Summer 2012 is $10,500 regardless of units.

For information on how to pay fees, as well as information on other fees (e.g., library fees, individual course fees, test fees, etc.), see the Fees and Expenses chapter in this catalog. The Fees and Expenses chapter also has information on the policies governing debts owed to CSUEB.

Credit Cards, Cash, Check
You may use credit cards (American Express, Discover, and MasterCard), cash, or check for payment of registration fees. See the current Class Schedule for additional information.

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Fees: Credential

Students seeking an initial Multiple Subject, Single Subject, or Special Education teaching credential who have been admitted to a credential program with "classified" or "conditionally classified" status pay the following fees. This fee level will apply whether or not the student is simultaneously enrolled in a master's degree program.

Qualified Teacher Credential Registration Fees, Effective Fall 2011

<table>
<thead>
<tr>
<th></th>
<th>0.1 to 6.0 Units</th>
<th>6.1 to more Units</th>
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<td>Tuition Fee*</td>
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<tr>
<td>Student Body Fee</td>
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<tr>
<td>Facilities Fee</td>
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<td>2</td>
</tr>
<tr>
<td>University Union Fee</td>
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<tr>
<td>University Union Recreational Fee</td>
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<td>60</td>
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<tr>
<td>Instructionally Related Activities Fee</td>
<td>16</td>
<td>16</td>
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<tr>
<td>Health Services Fee</td>
<td>75</td>
<td>75</td>
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<tr>
<td>Athletics Fee</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Academic Excellence Fee, effective Winter 2012</td>
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<td>40</td>
</tr>
<tr>
<td>Photo I.D. (quarterly fee)</td>
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<tr>
<td>Total Hayward</td>
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<td>Total Concord Only</td>
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<td>Total Online Only</td>
<td>$1,363</td>
<td>$2,251</td>
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</table>

*Note: The Tuition Fee for qualified teacher credential students for the academic year (three quarters) is $3,684 for 0.1 to 6.0 units a quarter and $6,348 for 6.1 or more units a quarter. (Note: Please see Errata page for corrections to this content.)

Credit Cards, Cash, Check
You may use credit cards (American Express, Discover, and MasterCard), cash, or check for payment of registration fees. See the current Class Schedule for additional information.

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Residency Determination

Planning and Enrollment Management determines residence status of all new and returning students for nonresident tuition purposes. For information on the criteria used in making this determination, as well as residence determination dates, see the Admissions/Undergraduate chapter in this catalog. (Legal residents of California are not charged tuition, only fees. See the Nonresident Tuition section.)

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Nonresident Tuition

Nonresident Tuition (in addition to other fees charged to all students) per unit or fraction thereof is $248.

Note: The total nonresident tuition paid per quarter will be determined by the number of units taken. Mandatory systemwide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code (see section on Fee Waivers in the Fees and Expenses chapter).

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Footnotes

1. Fee adjustments subject to the policies established in Executive Order 681.
Catalog Rights for Graduation

If you are absent due to an approved Educational Leave or to attend another accredited institution of higher education, you will not lose your

Catalog Rights for Graduation

These are the seven basic requirements for your B.A. or B.S. degree defined in the Code:

- Complete a 72 quarter-unit program of General Education-Breadth requirements including 12 upper-division (3000 or higher) units in G.E. Areas B6, C4, D4 (details to follow).
- Complete one of the majors described in this catalog.
- Complete the U.S. history, U.S. Constitution, and California state and local government requirement through coursework or exams (details to follow). You must also complete one course for the Cultural Groups/Women requirement.
- Satisfy the University Writing Skills Requirement by passing two freshman-level English composition courses (ENGL 1001 and 1002) and the upper division University Writing Skills Requirement (details to follow).
- Complete a minimum of 45 quarter units in residence enrolled as an admitted student at Cal State East Bay. Up to 36 units taken through Open University and Special Session may be counted for residence. Units in residence must include at least 36 upper division units, 18 units in your major, and 12 units of G.E. (Units you earn at other institutions, and units you earn through Credit-by-Examination are not residence units.)
- Complete at least 180 quarter units for your B.A. degree, 186 quarter units for your B.F.A. degree, or 180-188 quarter units for your B.S. degree. At least 60 of these units must be in upper division courses (courses numbered 3000 and above). No more than 60 units can be graded in the Credit/No Credit pattern (CR/NC or A/B/C/NC). No more than 36 units can be in Continuing Education, Open University, or correspondence credit, and no more than 45 units can be earned credit-by-examination (excepting Advanced Placement).
- Attain a grade point average of at least 2.00 on a 4.00 scale in all units you attempt at Cal State East Bay, all the units you attempt including transfer units, and all units you attempt in the major regardless of the department in which they are taught.

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Catalog Rights for Graduation

To meet the seven requirements listed in the previous section, you must follow the specifics listed in this catalog. As long as you maintain attendance by enrolling in at least two quarters each calendar year, your degree requirements will remain those in this catalog. However, you may elect to meet the requirements of the catalog in effect at the time you graduate. These principles are called your "catalog rights."

If you are absent due to an approved Educational Leave or to attend another accredited institution of higher education, you will not lose your
If you are a transfer student who attended another CSU campus and/or California community college, you have Cal State East Bay catalog rights from the time you began at the other institution if you have maintained attendance as noted above.

Your catalog rights for your major (and minor if you pursue one) are governed by the catalog in effect at the time you declare your major (or minor). Cal State East Bay publishes an annual online Catalog, but only published a printed Catalog every other year with the last edition printed for the 2010-2012 years. If you enter in the second year of the printed catalog, you should check the online catalog for that year to see if there are any changes affecting your major and/or minor graduation requirements. You will not lose your catalog rights for G.E. and other graduation requirements by declaring or changing your major, if you maintain attendance.

If you do break attendance by not enrolling in two quarters in a calendar year, your graduation requirements will be governed by the catalog in effect at the time you reenter.

The principle of catalog rights refers to degree requirements, not policies, fees, services, and other matters which, when they change, apply to all students. For that reason, you should check the latest online catalog.

General Education-Breadth Requirements

The General Education Program is designed so that, taken with the major depth program and electives, it will assure that graduates have made measurable progress toward becoming truly educated persons for a diverse society. Particularly, the purpose of the General Education Program is to provide means whereby graduates:

- achieve the ability to think clearly and logically, to find information and examine it critically, to communicate orally and in writing, and to reason quantitatively;
- acquire appreciable knowledge about their own bodies and minds, about how human society has developed and how it now functions, about the physical world in which they live, about the other forms of life with which they share that world, and about the cultural endeavors and legacies of their civilizations;
- come to an understanding and appreciation of the principles, methodologies, value systems, and thought processes employed in human inquiries;
- come to understand and appreciate the contributions to knowledge and civilization that members of diverse cultural groups and women have made.

The General Education Program is planned and organized to enable students to acquire abilities, knowledge, understanding, and appreciation as interrelated elements, not as isolated fragments.

The California State University G.E. program requires at least 72 quarter units distributed over six areas and governed by three general requirements. Transfer students must earn 60 units in lower-division courses that meet the requirements of the CSU or IGETC transfer plan. Twelve units of upper-division G.E. will be completed at CSUEB. The lists of courses meeting the requirements change from quarter to quarter and are not included in this catalog because they rapidly become outdated. The list of courses currently meeting each requirement appears in the online Class Schedule each quarter or at: [http://www.csueastbay.edu/ge](http://www.csueastbay.edu/ge).

Before progressing very far into your G.E. and other degree requirements, be certain you have developed the entry-level learning skills in English composition and mathematics necessary for collegiate success. You must take the EPT/ELM tests before your first enrollment (if not exempt by the other test scores listed in the Registration chapter). If your skills are such that you can begin taking college-level English composition math or statistics immediately, do so at your earliest opportunity, as a freshman if at all possible. (Many majors, including Business Administration and the sciences, require much more math or statistics than the single G.E. course.)

If your skills are not at the collegiate level, you must enroll in the appropriate remedial course(s) (again, described in the Registration chapter) in your first quarter and complete all remedial courses you need as soon as possible, as a freshman if at all possible. Students who fail the same remedial course twice, fail to enroll continuously in remediation as long as it is required, and/or who fail to complete remediation in six quarters will not be allowed to continue.

You will not be allowed to register once you have earned 90 units if your first freshman English composition course (ENGL 1001 or equivalent for G.E. Area A2) and your quantitative reasoning course (G.E. Area B4) have not been passed. Cal State East Bay requires that your freshman English composition course be passed before you attempt the Writing Skills Test in your first quarter in junior status (90 or more quarter units).

A word is necessary about the relationship of G.E. to your major. Normally no course in your major department, as designated by course prefix (for example, ANTH, ENGL, GEOL, MUS) can be applied to G.E., even if not applied to your major requirements. For Business Administration majors, courses with the prefixes ACCT, ENTR, FIN, ITM, MGMT, and MKTG will not count for G.E.; and THEA and DANC courses cannot be used by Theatre Arts majors. The only exceptions to this rule are in Area A, in Area B4, in Area C for a MLL course in another language from those in the major, in Area G4, and one course in a thematic freshman learning community (B1-3, C1-3, or D1-3).

On the other hand, courses required for your major, but offered by other departments (for example, MATH for Geology majors, MLL for English majors), can be applied to G.E.

This is why it is important to know your major before you get too far into the G.E. program. Most majors specify certain G.E. courses for their students. If you take a course other than the one specified, you will have to take the required course anyway. Also, if you don't know your major, you could take a course that subsequently ends up in your major and lose it for G.E. credit.

You can view and print the General Education Requirements for Native or Transfer students, as well as Graduation Checklists, respectively, by clicking the appropriate pdf link below.

Links to printable pdfs:

- [General Education Requirements for Native Students](http://www.csueastbay.edu/ge)
- [Graduation Checklist for Native Students](http://www.csueastbay.edu/ge)
- [General Education Requirements for Transfer Students](http://www.csueastbay.edu/ge)
- [Graduation Checklist for Transfer Students](http://www.csueastbay.edu/ge)

Narrative Description of G.E. Requirements

LOWER DIVISION G.E. REQUIREMENTS (60 Units)
Area A: Communication in the English Language (12 units)
You must complete this area of the G.E. Requirements in your freshman year unless a year or more of remediation is required. You must enroll in sections of Area A1 and A2 courses which are linked to the freshman thematic learning community you select in Area B, Area C, or Area D. You must also enroll in an activity class each of the first two quarters of the learning community (see Area G, G.E. Electives).

A1 Oral Communication (4 units)
Students who have completed general education requirements should be grounded in the rhetorical principles that govern public presentations. These principles are fundamental to sound reasoning and clear expression. The principles foster open-mindedness and information competence combined with critical thinking and analytical skills, and an awareness of, and ability to adapt to audience, context, and purpose.

Criteria: A course meeting the Oral Communication requirement assumes that you should, at the time of entry, be able to write brief essays showing adequacy in (a) selecting a controlling idea appropriate to the given writing task, (b) coherent development of that idea to a reasoned conclusion, (c) use of sentences that demonstrate some structural variety and contain language appropriate to the audience and purpose, and (d) control of conventions of standard written English (relative freedom from errors such as fragments, run-together sentences, faulty agreement, and improper pronoun reference) and of mechanics (capitalization, spelling, and punctuation). The course must provide you with constructive criticism of both argumentative and persuasive discourse presented extemporaneously, (a) small-group (problem-solving) discussion, (b) interpersonal communication, (c) expository discourse presented extemporaneously, (d) argumentative and persuasive discourse presented extemporaneously, and (e) presentation of evidence; (13) organize an essay in light of audience expectations; (14) present material logically and without fallacies; (15) present material sound, non-fallacious arguments; (5) recognize and address audience viewpoints appropriately; (6) present ideas organized in a fashion appropriate to topic, audience, occasion, and purpose; (7) use language, vocal variety, and physical behaviors that are appropriate to the audience, occasion and purpose and maintain interest and support the verbal message.

A2 Written Communication (4 units)
A course satisfying Area A2 must be passed with a grade of "A," "B," "C," or "CR."

Students who have completed general education requirements should be grounded in the rhetorical principles that govern reading and writing. These principles are fundamental to logical thinking and clear expression. For reading, they presume open-mindedness combined with critical thinking and analytical skills; and for writing, they presume an awareness of audience, context, and purpose.

Criteria: A course meeting the freshman composition requirement assumes that you should, at the time of entry, be able to write brief essays showing adequacy in (a) selecting a controlling idea appropriate to the given writing task, (b) coherent development of that idea to a reasoned conclusion, (c) use of sentences that demonstrate some structural variety and contain language appropriate to the audience and purpose, and (d) control of conventions of standard written English (relative freedom from errors such as fragments, run-together sentences, faulty agreement, and improper pronoun reference) and of mechanics (capitalization, spelling, and punctuation). The work of the freshman English course is to strengthen these skills by extensive practice in the writing of expository essays suitable for college-level credit. If you are not exempt from the EPT and do not score 147 or higher on the test, you must pass one or more remedial English courses before enrolling in the A2 course (see Registration chapter). G.E. Area A2 must be completed by the time you reach 90 quarter units or future registration will be blocked.

Student Learning Outcomes
Upon completion of your A1 requirement, you should have developed the following competencies in speaking and listening.

Speaking: (1) know how to choose and narrow a topic appropriately for a specific audience and occasion; (2) communicate the thesis/specific purpose in a manner appropriate for the audience and the occasion; (3) provide appropriate supporting material based on the audience and occasion and using appropriate technology (PowerPoint, demonstration, etc.) to present the material to the audience: (4) present logically sound, non-fallacious arguments; (5) recognize and address audience viewpoints appropriately; (6) present ideas organized in a fashion appropriate to topic, audience, occasion, and purpose; (7) use language, vocal variety, and physical behaviors that are appropriate to the audience, occasion and purpose and maintain interest and support the verbal message.

Listening: (1) recognize that listening is an interaction among the speaker, message, and audience; (2) understand the public or private context in which the interaction occurs; (3) engage with the ideas, the supporting details, and the relationships among ideas; (4) attend to messages with an open mind; (5) question authors and speakers; and (6) evaluate messages using criteria appropriate to the context.

Student Learning Outcomes
Upon completion of your A2 requirement, you should have developed the following competencies: (1) read for the meaning of a text by determining its purpose, intended audience, and significance; (2) understand the historical context of the text; (3) engage with and offer thoughtful responses to ideas in the text; (4) question authors and texts; (5) evaluate the text according to criteria appropriate to the context; (6) realize that writing is a recursive process involving prewriting and revision; (7) compose an essay with a clear thesis and evidence to support the thesis; (8) understand the role of logically sequenced and fully developed paragraphs; (9) develop and have confidence in one's own ideas; (10) demonstrate awareness of other points of view and how to address them; (11) incorporate research into an essay, including summarizing, paraphrasing, and properly quoting and citing material from other sources; (12) know the ethics of academic writing and of accuracy in the use of evidence; (13) organize an essay in light of audience expectations; (14) present material logically and without fallacies; (15) present material in language appropriate for the context, usually in standard written English that is grammatically and syntactically correct; (16) be familiar with strategies for timed writing.

A3 Critical Thinking (4 units)
Students who have completed critical thinking requirements will develop clarity and rigor in reasoning and its presentation, and the ability to understand, represent, and evaluate the presentations of reasoning made by others.

Criteria: A course meeting the critical thinking G.E. requirement focuses primarily on: (a) identifying, analyzing, evaluating, and presenting arguments, (b) learning elementary inductive and deductive reasoning, and (c) recognizing formal and informal fallacies. You will complete a minimum of six assignments demonstrating critical thinking in a variety of contexts. At least four of these assignments must be written. A critical thinking textbook or its equivalent is required in all courses meeting this requirement.

Student Learning Outcomes
Upon completion of your A3 requirement, you should have developed the following competencies: (1) use the rules and strategies of deductive, inductive, and natural language reasoning; (2) apply the rules and strategies for testing validity; (3) evaluate statistical reasoning; (4) recognize fallacies of reasoning; (5) present orally and in writing well reasoned cases both to support a proposition and to refute another's claim.

Area B: Natural Sciences and Quantitative Reasoning (16 units)
Students who have completed natural science and quantitative reasoning requirements will gain basic knowledge and learn key principles in the life and physical sciences, recognize the vital role experiments play in adding to scientific knowledge, and understand modern methods and tools used in scientific inquiry.

Criteria: G.E. courses in the physical and life sciences teach the methodologies of science, including systematic observation and experimentation. The laboratory course required in this General Education Area provides first-hand experience in making observations in the natural world or laboratory, the techniques and procedures of making those observations, and techniques and procedures for organizing and analyzing observations. In addition to a working knowledge of the methods of science, you will acquire an understanding of the fundamental principles of particular disciplines.

B1-3, 5 (12 units)
You must select one course in physical science and one in life science, courses from three different disciplines, and at least one of the courses
requirement and do not score 50 or higher on the test, you must pass one or more remedial Mathematics courses before enrolling in the B4
courses. Courses that satisfy Area B4 foster the development and use of formal skills and concepts appropriate to the specific course. They
emphasize problem solving, reasoning skills, and the communication of mathematical or statistical ideas. If you are not exempt from the ELM
requirement and do not score 50 or higher on the test, you must pass one or more remedial Mathematics courses before enrolling in the B4
course (see Registration chapter).

Student Learning Outcomes
Upon completion of your B4 requirement, you should have developed the following competencies.

Quantitative Literacy: (1) know formal mathematical concepts and formulae; (2) find sources for key mathematical ideas.
Numeracy Skills (Reasoning): (1) manipulate and use theories; (2) graphically display and interpret quantitative results; (3) perform basic
arithmetic skills.
Problem Solving (Thinking): (1) identify and analyze real or potential problems; (2) apply appropriate quantitative theories; (3) evaluate
appropriate quantitative measures; (4) explain or discuss results in quantitative terms.

You must complete your quantitative reasoning G.E. requirement in your freshman year unless three quarters of remediation are needed. In any
case, G.E. Area B4 must be completed by the time you reach 90 quarter units or future registration will be blocked.

Area C: Humanities (12 units)

C1-3 (12 units)
You must select one course in the Fine Arts and one in Letters (see below) and courses from three different disciplines. You may select a
freshman learning community or complete your Humanities requirements in your second year. Sophomore courses assume a higher level of
basic skills (completion of Area A and B4 requirements). No Cal State East Bay course used to meet the U.S. history and government code requirement
may be applied to Area C. Language courses taken to clear Area C1, Fine Arts, may not be taken credit-by-exam.

Student Learning Outcomes
Upon completion of your C1-3 requirements, you should have developed the following competencies: (1) demonstrate through oral and written
works how foundational works in the humanities illuminate enduring human concerns and the intellectual and cultural traditions within which
these concerns arise, including both classical and contemporary artists and theorists; (2) demonstrate a developing understanding of how
historical and cultural contexts, individual works, and the development of humanities over time, interact; (3) demonstrate ability to critically
employ concepts, theories, and methods of analysis used in the humanities to interpret and evaluate enduring human concerns; (4) critically
reflect on the formation of human goals and values, and articulate an understanding of the creativity reflected in works of the humanities that
influenced the formation of those values.

C1 Fine Arts (4 units)
Criteria: Courses meeting this requirement have as their major component the integration of evaluative and descriptive aspects of the history,
theory, aesthetics, and criticism of different works, forms, styles, and schools of art.

C2 Letters (4 units)
Criteria: Courses in this area examine significant written and oral texts of the creative intellect. The major goals are: (a) to teach the critical
examination of ideas and theories through the use of historical, linguistic, literary, philosophical, and rhetorical approaches and methods; and
(b) to encourage understanding of enduring human concerns and the intellectual and cultural traditions within which they arise.

C3 An Additional Humanities Course in either Fine Arts or Letters

Area D: Social Sciences (12 units)
Students who have completed social science requirements will become acquainted with basic principles, methodologies, theoretical problems,
and applications in those sciences whose field of study is human behavior in its social environment. No Cal State East Bay course used to meet
the U.S. history and government code requirement may be applied to Area D.

D1-3 Basic Requirements (12 units)
You must select three courses in the social sciences from three different disciplines. You may select a freshman learning community or complete
your social sciences requirements in your second year. Sophomore courses assume a higher level of basic skills (completion of Area A and B4
requirements).

Student Learning Outcomes
Upon completion of your D1-3 requirements, you should have developed the following competencies: (1) demonstrate, orally and in writing,
recognition of the application of disciplinary concepts derived from at least three social or behavioral sciences in the study of human behavior,
individually and in society; (2) demonstrate, orally and in writing, recognition of the inquiry methods used by at least one of the social or
behavioral science disciplines; (3) demonstrate, orally and in writing, the ability to describe how human diversity and the diversity of human
societies influence our understanding of human behavior, individually and in societies, both local and global; (4) demonstrate, orally and in
writing, some knowledge of the political, social, and/or economic institutions of a country other than the United States; (5) demonstrate, orally
and in writing, the ability to describe major positions and contrasting arguments made on one or more significant contemporary issue area
confronting U.S. society as applied to human behavior.

Criteria: Courses fulfilling the Basic Social Science requirements present the fundamental principles and methods of inquiry that are grounded in
social science disciplines.

Area F: Performing Arts and Activities (4 units)
Criteria: Courses in this area provide an opportunity to develop an appreciation of the visual and performing arts and activities through direct
experience. Students are guided by participation toward an understanding of the techniques, processes, and possibilities inherent in such aspects of culture as art, theatre, music, creative writing, and sport. Courses in this area enhance student development through accomplishment. At least 40% of the class time in these courses must be activity or performance.

**Area G: Electives (4 units)**

G1-2-3 Activity Courses Accompanying Freshman Learning Communities (2 units)
This is a one-unit and two .5-unit activity courses (two hours of class) which accompany the freshman learning communities (Areas A1-3, C1-3, D1-3).

Criteria: They integrate the thematic and Area A course content, build learning communities, and integrate academic skill development and support services. They also include the development and honing of particular skills (e.g., writing, speaking, calculating, and reasoning) at various levels depending on the individual student's proficiency.

G4 Information Literacy (2 units)
Criteria: Courses fulfilling this G.E. requirement develop information processing and technical competencies. The former include the ability to recognize a need; find resources; access, evaluate, and organize information; understand ethical, social and legal dimensions; and communicate information. The latter include the ability to select and use the appropriate technology.

**UPPER DIVISION G.E. REQUIREMENTS (12 units)**

To be eligible to begin taking upper division G.E. courses, you must have completed 90 quarter (60 semester) units, your lower division G.E. requirements, including critical thinking (Area A3), ENGL 1002, and the University Writing Skills Requirement. You may complete Areas B6, C4, and D4 in your junior or senior year.

The 12-unit upper division General Education program of Cal State East Bay serves a variety of purposes. It enables students to study subjects outside their majors at a more advanced level than in lower division G.E. courses by building on the skills developed in earlier classes in English composition, oral communication, critical thinking, and information literacy. The upper division Science course (Area B6) focuses on scientific inquiry and stresses numeracy, quantitative analysis, information literacy, and critical thinking skills. The upper division Humanities course (Area C4) focuses on history, literature, and philosophy, and stresses advanced writing, speaking, and reasoning skills. The Social Sciences course (Area D4) focuses on the application of the methodologies and research findings of the social sciences to significant contemporary problems, and stresses advanced writing and information literacy skills.

Upper division G.E. courses also give students the opportunity to explore new subjects unrelated to their majors, or to complement their majors with supportive courses in departments outside their major department. Students may ask their major advisors for a list of courses that relate to, and support study in their major field.

**Area B6: Upper Division Science (4 units)**
A 4-unit upper division course in the sciences (life or physical science) that includes numeracy, quantitative analysis, information literacy, and critical thinking skills. Students must complete their lower division B1-5 requirements prior to taking their B6 course.

**Student Learning Outcomes**
Upon completion of your B6 requirement, you should have developed the following competencies: (1) demonstrate advanced and/or focused science content knowledge in a specific scientific field using appropriate vocabulary and referencing appropriate concepts (such as models, uncertainties, hypotheses, theories, and technologies); (2) apply advanced quantitative skills (such as statistics, algebraic solutions, interpretation of graphical data) to scientific problems; (3) demonstrate understanding of the nature of science and scientific inquiry and the experimental and empirical methodologies utilized in science to investigate a scientific question or issue; (4) critically analyze scientific claims and data; (5) apply science content knowledge to contemporary scientific issues (e.g., global warming) and technologies (e.g., cloning), where appropriate.

**Area C4: Upper Division Humanities (4 units)**
A 4-unit upper division course in the humanities (history, literature, philosophy) that includes a significant writing component and emphasizes advanced communication and critical thinking skills.

**Student Learning Outcomes**
Upon completion of your C4 requirement, you should have developed the following competencies: (1) demonstrate an understanding of, and ability to, apply the principles, methodologies, value systems, and thought processes employed in human inquiries; (2) demonstrate an understanding of the cultural endeavors and legacies of human civilization; (3) be able to discuss and deliberate about opposing viewpoints in an insightful and logical manner; be able to present an opposing side fairly and to criticize the argument rather than attacking the person; (4) demonstrate a developing intellectual curiosity and a habit of lifelong learning through choice of research topics, the number and quality of questions asked in class, the application of course concepts or themes to lived experiences or world events, or through other similar means; (5) demonstrate the potential for participating in, and contributing to, a democratic society as an informed, engaged, and reflective citizen.

**Area D4: Upper Division Social Sciences (4 units)**
A 4-unit upper division course applying the research findings of the social sciences to significant contemporary problems and emphasizing advanced writing and information literacy skills.

**Student Learning Outcomes**
Upon completion of your D4 requirement, you should have developed the following competencies: (1) demonstrate an understanding of and ability to accurately apply disciplinary concepts of the social or behavioral sciences to the study of human behavior, individually and in society; (2) demonstrate an understanding of, and the ability to, effectively conduct or plan research using an inquiry method of the social or behavioral sciences; (3) explain in writing, using examples, how human diversity and the diversity of human societies influence our understanding of individual and collective human behavior; (4) develop advanced skills in oral and written argument in the social or behavioral sciences.

**GENERAL DEGREE REQUIREMENTS**
These are to be satisfied simultaneously with the lower and upper division Area requirements described above.

- A total of 72 quarter units of coursework are required to meet the General Education-Breadth Requirements. Normally, no course taken in the major department, as designated by course prefix, may be applied to the 72-unit G.E. program. Exceptions are: (1) in Areas A, B4, and G4 and one course in one thematic learning community (B1-3, C1-3, D1-3), unless certified by California community colleges and/or other CSU campuses; (2) Modern Language majors may use courses in another language; (3) a course required for the major, but not offered by the major department, may be applied to G.E. No course taken to satisfy the U.S. History, U.S. Constitution, and California State and Local Government requirement may be applied to G.E. unless certified by California community colleges or other CSU campuses. No cooperative education courses may be applied to G.E.
- Must complete ENGL 1002 (College Writing II) or transfer equivalent before attaining 90 quarter units.
- Complete U.S. History, U.S. Constitution and California State and local government requirement through coursework or exams (details to
A minimum of 12 quarter units of the General Education-Breadth Requirements must be taken in residence at Cal State East Bay. (You are in residence if admitted to and regularly enrolled in the university).

A minimum of 12 quarter units of upper division (3000 and above) coursework applicable to the General Education-Breadth Requirements must be taken after you attain upper division status (90 or more quarter units). You cannot use community college courses to satisfy this requirement. You must take these 12 units in Areas B6, C4, and D4. No course taken in the major department, as designated by course prefix, may be applied to the upper division G.E. requirement.

A minimum of 3 quarter units of coursework must recognize the contributions to American civilization and knowledge that members of various cultural groups and women have made. The purpose of this requirement is to provide you with an introduction to the research, literature, and methodologies of the disciplines of ethnic studies and gender/women's studies from historical, cultural, social, and economic perspectives. Courses are taught by faculty committed to the four competencies listed below and are designed to give you a comprehensive understanding of the contributions to U.S. society made by cultural groups [African Americans, Asian Americans, Latino(a) Americans, Native Americans] women, and gays/lesbians (hereafter referred to as "groups").

Student Learning Outcomes

Upon completion of your Cultural Groups/Women requirement, you should have developed the following competencies: (1) knowledge of, and respect for, one or more of the groups and their contributions to U.S. society, including, but not limited to, three or more of the following aspects-historical, linguistic, cultural, economic, political, literary; (2) ability to analyze critically the relationships between the groups and the dominant society, between the groups themselves, and between members of the same group; (3) working knowledge of the groups' histories and contemporary experiences as subjects (as opposed to objects or victims) and of their voices and expressions, including, but not limited to, oral traditions, writings, and art forms; (4) comprehension of the origins and functions of discrimination, exploitation, and oppression of the groups, both historically and in the present, and ability to identify various patterns of discrimination.

TRANSFER STUDENTS

Under Chancellor's Executive Order No. 1033, up to 60 quarter (40 semester) units of the CSU General Education-Breadth Requirements may be certified by California Community Colleges and other CSU campuses. Certification is not automatic for the A.A. in University Studies programs. You should note that even though your certification from a California Community College (CSU G.E. pattern for CSU Intersegmental General Education Transfer Education Transfer Curriculum-IGETC) or another CSU campus may show more than the maximum number of certifiable units, you must still complete a minimum of 12 upper division residence G.E. units at Cal State East Bay.

For example, if your catalog rights for graduation are governed by this catalog, you must complete the following:

- Area B6, an upper division Science (life or physical science) course of at least 4 units selected from the Area B6 list;
- Area C4, an upper division Humanities course of at least 4 units selected from the Area C4 literature/history/philosophy list;
- Area D4, an upper division Social Science course of at least 4 units selected from the Area D4 list.

The Cultural Groups/Women General Education requirement may be satisfied simultaneously with one of the above lower or upper division Area General Education requirements, or as a separate course selected from Cal State East Bay's Cultural Groups/Women list. This requirement can also be satisfied by a lower division General Education transfer course that meets the CSUEB criteria; and

The second composition requirement for transfer students, is satisfied with ENGL 1002 (College Writing II), or an equivalent transfer course. If the course you are using to clear Area A3, Critical Thinking, is on the IGETC Critical Thinking list, this same course can be used to clear your second composition requirement.

If your catalog rights for graduation fall under an earlier catalog, see the General Education web page (www.csueastbay.edu/ge/transfer.htm) to identify requirements for that catalog.

You must complete at least 45 quarter (30 semester) units of G.E. including G.E. Areas A (Communication in the English Language) and B4 (Quantitative Reasoning) before transferring as a junior.

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Major: Defined

A major is a specified pattern of courses in a particular discipline or group of disciplines. (A list of Cal State East Bay undergraduate majors appears on the Undergraduate Majors and Options page of this catalog.) It complements G.E. by allowing you to specialize in one area, to study it in more depth than the one or two courses taken for G.E. in other disciplines. A few majors (such as Music and Spanish) are self-contained in the major department and have no courses that can double-count in G.E. Most majors, however, require some coursework in other departments and areas. These courses, if applicable to G.E., can be double-counted. You can design an Interdisciplinary Studies Major with faculty advice and administrative support (see the Interdisciplinary Studies Major chapter of this catalog).

A major is not the same as a career, though some majors are more closely allied to specific careers than others. There are people in most careers from a wide variety of majors. Cal State East Bay majors are described in the Undergraduate section of this catalog, and career options are listed for each of them.

A B.S. degree major often requires more units than a B.A. degree major. A B.F.A. degree major requires more units than most B.S. or B.A. degree majors because it is so specialized.

You may declare your major either on your application when you apply to Cal State East Bay or after you enroll by filling out a "Change of Major" form available in the Student Enrollment and Information Center, 1st Floor, Student Services and Administration Building, or in the Student Services Center at the Concord Campus.

You may complete more than one major with permission. All majors earned will appear on the same diploma.

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Option: Defined

An option is a prescribed pathway through a major which allows for emphasis on a particular segment of the discipline (for example, the Journalism Option in the Communication Major and the Dance Option in the Theatre Arts Major). Not all majors have formal options. Some majors with formal options require you to select an option (e.g., Business Administration) whereas others do not (e.g., Political Science). In some majors, different options have different unit values.

An option can appear on your diploma if you request it when filing for graduation. If you wish to complete more than one option and have the additional option(s) recorded, each must differ by at least three courses and nine units from any other option you complete.
Free Electives

Most students have some units not prescribed by G.E., the major, or other graduation requirements. These range from one or two courses in a few very large, occupationally oriented majors to a dozen or more courses in some humanities and social science majors.

Free electives are courses you are free to select to complete your minimum unit requirements for the degree. Some students complete free electives with whatever looks interesting when they have free hours in their schedules, but most students have a purpose in mind. This could be taking more courses in the major to prepare for graduate school or employment, taking a minor or certificate program (defined below) to complement the major (e.g., an English major taking a Marketing minor), or simply following a special interest (e.g., dance or photography). No student is required to do any of these things, but it is important that you understand your options.

Minor: Defined

A minor is a coherent program in some field or group of related fields other than your major. Minors range in size from 24-48 quarter units, at least 12 of which must be upper division. No student is required to have a minor, so it will not appear on your record or diploma unless you request it. The minimum grade point average for a minor is 2.0, so you must take at least one course on the A-F grading pattern. At least 50% of a minor or 12 units, whichever is less, must be taken at Cal State East Bay if you want the minor recognized on your diploma and/or permanent record.

Courses in a minor may be double-counted in G.E. However, at least 18 quarter units of a minor must not be double-counted in the discipline of the major for Cal State East Bay to recognize the minor.

If you wish to complete a minor, fill out a “Change of Major, Minor, Option” form available online at the Student Records Forms website.

Certificate Program: Defined

A certificate program is a coherent set of academic courses, considerably narrower in scope and objectives than a degree or major, for which you can receive a certificate upon its successful completion. Most certificate programs are oriented toward occupations and/or career skills. A certificate program must contain at least 12 units of courses numbered 3000 and above and a minimum of 20 total units (unless the certificate consists solely of 5000-and 6000-level courses in which case only 15 units are required). Each certificate program must contain a required core of at least three courses and 12 units. You can design a special certificate with faculty advice. See “Special Certificates” in the Interdisciplinary Studies Major chapter of this catalog.

Some certificate programs have admission requirements. Refer to the catalog description of the specific certificate program for more information. You must receive a grade of “C” or better in each undergraduate and 5000-level course and a “B” or better in each graduate course (6000-level) applied to the program. Only one course below the 6000-level may be taken "CR/NCR" and no graduate course may be taken "CR/NCR" in a certificate program unless that is the only grading pattern for the course. You must take at least 75% of the courses and all 5000- and 6000-level courses at Cal State East Bay. (For certificate programs, Cal State East Bay courses may be taken through Continuing and International Education or as a regularly admitted and enrolled student.) You may not receive a certificate if you have already received a major, option, or minor with the same title.

No student is required to complete a certificate program. Completion of a certificate program is recognized by the awarding of a certificate. There is no notation about the program on either a diploma or permanent record. (The courses will, of course, be on your permanent record.) You may pursue a certificate program before, during, or after your baccalaureate degree. Unlike a minor, a certificate is not part of a degree.

U.S History and Government Code Requirement

CSU graduates are expected to have knowledge of: significant events in U.S. history; the role of major ethnic and social groups in these events; the political, economic, social, and geographic context of these events; the U.S. Constitution, U.S. political institutions and processes; the rights and obligations of U.S. citizens; the California Constitution; federal-state relations; and California state and local government, and political processes.

You can demonstrate your competence in these fields by either: (a) passing one of three CLEP tests offered each quarter by the Testing Office, and passing a Category II (ASSIST US-3) course, or (b) passing two courses (one course from each of the following two categories) which cover all three topics:


- Second Category (ASSIST US-3): ES 1202 Ethnicity in American History II; HIST 1102 History of the U.S. since 1877; POSC 1202 Public Policy/California Politics; HIST 3500 History of California; POSC 3120 State and Local Politics and Government; POSC 3150 Politics of California.

Be aware that receiving credit for any courses applicable to this requirement through a national test such as Advanced Placement, CLEP, or at an out-of-state institution will not satisfy the California state and local government part of this requirement. You will still be required to complete a Category II course (ASSIST US-3) in the second category above.

University Writing Skills Requirement

In addition to the lower-division General Education requirements in writing, the California State University system requires all students to demonstrate writing competency at the university level in order to receive a baccalaureate or master’s degree. This requirement was implemented system-wide in 1977. You must satisfy the University Writing Skills Requirement (UWSR) in order to receive a degree from CSUEB unless you are exempt by one of the following criteria.

1. Graduation from any one of the CSU campuses.
2. Completion of the Graduation Writing Assessment Requirement at any one of the CSU campuses. Cal State East Bay will accept certification of completion if the entire requirement, as specified by that CSU campus, was satisfied and you were a matriculated student on that campus at the time.

3. Earned a minimum score of 4.5 on the writing portion of the GMAT.

4. Earned a minimum score of 4.5 on the writing portion of the GRE.

5. Earned a minimum score of 53 on the writing portion of the CBEST.

As soon as you have completed 90 quarter units, you will be required to begin steps to satisfy the University Writing Skills Requirement. DO NOT try to satisfy this requirement before completing 90 units or the UWSR will not be met. Complete ENGL 1001 and 1002, which are graduation degree requirements, before attempting to satisfy the UWSR.

To satisfy the requirement at CSUEB, you may do one of the following:

- Option One: Register for and pass the Writing Skills Test (WST). See WST (Option One) below.

- Option Two: Enroll in and pass a first-tier writing course (ENGL 3000 or 3001) and possibly a second-tier course, as well. See Course (Option Two) below.

WST (Option One): The Writing Skills Test consists of an analytic essay that requires you to demonstrate that you can think and write critically. You must pass the WST and satisfy the UWSR with a score of Clear Competence (8) to meet the requirement. If you fail the WST, you have only one opportunity to take it again. If you fail it again, your highest score of the two will determine your placement in courses. If your score is Limited Competence (6), you will be required to take the course option (see below). If your score is Developing Competence (7), you need only take a second-tier course to satisfy the UWSR (see below).

Course (Option Two): English 3000 and 3001 are the first-tier courses, designed to help students meet the University Writing Skills Requirement. Students who have taken the Writing Skills Test (WST) and have received Limited Competence (6) must take this course and perhaps a second-tier course as well. Students who choose to meet this requirement through class work do not ever have to take the WST although you may take it at any time, for a total of two attempts, even when enrolled in a writing skills course. Generally speaking, ENGL 3000 is intended for native speakers of English, while ENGL 3001 is intended for non-native speakers. Based on end-of-course portfolio evaluation scores, at the end of the first-tier course you will be directed as to your next step, which will involve one of the following: You may be found to have met the UWSR requirement altogether, you may be directed to enroll in a second-tier course, or you may be directed to repeat first tier. Three second-tier courses are currently offered: ENGL 3003, SCI 3010, and MKTG 3495. If you passed one of these courses prior to fall 2000, it may not meet the UWSR. For more information on these courses, contact the individual department.

If you have taken the first-tier course three times consecutively and have not passed and have a letter of good faith effort from your most recent first-tier instructor, you may apply to the Associate Vice President, Academic Programs and Graduate Studies, for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on this waiver (510.885.3718).

If you receive a grade of "D+" or "D" in a second-tier writing course (taken Fall Quarter, 2000 or later), you may appeal to the Associate Vice President, Academic Programs and Graduate Studies, for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on this waiver (510.885.3718).

For more information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661

**Transfer Requirements**

In general, degree requirements are the same, but special provisions safeguard the programs taken by students at California community colleges and other CSU campuses.

1. If you complete G.E. courses approved for transfer to the CSU and they are certified by your California Community College and/or CSU campus (or another campus accepts them and certifies them), Cal State East Bay will accept them to meet the requirements for which they are certified.

   According to the Code, CSU cannot accept more than 58 quarter units or 39 semester units. In practice, Cal State East Bay accepts 60 quarter (40 semester) units because our three-course, upper division G.E. program is 12 quarter units. 60 plus 12 totals the 72 units required for G.E.

2. If you complete the Intersegmental General Education Transfer Curriculum (IGETC) and it is certified complete by your community college, you have satisfied the entire 60-unit lower division G.E. program and have only the three courses, 12-unit, upper division G.E. program to complete. (The IGETC is an all-or-nothing proposition; there is no partial certification as in #1 above.)

3. If you complete any part or all of the U.S. history, U.S. Constitution, and California state and local government requirement at a California community college or other CSU campus and it is certified, Cal State East Bay will accept that certification for completion for all, or part of, the requirement. Contact either the History department or the Political Science department if you have any questions about this requirement.

4. If you successfully completed a course at another university or college that is not certified for the CSU G.E. program, but you believe it meets the criteria listed earlier for a specific requirement, you may request an "exception" on your degree audit. If you believe you have a petitionable course, discuss it with your advisor, with a G.E. advisor in the Academic Advising and Career Education Office, or the G.E. Office. If (s)he agrees, the advisor will submit the exception request for review. After action on your request for an exception, an e-mail to your Horizon account will notify you of the decision.

   Likewise, if you believe you have a petitionable course for the U.S. history and government requirement, you may request an exception. In this case, go to either the History department or the Political Science department, whichever is appropriate to the course, and review the issue with the department Chair. (Both departments are in Meiklejohn Hall.) If the Chair agrees, (s)he will approve the exception and note it on your degree audit.

5. Cal State East Bay has articulation agreements for all of our majors with all community colleges in Alameda and Contra Costa counties and with several others from which we receive sizable numbers of students. You may view them online at: http://www.assist.org. If you followed one of these major articulation agreements and completed all equivalent lower division work at the community college, your major department will consider your lower division major complete.
If you did not follow an articulation agreement, your major department will evaluate your transfer courses individually for equivalence.

6. The graduation writing proficiency requirement (called the University Writing Skills Requirement at Cal State East Bay) is mandatory on all CSU campuses. Cal State East Bay will accept certification of the graduation writing proficiency requirement from any CSU campus. However, we must have written documentation that the entire requirement was satisfied at the other campus where you were enrolled as a matriculated student. (*Matriculation* means regularly enrolled after being admitted to a university.) You cannot, for example, take a writing proficiency test at another campus to meet the UWSR at Cal State East Bay while you are matriculated at CSUEB.

Although you can complete a sizable portion of your graduation requirements at other colleges and universities, do not forget the residence requirements previously listed. They must be satisfied while matriculated and enrolled at Cal State East Bay.

### Multiple Majors

You can pursue two or more majors simultaneously with permission, making sure they differ from each other by a minimum of 18 units.

The disadvantage of completing multiple majors while working on the same degree is that you have to delay graduation until you complete all requirements of all the majors. However, you are checked for completion of the G.E. requirements only once (and the only department excluded from G.E. is your first major, not any additional ones).

In the case of multiple degrees, it is possible for you to pursue additional degrees simultaneously or consecutively. If you complete a second baccalaureate simultaneously with your first baccalaureate, you will not need to take additional residency or General Education units beyond those required for the degree you indicate as your primary baccalaureate.

If you return to complete a second bachelor's after graduating with your first bachelor's from a CSU campus, you are not required to complete any additional GE or Code courses. The 12 units of GE in residence are automatically waived for you if your first bachelor's was from a CSU campus. You are still held to the University Writing Skills Requirement if you did not satisfy it with your first degree.

If you enroll at CSUEB to complete a second bachelor's after graduating with your first bachelor's from a non-CSU institution, you will have your GE and Code courses evaluated under the appropriate GE catalog and CSUEB GE pattern. In this situation, the 12 units of GE in residence are a requirement for your second baccalaureate. You will be held to the University Writing Skills Requirement.

You cannot get two degrees in the same field. For example, a B.A. with a major in Geology and a B.S. with a major in Geology, or a B.S. with a major in Business Administration (Option in Accounting) and a B.S. with a major in Business Administration (Option in Marketing) are not allowed. (Note: Although you cannot receive two B.S. degrees in Business Administration, you can receive a single B.S. degree in Business Administration with two options.)

Any options and minors completed within your degree will also be recorded on your diploma and permanent record if you request them.

### Apply for Graduation

Note: Students are advised to review completion of general education requirements and to consult with your major and minor departments before filing for graduation.

Apply for graduation one term in advance of the term in which you intend to graduate. Students must apply prior to the end of the Late Add period. Deadlines to file are listed in the online class schedule each term. Log into MyCSUEB on the university website [https://my.csueastbay.edu](https://my.csueastbay.edu) and click on "Apply for Graduation." Students will be prompted to select the term for which they wish to graduate. A confirmation page will appear. Students print this page and give a copy to the major/minor department. Students are responsible for contacting their academic major department and informing them of their intent to graduate. Students must allow enough notice so that their department will have sufficient time to generate a major checklist sheet indicating whether the student has satisfied all academic requirements of the major.

The graduation filing fee will be charged to your account after a student files. Students may pay their fee:

- Online at MyCSUEB ([https://my.csueastbay.edu](https://my.csueastbay.edu))
- In person at the Cashiers' Office in the Student Services Building on the Hayward Hills campus
- In person in the Academic Services Office on the Concord Campus

The fee covers the cost of the graduation check, the diploma, and participation in the annual commencement ceremony (but not cap and gown rental/purchase, which is handled separately by the Bookstore). The fee is non-refundable, but if the student does not graduate when they intended, the fee will be transferred to the subsequent quarter, if you choose to update your quarter of graduation.

When students file for graduation, they may obtain a new registration priority. To register as a graduating senior, you must have earned 150 units or more and have filed for graduation. A student's graduation quarter can be moved by request a maximum of three consecutive times, after which time they must re-file and pay again. This should be done well in advance of the opening of registration for a given quarter, and no later than the end of the Late Add period of the quarter originally intended to be the student's final quarter. Changes in the information on the diploma (change of name, address to be sent, deletion of an incomplete minor) must be submitted no later than the end of the Late Registration period of the intended quarter of graduation.

After students file for graduation, their major department completes an official "Major Check" form showing all requirements completed for the major and those remaining to be completed for the major. (If you are an Interdisciplinary Studies Major, a Major Check is not needed.) Your department must submit the form to Planning, Enrollment Management, and Student Affairs no later than the fifth week of the quarter preceding the student's final quarter if they are to graduate on time. Students are strongly encouraged to check with their academic department by the end of the fifth week of classes of their next to last quarter to be certain this has been done.

If students are completing a minor and want it recorded, be certain to request that a "Minor Check" form be submitted by the department offering the minor to Planning, Enrollment Management, and Student Affairs no later than the end of the fifth week of classes of the student's second to last term.

If students are completing a Single or Multiple Subject Matter Preparation Program for entry into a teaching credential program, be certain that the appropriate check sheet is submitted by the department or program committee offering the program to the Credential Student Service Center in the College of Education and Allied Studies.

If students file any waiver or substitution petitions for major, G.E., or other graduation requirements, they must be certain the substitution petition reaches Planning, Enrollment Management, and Student Affairs at least four weeks before the end of your final quarter.

Once students have completed all degree requirements and Planning, Enrollment Management, and Student Affairs can verify their completion,
Graduate Credit

Undergraduate students may apply graduate courses taken during their final quarter of undergraduate attendance to a Cal State East Bay master's degree program. Students can take up to 13 units of courses during their final undergraduate quarter (no earlier) and apply them to their master's degree if they:

- have at least a 2.00 grade point average at Cal State East Bay;
- do not need the units or grade points to complete their baccalaureate degree;
- do not need the units for residence credit in their master's degree; and
- obtain prior permission from the department Chair to apply the courses to their master's degree.

While an undergraduate, you should obtain and complete a “Petition for Graduate Credit” form, and obtain the signed approval of the graduate department Chair to apply the courses to your master's degree. The form should be filed with Planning, Enrollment Management, and Student Affairs.

You cannot be matriculated in a baccalaureate degree and a master's degree program at the same time, so the units earned in your last undergraduate quarter that are applied to your master's degree are not residence credit in your graduate degree. Most Cal State East Bay master's degrees require 45 units, 32 of which must be in residence. If you take the maximum 13 units for your graduate degree in your last undergraduate quarter, you will have used-up your non-residence degree credit and cannot use any transfer, Continuing Education, or Open University units for your master's degree.

If you start working on a basic Teaching Credential (5000-level courses in Teacher Education) before completing your baccalaureate, and are not already in the Fast-Track Teacher Preparation Program, you may have the units certified for application to your post-baccalaureate requirements. To qualify, the units must be in excess of the units needed for your bachelor's degree or any requirement of that degree. You should submit a written request to Enrollment Management. The request should cite all the courses to be certified for this type of post-baccalaureate credit and should be submitted after completing your baccalaureate degree.
Graduate Degree Information

- **Graduate Education: Defined**
- **Graduate Student: Defined**
- **Graduate Study Completion**
- **Master's Degree Requirements**
- **University Writing Skills Requirement**
- **Candidacy**
- **Capstone Experiences**
- **Policies and Procedures**
- **Post-Baccalaureate Classification**
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- **Dual Master's Degrees**
- **Second Master's Degrees**
- **Applying for Graduation**
- **Doctorate Information**

**Graduate Education: Defined**

The master's degree is awarded for completion of a planned and integrated program of advanced study. It recognizes that a student has mastered a particular field sufficiently to pursue creative or applied projects in that field.

When you complete your graduate degree, you will have acquired a mastery of a particular area of knowledge; an ability to relate that knowledge to knowledge in other disciplines; an ability to deal systematically with the concepts, theory, and principles in new situations; an ability to formulate and deal with problems on an advanced level; methodological, technical, and communication skills essential for advanced study; an ability to undertake independent investigation and research; abilities characteristic of professional performance; and attitudes conducive to continuous intellectual and professional development.

Every master's degree program includes what is termed a capstone experience. This may include a thesis or its equivalent, a comprehensive examination, a specialized internship, a project, or case study report, a musical recital, gallery showing, or other comparable achievement. Your completion of the capstone experience demonstrates that you have successfully integrated the various elements of the graduate learning experience and have gained an in-depth knowledge of your discipline.

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**Graduate Student: Defined**

You are considered a Graduate Student at Cal State East Bay if you have been admitted to a specific master's degree program as a "Conditionally Classified" or "Classified" student, or to an advanced credential program which can be earned in conjunction with a master's degree. Basic teacher credential programs constitute a separate area of post-baccalaureate work, and students in these programs are defined as "Classified Post-Baccalaureate" students.

You will find information regarding master's degrees and credentials under the appropriate department's listing in the graduate section of this catalog.

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**Graduate Study Completion**

If you have completed all the units required for your master's degree, but are still working on your thesis, project, or studying for a comprehensive exam, you can have continued access to university facilities by registering for GS X6990 Graduate Study Completion, through the Division of Continuing and International Education. This is a 1-unit course with a fee of $78 (fee subject to change). The other alternative is to register for 0.1 units through the regular registration process at a cost of approximately $1164 (tuition fee, as of Spring 2011). Registering for GS X6990 will provide you with a valid Student ID card, the ability to check books out of the library, remote access to computerized databases in the library, use of computer labs on campus, the ability to continue to work on projects in science labs, eligibility to purchase a parking permit, and access to other benefits enjoyed by regularly registered students.

Note: GS X6990 cannot be used to satisfy any unit or course requirements for your degree.

You can register by picking up a "GS X6990 Graduate Study Completion Form" in your department or in the Continuing and International Education Office in SAB 1700. You will need to obtain a signature from your major department.

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**Master's Degree Requirements**

You must complete the five requirements listed below:

1. Fulfill the University Writing Skills Requirement;
2. Be Advanced to Candidacy;
3. Complete at least 45 quarter units applicable to your degree (45-52 in the Interdisciplinary Studies Major, 48 in Public Administration, 52-54 in Multimedia, 52-64 in the MBA, 72 in Counseling).

- All units must be earned within the five calendar years immediately preceding the receipt of your degree. (Outdated units may be accepted for one additional year with the approval of your department and the Associate Vice President, Academic Programs and Graduate Studies. If not completed in the sixth year, currency in the subject matter of the outdated courses must be demonstrated. Courses older than seven years are only applied to the degree in exceptional circumstances.)
- No more than 13 units, out of the total units required for your degree, can be completed when not in residence in your program (e.g., while at other schools, while an undergraduate with permission to take graduate courses, while pursuing an additional baccalaureate degree in "Unclassified Post-Baccalaureate" status, while enrolled in another graduate degree program, or while enrolled in
Continuing Education courses-including Open University courses
- At least 1/2 of the units in your program must be 6000-level
- No lower division units can be counted
- No more than 9 units of university thesis or 5 units of departmental thesis or project work can be counted
- No more than 15 units may be in CR/NC courses (16 in Public Administration, 24 in Counseling)

4. Complete a program of study approved by your department, which must include a thesis, project, or comprehensive examination; and
5. Earn a 3.0 grade point average in all units counted towards your degree.

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University Writing Skills Requirement

All CSU graduates must demonstrate competency in writing prior to receiving a degree by satisfying the University Writing Skills requirement (UWSR). Graduate students can meet this requirement in one of four ways:

1. If you have previously satisfied the Graduation Writing Assessment Requirement at CSUEB or at another CSU campus, CSUEB will accept official certification of completion if the entire requirement, as specified by that CSU campus, was satisfied and you were a matriculated student at the time.
2. If you received an essay score of 4.5 or higher on the GMAT or GRE or an essay score of 53 or higher on the CBEST.
3. If you pass the Writing Skills Test (WST) at CAL STATE East Bay (see WST (Option One)) below for details.
4. If you pass a first-tier writing course and possibly a second-tier writing course (if needed). See Course (Option Two) below for details.

If you have not satisfied the UWSR before you begin your graduate work, you must either take the Writing Skills Test or enroll in a first-tier course by the end of your first quarter in "Conditionally Classified graduate" status. If you do not take the test or course when required, you may have a hold placed on your ability to register and may be dropped from your classes. If you think your writing is competent, you should take the Writing Skills Test. The UWSR must be satisfied before you can be admitted as a "Classified Graduate" student and, consequently, before you can be advanced to candidacy and receive a degree.

WST (Option One): The Writing Skills Test consists of an analytic essay that requires you to demonstrate that you can think and write critically. You must pass the WST and satisfy the UWSR with a score of Clear Competence (old 8) to meet the requirement. If you fail the WST, you have only one opportunity to take it again. If you fail it again, your highest score of the two will determine your placement in courses. If your score is Limited Competence (old 6), you will be required to take the course option (see below). If your score is Developing Competence (old 7), you need only take a second-tier course and pass with a C-(CR) or better to satisfy the UWSR.

Course (Option Two): English 3000 and 3001 are the first-tier courses, designed to help students meet the University Writing Skills Requirement. Students who have taken the Writing Skills Test (WST) and have received Limited Competence (6) must take this course and perhaps a second-tier course as well. Students who choose to meet this requirement through class work do not ever have to take the WST although you may take it at any time, for a total of two attempts, even when enrolled in a writing skills course. Generally speaking, ENGL 3000 is intended for native speakers of English, while ENGL 3001 is intended for non-native speakers. Based on end-of-course portfolio evaluation scores, at the end of the first-tier course you will be directed as to your next step, which will involve one of the following: You may be found to have met the UWSR requirement altogether, you may be directed to enroll in a second-tier course, or you may be directed to repeat first tier.

Three second-tier courses are currently offered: ENGL 3003, SCI 3010, and MKTG 3495 (business majors are required to take this course in the major but may not enroll until they have reached Developing Competence on the WST or passed a first-tier course). If you passed one of these courses prior to Fall 2000, it may not meet the UWSR. For more information on these courses, contact the individual department.

If you have taken the first-tier course three times consecutively and have not passed and have a letter of good faith effort from your most recent first-tier instructor, you may apply to the Associate Vice President, Academic Programs and Graduate Studies, for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on this waiver (510.885.3718).

If you receive a grade of "D+" or "D" in a second-tier writing course (taken Fall Quarter, 2000 or later), you may appeal to the Associate Vice President, Academic Programs and Graduate Studies, for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on this waiver (510.885.3718).

If you have a verified disability and would like to request accommodations to assist you in satisfying this requirement, visit Accessibility Services website or call 510-885-3661.

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Candidacy

"Candidacy" is a status which recognizes completion of substantial progress towards your degree. You are eligible for Advancement to Candidacy when you:

1. are a "Classified Graduate" student in good standing;
2. have completed at least 12 quarter units of 6000-level coursework with a minimum 3.0 GPA;
3. have designed a formal program of study approved by your graduate advisor;
4. have fulfilled the University Writing Skills Requirement;
5. have completed other department prerequisites for advancement; and
6. are recommended for Advancement to Candidacy by your advisor (subject to approval by your department's graduate coordinator).

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Capstone Experiences

The capstone experience of your graduate program will be the successful completion of a thesis, project, or comprehensive examination. The quality of your work, including quality of expression, is the major consideration in judging the success of this degree component.

Thesis
A thesis is the written product of a systematic study of a significant issue. In the thesis, you are expected to identify the issue, state your major assumptions, explain the significance of your project, detail your sources for and methods of obtaining data, provide analysis of the data, and
Cal State East Bay offers two kinds of master's degree theses, University Thesis (numbered 6910) and Departmental Thesis (numbered 6909). Students required, or electing, to write a thesis must register for a minimum of one unit of either 6909 or 6910 in order to receive credit toward completion of this capstone experience. Check with your department for information on the number of units for which you must enroll.

Most criteria are the same for both the Departmental Thesis and the University Thesis.

- You must be a graduate student (i.e., admitted to a master's degree program) to enroll in a thesis course; your department may add additional requirements.
- Your thesis work will be supervised by a departmental committee which must include at least one Cal State East Bay faculty member who is a member of your major department.
- You may not receive credit for more than one unit of thesis work per quarter by the degree program.
- Each quarter you will receive a grade of "RP" (Report in Progress) for units earned in 6909 or 6910 until you complete your thesis; you will then be given a final grade for the entire course. No "RP" units will be counted towards your degree or in calculating your GPA. If your thesis is not approved within five years of your initial enrollment in a thesis course, the "RP" grade(s) will be changed to "F" or "NC" (depending on the grading pattern of the course).
- Normally you will be required to present an oral defense of your thesis.

There are also a few significant differences between the two kinds of theses.

- You may not earn more than 9 units for University Thesis, while the maximum for Departmental Thesis is 5 units. Several departments have lower unit requirements, so check the program description in this catalog.
- The format of a University Thesis is established by the Associate Vice President, Academic Programs and Graduate Studies. Since these works are expected to serve as resources for future research, the format is formal, and the theses are bound and placed in the Cal State East Bay Library. A Departmental Thesis, on the other hand, is usually not as formal. Its standards and format are determined by the department, and the thesis is retained by the department.

**University Thesis:** A comprehensive examination is intended to assess your mastery of relevant subject matter, your ability to analyze and integrate the knowledge of your field, your skill in critical and independent thinking, and your use of appropriate organization and accurate documentation. A record of your examination (questions and responses) will be retained by your department. Some departments grant unit credit for exam preparation while others do not.

** Comprehensive Examination**

A comprehensive examination is intended to assess your mastery of relevant subject matter, your ability to analyze and integrate the knowledge of your field, your skill in critical and independent thinking, and your use of appropriate organization and accurate documentation. A record of your examination (questions and responses) will be retained by your department. Some departments grant unit credit for exam preparation while others do not.

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**Policies and Procedures**

**Registration**

As a graduate student, you must follow the same registration policies and procedures as undergraduate students. (See the **Registration chapter** for details.)

Registration procedures for Thesis or Project courses are slightly different. You must complete a "Special Registration Petition" for each quarter you wish to enroll in one of these courses. Submit it to your department office. This must be done no later than the last day of the Add period. You are responsible for checking on the progress of this procedure.

**Prerequisites:** See "What information do I need to register for and enroll in classes?" in the **Registration chapter**.

**Grading**

It is an integral part of the teaching responsibility of the faculty to provide careful evaluation and timely assignment of an appropriate grade to each enrolled student. There is a presumption that grades assigned are correct. It is the responsibility of anyone appealing an assigned grade to demonstrate otherwise. In the absence of compelling reasons, such as instructor or clerical error, prejudice, or capriciousness, the grade determined by the instructor of record will be considered final.

For purposes of correcting an error, an instructor may change a grade with approval of his/her department chair and college dean. No grade may be changed once your graduation has been recorded. The administrative symbol for withdrawal cannot be assigned by a faculty member. See "What changes can I make in my enrollment status?" in the **Registration chapter** for a description of withdrawal policies and procedures.
The grading symbols used for graduate courses are as follows:

<table>
<thead>
<tr>
<th>Academic Grades</th>
<th>Standard of Work Represented</th>
<th>Grade (Quality) Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>Superior</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>Adequate</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>Adequate</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>Adequate</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>Substandard</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>Substandard</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>Substandard</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>Unacceptable</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>Unacceptable</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>0</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit</td>
<td>0</td>
</tr>
<tr>
<td>RP</td>
<td>Report in Progress</td>
<td>0.0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete (Authorized)</td>
<td>0.0</td>
</tr>
<tr>
<td>IC</td>
<td>Incomplete Charged</td>
<td>0.0</td>
</tr>
<tr>
<td>RD</td>
<td>Report Delayed</td>
<td>0.0</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>0.0</td>
</tr>
<tr>
<td>WU</td>
<td>Withdrawal Unauthorized</td>
<td>0.0</td>
</tr>
<tr>
<td>AU</td>
<td>Audit</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Administrative Grades Symbols**: You may also receive the administrative grades indicated above. It is important that you observe the differences among them. As noted in the Capstone Experiences section the Report in Progress grade ("RP") is used in courses when assigned work extends beyond one quarter. It indicates that work is in progress and has been evaluated and found satisfactory to date, but that assignment of a precise grade must await completion of additional work. You cannot enroll in more units of RP-graded courses than are applicable to your degree. An "RP" in a thesis course becomes an "F" or an "NC" if the work is not completed in five years; an "RP" grade in any other course becomes an "F" or an "NC" after one year.

The Incomplete (Authorized) grade ("I") is used to indicate that (1) a discreet portion of the required coursework has not been completed and evaluated in the prescribed time period due to unforeseen but fully justified reasons, (2) attending a future offering of the class is not required to complete the work, and (3) your instructor believes it likely that you will earn credit for the course upon completion of that work. An "I" must normally be made up within one calendar year immediately following the end of the term during which it was assigned. This limitation prevails whether or not you maintain continuous enrollment. If you receive an "I" and do not complete the work within the period specified by your instructor (in no case to exceed one year), the grade will be changed to an "IC" or "NC," depending on the grading pattern in which you enrolled. An extension may be granted by the department if military service or serious health or personal problems prevent you from completing the work, or if the professor is away on leave during the quarter of expiration. Such extensions are for one quarter only, up to a maximum of two extensions, and must be approved by the instructor and the department chair. Written notification of the extension must be sent to Enrollment Management.

An Incomplete Charged ("IC") is used when you receive an authorized incomplete ("I"), but do not complete the required coursework within the allowed time, and the original grading pattern of the course was "A-F." The "IC" replaces the "I" and is counted as a failing grade for computing your grade point average.

A Withdrawal Unauthorized ("WU") indicates that you enrolled in a course, but did not withdraw from the course and also failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities, or both, were insufficient to make normal evaluation of academic performance possible. The "WU" is counted in your grade point average as an "F" grade.

The Report Delayed grade ("RD") is rarely used, and will be assigned by the Registrar only if grade reports are delayed by circumstances beyond your control, such as your instructor's illness.

You may drop a course at any time during the first two weeks of instruction. (For Drop procedures, see the Class Schedule.) No mention of a dropped course appears on your permanent record. After the first two weeks of the quarter, deletion of a course is considered a Withdrawal, and a "W" grade will be assigned if the reason for your request to withdraw from the course is due to circumstances beyond your control and you have obtained the appropriate approvals. This grade carries no notation as to the quality of your work and is not included in GPA calculations. Under extreme circumstances you may decide that you must withdraw from all your courses. If you believe this may be necessary, contact your graduate advisor or department chair as soon as possible for advice on the appropriate procedures to follow. (See "What changes can I make in my enrollment status?" in the Registration chapter and "What are the administrative grading symbols, and what do they signify?" in the undergraduate Grading and Academic Standards chapter for additional information on withdrawal procedures.)

**Grade Point Average (GPA)**: Your grade point average (GPA) is calculated by dividing the total number of quality hours (units you have attempted, excluding CR/NC courses) into the number of grade (quality) points earned. If you repeat a course required in your major, your
Enrollment Management. You may petition the Fairness Committee if you believe the instructor should have assigned an academic grade. For
not assign a grade to an individual student, the appropriate failing grade for nonattendance ("WU" or "NC") is automatically recorded by
Post-Baccalaureate Classification
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or dean's list recognition as is the case for undergraduates.
Because graduate students constitute a select group whose members do very well in their programs, there is no academic honors at graduation
Honors
Because graduate students constitute a select group whose members do very well in their programs, there is no academic honors at graduation or dean's list recognition as is the case for undergraduates.

Final Examinations: You can expect your instructors to provide you with comprehensive course requirement information for each course at the
beginning of the quarter. This will include the work that is expected of you and the basis on which you will be evaluated. Most courses have
graded assignments throughout the quarter and a final examination or paper. The purpose of this policy is to ensure fairness for all students. Exceptions are, therefore,
and Graduate Studies; Tel. 510-885-3716), no later than one quarter after the disputed grade was recorded. The Fairness Committee may
Resolution of Disputes
Declassification from a Degree Program: You may be declassified (dropped) from a graduate degree or credential program for a range of
reasons, including, but not restricted to, unprofessional conduct; behavioral issues that interfere with the learning of others; failure to make
progress toward the degree or program as set forth by the University and program policies; failure to meet grade requirements to maintain good
standing in the program and/or University; and/or the department/program faculty determine that the student is incapable of completing degree
requirements at the level expected of a graduate student in the discipline even if the GPA is above a 3.0.

The decertification request must be initiated by the major department with support from the department/program chair and college dean or
designee. Requests are submitted to the Office of Academic Programs and Graduate Studies for final action and official notification to the
student and the Registrar's Office. The Office of Academic Programs and Graduate Studies will also determine if the student should also be
academically or administratively disqualified from the University. If the student is not disqualified from the University and wishes to continue in
academically or administratively disqualified from the University. If the student is not disqualified from the University and wishes to continue in
the University or Open University in any undergraduate or graduate courses in the program or degree from which they were declassified. Unless declassification
was related to conduct issues that interfere with campus interactions, declassified students are eligible to apply to a new program and be
accepted as a student by the department/program. The student must be accepted to a new program no later than three quarters after being
declassified; otherwise, the student must reapply to the University.

Resolution of Disputes
If you believe you have received an inappropriate grade or have been treated in an unfair way and you cannot resolve the matter informally with
the instructor and department chair, you should present your case to the President's Appointee to the Fairness Committee (Academic Programs
and Graduate Studies; Tel. 510-885-3716), no later than one quarter after the disputed grade was recorded. The Fairness Committee may
authorize a change of grade under certain circumstances (see the Grading and Academic Standards chapter). If the instructor of record does
not assign a grade to an individual student, the appropriate failing grade for nonattendance ("WU" or "NC") is automatically recorded by
Enrollment Management. You may petition the Fairness Committee if you believe the instructor should have assigned an academic grade. For
additional information, see "What recourse do I have if I believe I have received a grade that is inappropriate?" in the Grading and Academic
Standards chapter.

Honors
Because graduate students constitute a select group whose members do very well in their programs, there is no academic honors at graduation or dean's list recognition as is the case for undergraduates.

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Post-Baccalaureate Classification
You will be classified a full- or part-time student according to the following criteria:

- Full-time enrollment for a "Graduate" or "Classified Post-Baccalaureate" student is 8 or more units. You are considered to be a part-time student if you are enrolled for fewer than 8 units.
- Full-time enrollment for an "Unclassified Post-Baccalaureate" student (i.e., not enrolled in a master's degree program), is 12 or more units.
- If you are receiving financial aid or benefits from other programs (e.g., Veterans Administration or State Department of Vocational Rehabilitation), you may be subject to specific enrollment requirements to maintain your eligibility. You should check directly with the source of your benefits.
- If you are an international student on a non-immigrant visa, the U.S. Immigration and Naturalization Service (INS) requires that you pursue a full-time course of study in a specific program. You are expected to complete 8 units per quarter and 24 per year.

Also see "Academic Load" under "What information do students need to enroll in classes?" in the Registration chapter.

Credit for Transferred Courses

If you have earned credit at another institution which you wish to apply to your graduate program at Cal State East Bay, you may transfer up to 13 quarter units. (However, this number may be reduced if you have other non-residence credit you wish to apply to your degree.) To request transfer credit:

1. you must have taken the course after earning a bachelor's degree;
2. your department must accept the course(s) as relevant to your degree program;
3. the institution at which you took the course must customarily grant the level of credit for the course (graduate or upper division) that you wish to receive for it at Cal State East Bay;
4. you must have taken the course within five calendar years immediately preceding the receipt of your degree.

You also may apply units earned through the CSU International Programs that meet the criteria outlined above. No more than half of the 45 units required for your degree may be earned in this way. If you also apply transfer credits to your degree, the total of the transfer and International Program units may not exceed one-half of those required for your degree. If you complete your capstone experience (thesis, project, or comprehensive examination) while in the International Programs, this must be done under the supervision of at least one Cal State East Bay faculty member.

Also see "Credit for Non-Collegiate Instruction" in the Registration chapter.

In general, Cal State East Bay does not allow the use of credit-by-examination from challenged courses for master's degree requirements. Exceptions may be established by individual departments and must be noted in the degree description in the University Catalog. They are governed by the following policies:

- you must pass the exam challenging the course with a grade of "B-" or better;
- no more than 13 units of credit-by-examination may be applied to your degree; and
- challenged courses may not be credited to the residency requirement of your degree.

Change of Educational Objective

If you are a continuing post-baccalaureate student and wish to change your degree objective or credential program, or you wish to change from "Unclassified" status to a graduate degree or credential program, you must file a "Change of Graduate Objective" form with the Office of Graduate Admissions. The forms are available from, and should be submitted to, either the Student Enrollment Information Center (Student Services and Administration Building), the Office of Graduate Admissions, or the Academic Services Office at the Concord Campus.

Dual Master's Degrees

If you wish to pursue two master's degrees at the same time, you should indicate this on your application or "Change of Graduate Objective" form filed with the Office of Graduate Admissions:

1. Note that you must fulfill all prerequisites and requirements for each degree (up to 13 units from your first degree may be applied to your second degree if agreed to by your second degree program); and
2. earn all units for each master's degree within the five calendar years immediately preceding the receipt of each degree.

If both degrees are in the same field (e.g., business administration), they each must be in a different option and all 45 or more units must be different.

Second Master's Degrees

If you already have a master's degree and want to pursue a second master's degree, you must meet the following criteria:

1. apply and gain admission to the department offering the second master's degree program;
2. fulfill all prerequisites and requirements for the second degree;
3. complete at least 32 units (32-39 in the Special Major, 35 in Public Administration, 39-41 in Multimedia, 59 in Counseling) in your second degree. Up to 13 units from your first degree may be applied to your second degree if accepted by your second degree program;
4. earn all units for your second master's degree within the five calendar years immediately preceding the receipt of the degree.

If your second degree is in the same field as your first degree (e.g., business administration), the second degree must be in a different option and all 45 or more units must be different.

Applying for Graduation

You are advised to review completion of degree requirements with your department before filing for graduation.

Apply for graduation one term in advance of the term in which you intend to graduate. You must apply prior to the end of the Late Add period.
Deadlines to file are listed in the online class schedule each term. Log into MyCSUEB on the university website (https://my.csueastbay.edu) and click on "Apply for Graduation." You will be prompted to select the term for which you wish to graduate. A confirmation page will appear. Print this page and give a copy to your department.

- online at MyCSUEB (https://my.csueastbay.edu)
- in person at the Cashiers’ Office in the Student Enrollment Information Center (Student Services and Administration Building, 1st Floor) on the Hayward Hills campus
- in person in the Academic Services Office on the Concord Campus

The fee covers the cost of the graduation check, the diploma, and participation in the annual commencement ceremony (but not cap and gown rental/purchase, which is handled separately by the Bookstore). The fee is non-refundable, but if you do not graduate when you intended, the fee will be transferred to the subsequent quarter automatically.

When you file for graduation, you may obtain a new registration priority. To register as a graduating graduate student, you must be a "Classified Graduate" who is recommended for Advancement to Candidacy by your advisor and have made substantial progress towards your degree.

If you are completing an undergraduate Single Subject Matter Preparation Program for entry into a teaching credential program, or you are completing a graduate Single or Multiple Subject Credential Program, be certain that the appropriate check sheet is submitted by the department or program committee offering the program to the Credential Student Service Center in the College of Education and Allied Studies.

Once you have completed all degree requirements and Enrollment Management can verify their completion, your diploma will be ordered. The final graduation evaluation process typically takes up to three months following the posting of grades from your last quarter of attendance. Your diploma will be mailed to your address of record with the university 4-6 weeks after this final graduation check is completed.

A diploma is an official document containing the embossed seal of Cal State East Bay, your name, the degree conferred and date, major(s) completed in the degree conferred, any options or minors completed and requested, and the signatures of state and university officials. It is not reproducible or available in multiple copies. You can obtain multiple copies of your record by ordering transcripts which also show degrees, majors and options, as well as other information. If you need proof of completion of your degree before receiving your diploma, you may request a verification of graduation or a transcript from Enrollment Management. Should you change your name, you may request that a new diploma be issued with your new name if (1) you return the originally issued diploma to Enrollment Management, (2) you provide legal documents confirming your legal name change, and (3) you pay the fee for a new diploma.

Once your degree is posted to your permanent record, your diploma and transcript cannot be altered by adding additional options, or by grade changes, and/or withdrawals. The university protects the integrity of its transcripts and will not rewrite history unless a University error has occurred.

Doctorate Information

Doctorate: For information regarding the Doctor of Education, please see the Educational Leadership chapter in the graduate section of this catalog. A copy of the Doctoral Student Handbook may be requested from the Department of Educational Leadership, Dr. Jose Lopez, Doctoral Program Director, Arts & Education Building, Room 250, Tel: 510-885-4145; email: edld@csueastbay.edu. Department web site: http://www20.csueastbay.edu/ceas/departments/el/

Footnotes

1. Note that a "B-" grade, though described as "adequate," generates fewer than 3.0 grade (quality) points and must be balanced by a grade of "B+" or higher.
2. These grades cannot be selected by students. They are only available in graduate courses offered exclusively on a "Credit/No Credit" basis.
3. For definitions of administrative grades, see "What are the administrative grading symbols, and what do they signify?" in the Grading and Academic Standards chapter.
Facilities

- Art Galleries
- Bookstore
- Business and Economics Special Facilities
- Computing, Communication, and Media Support
- Language Laboratory
- Library
- Marine Laboratories
- Museum of Anthropology
- Parking Facilities
- Science Facilities
- University Union

Art Galleries

The Hayward Hills campus enjoys two exhibition spaces (the University Art Gallery and the Student Gallery) which make it possible to mount shows of varying size and significance.

The University Art Gallery is 2820 square feet of exhibition space. Located in AE 106, the Gallery has one person shows, group shows and student shows in a variety of media. An adjoining courtyard is available to display outdoor sculpture. Admission to the University Art Gallery is free. The student gallery, located in AE 274, is a more intimate space. Throughout the year, students present their works for short exhibitions. The days and hours of these shows vary and are also admission free.

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Bookstore

The Pioneer Bookstore's mission is to support the educational endeavor of the University by offering access to course materials for classes, as well as merchandise and services for the convenience of the campus community. The Hayward campus store is located between the Library and the University Union, across the street from Warren Hall. The Concord campus store is located in the Campus Union.

In addition to your required course materials, your bookstore offers: CSUEB logo clothing and gifts, electronics, nursing supplies and scrubs, lab supplies, educationally-discounted computer software and hardware, computer supplies, school and office supplies, testing materials and study guides, general books, art supplies, Peet's coffee, fresh sandwiches and salads, microwave meals and other snacks. The Hayward store also has a full-service U.S. Post Office and a Bank of America ATM.

All course materials and selected merchandise and services can be ordered online for delivery to your address at a fee, or for campus pickup at no additional charge. The website also posts current hours and general information. Hours and general information are also available at 510-885-3507.

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Business and Economics Special Facilities

The College of Business and Economics has an undergraduate Student Service Center in the Valley Business & Technology Center, VBT 129 (510-885-3323), providing academic guidance for Business and Economics majors. In addition, there are numerous student study commons located throughout the building.

The Acosta Gallery is used for hosting special events and when not in use serves as a gathering place for students.

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Computing, Communication, and Media Support

The Division of Information Technology Services, ITS, supports and enriches the university experience for students, faculty and staff—experience that is increasingly technology enabled and network based. ITS teams develop, operate and maintain the University’s shared computing and networking infrastructures, major administrative and academic information systems, baseline instructional and information technologies, and the requisite technical support services. ITS provides support services to the University community via the following three primary groups:

Media and Academic Technology Services (MATS)

The MATS department of the Division of Information Technology Services is responsible for the support of academic technologies delivered throughout campus and through internet delivery strategies. Components of this organization are also engaged in the research of new and emerging technologies as they pertain to the instructional mission of the University. MATS is comprised of the following:

Learning Environments Technology Services, located in LI 2800, provides support for technology resources in the University's classrooms and computer labs. Services include designing, installing and maintaining smart classrooms; assuring the operation of presentation and computer equipment in smart classrooms; and presentation rooms; and providing technology delivery services.

Instructional Technology Service Center, ITSC, located in the Lower Mall across from the Library in room LI 2800, provides support for faculty presentation needs and facilitates their use of all forms of instructional technology in the classroom, web-based and online instructional delivery. Some of the services provided by the ITSC are multimedia production, consultation with individual faculty on computer applications and presentation equipment, coordination of campus-wide technology funding initiatives, software distribution programs, online education including the campus learning management system (Blackboard), internet delivered instruction, streaming media technologies, and instructionally related digital video and television editing and production.

Adaptive Technology Service Center is engaged in researching and disseminating AT instructional techniques and technologies as they relate to pedagogical and instructional content creation, delivery and learning activities and the support of student adaptive technology. This center
The University Library plays an important role on campus, constantly transforming its services to support the teaching and learning needs of students and faculty in an ever-changing digital environment. The University Library continues to house locally owned printed materials and provide access to extensive electronic information resources online. The library instruction program guides and helps students locate and use the right information at the right time. The University Library also provides facilities where students use the latest technology tools in the Learning Commons, collaborate with their peers in group study rooms, or study in quiet areas.

### Information Resources

The University Library offers extensive collections, both in print and online, to support academic programs and faculty research. The library holds over 900,000 printed items, including books, journals, scores, maps, and U.S. federal and California state government publications. The library currently maintains approximately 1,000 print subscriptions to journals, some of which offer free on-line access to electronic versions. In addition, it has over 850,000 microform items, and over 30,000 media resources. In terms of online access to information resources, the library subscribes to many electronic databases and provides access to approximately 16,000 journals and over 30,000 electronic books.

The University Library supports and maintains both special collections and archives. Special Collections houses rare and antiquarian books; fine examples of book art; and manuscript collections, such as the Jensen Family papers, which provide rich primary sources on the history of the Hayward area. The University Archives contain the official records of the history of the university, as well as materials pertinent to the history of Southern Alameda County. The library online catalog, HAYSTAC, lists the entire collection and can be searched by author, title, subject, call number, and keywords. Visit the library website at [http://library.csueastbay.edu](http://library.csueastbay.edu) and discover the information resources both within the library and beyond the walls of the University Library.

### Instructional Services

The library offers LIBY 1210 (Introduction to Information Literacy), a course which satisfies the General Education Information Literacy requirement. The library also offers LIBY 1551 (Information Skills for the Electronic Age) and LIBY 3200 (Discipline Based Information Research). (See the Library chapter in the undergraduate section of this catalog for course descriptions and further information.) In addition to credit courses, the library offers course-specific instructions and workshops at faculty request to complement specific projects and papers assigned in class.

### Reference Services

The library offers reference assistance in person at the Reference Desk, over the telephone, and through electronic chat reference and e-mail. Librarians are also available by appointment and during scheduled office hours for individual consultation regarding library research. For a list of the librarians/staff and their subject areas, go to [Subject Specialists](http://library.csueastbay.edu).

### Circulation and Borrowing Services

Most library printed materials are available for check-out for various loan periods. For details about our circulation policies, ask at the Circulation Desk or check the Library's home page. The library participates in LINK+, a resource sharing service that enables faculty, staff, and students to place their own requests to borrow books that are not available at Cal State East Bay. Books are borrowed from other public and private libraries throughout the state and wider region. Interlibrary Loan staff help you borrow materials not readily available at the University Library or through LINK+. The library's interlibrary loan service provides books and journal articles unavailable here. Request forms are available on the library's web page and the service is available for a nominal fee.

### Media Resources and Reserves

From the Upper Mall Service desk, the library provides access to media resources such as DVDs, compact disks, videos, and other formats. Viewing and listening equipment is available. Reserve materials that faculty members have set aside for class use are available at this desk, or through Blackboard if materials are available in digital format.

### The Library as Place

The library is your intellectual center to study, engage in research, and share knowledge and insight with others. Various spaces within the library are designed to facilitate group and individual work. The library offers the following: (1) The Learning Commons, a state-of-the-art facility offering the largest group of computers on campus, coupled with access to the collections, services, and support offered by the library; (2) Adaptive Technologies which include several workstations on wheelchair accessible tables, and special speech and text magnification software; (3) Photocopy Services, self-service machines available throughout the library (machines accept currency, coins, and copy cards); (4) Networked Printing Services, computers in the Learning Commons and wireless laptops allow you to print from MS Office suite (Word, Excel, PowerPoint, Access), the Internet, and library databases; workstations near the Reference Desk permit printing from library databases; (5) Group Study Rooms on the Upper Mall facilitate work in small groups and the intellectual exchange of ideas through discussion; (6) Student Center for Academic Achievement (SCAA) on the Upper Mall offers tutoring primarily in English and Mathematics.

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**User Support Services (USS)**

The USS department of the Division of Information Technology Services provides desktop support and consulting to the academic and administrative faculty and staff. Services include configuring and troubleshooting computers; distributing and installing licensed software applications; consulting with faculty and staff members to assist with the operation of their computers; and providing services to secure the University’s computers and to protect computers from security threats.

In addition, USS provides training for staff and administrators in selected university-specific enterprise computer applications. See the training website for more information at [http://www.csueastbay.edu/its/training/](http://www.csueastbay.edu/its/training/).

USS also manages a central Service Desk, which is available to all members of the campus community who have questions regarding computing software, hardware and network communications. The Service Desk can be reached by calling 885-H-E-L-P (4357), e-mailing servicedesk@csueastbay.edu or online at [http://servicedesk.csueastbay.edu](http://servicedesk.csueastbay.edu).
Concord Campus Library

The branch campus library in Concord is a full-service library, providing reference and instructional assistance, electronic services, and circulation services. The Concord Library provides access to all the resources at the main library through onsite and networked resources. Print materials from the main library can be paged for pickup in Concord.

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Marine Laboratories

Instruction in marine biology, geology, oceanography, and other marine sciences is offered at the Moss Landing Marine Laboratories (www.mlml.calstate.edu) in conjunction with a consortium of five other California State University campuses. Full-time course offerings are available for resident credit and the facilities are used to supplement courses taught on the Hayward Hills campus. The laboratories are located 82 miles south of Hayward on Monterey Bay, and some classes are taught in Salinas. See the Marine Sciences chapters in this catalog for further details and for courses offered at Moss Landing, as well as information on the M.S. program in Marine Science.

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Museum of Anthropology

The Clarence E. Smith Museum of Anthropology was established in 1974 and opened its exhibition gallery in 1979. Chartered as a teaching museum for the instruction of museology in an anthropological context, the Museum is named in honor of the late Professor Clarence Smith of the Department of Anthropology. Professor Smith recognized the advantage of demonstrating tangibly, in art and artifact, both human diversity and the range of human achievement throughout the world. Efforts are made to represent both traditional cultural forms and their contemporary expressions and influences. In the forefront of the Museum's repertory are exhibits designed to illustrate all aspects of human culture from around the world, features of culture change, and technological as well as biological evolution.

The exhibition galleries of the Museum are located in the southeast corner of the fourth floor of Meiklejohn Hall on the Hayward Hills campus. They are open to the public, Monday through Friday, and by appointment; admission is free. Access to the collections is limited to qualified professionals and students whose scholarly research requires direct examination of the Museum's holdings. Consult with the Museum's collection manager for a current list of artifacts held. The staff and director's office is located on the first floor (1017) of Meiklejohn Hall. Consultations are given by appointment. For information on exhibits and appointments, call the Museum at (510) 885-3104 or (510) 885-3168, Monday through Friday, 8:00 a.m. to 5:00 p.m.

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Parking Facilities

Campus parking facilities are available to students displaying valid parking permits. Quarterly permits may be purchased by mail during the registration process, on-campus at the Caishier's Office, 1st Floor, Student Services and Administration Building, in the Pioneer Bookstore, and in the Concord Campus Academic Services lobby, as well as online via the Bookstore. Several parking lots contain parking permit dispensers from which a “Day Permit” may be purchased. In addition, there are several metered spaces available on the Hayward campus. See campus maps for locations of parking facilities.

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Science Facilities

The College of Science is housed in a 201,000-square-foot science building which includes many specialized teaching laboratories, general purpose personal computers, and specialized computing facilities.

The Departments of Biological Sciences, Chemistry and Biochemistry, Engineering, Earth and Environmental Sciences, Mathematics and Computer Science, Nursing and Health Sciences, Physics, and Psychology each maintain a number of well-equipped laboratories for undergraduate instruction. Laboratory classes are limited to 24, 20, 16, or 12 students, depending on the discipline.

In addition to the normal complement of laboratory equipment, students in the College of Science have access to three modern teaching and research core facilities:

BioCore: Support for cellular and molecular biology teaching and research
  - Equipment: Existing: DNA sequencer, real time PCR machine, flow cytometer, fluorescent microscope, HPLC, trace DNA lab, cell culture facility; Future: confocal microscope, microarray reader, FACS for cell type analysis, robotics
  - Supported Activities: Cell culture and cell sorting, DNA sequencing and typing, gene expression studies, forensic science and ancient DNA work

ChemCore: Support for qualitative, quantitative and structural analyses of chemicals and biomolecules
  - Equipment: Existing: 500MHz multi-nuclear FT-NMR spectrometer, gas chromatographic/mass spectrometer, atomic absorption spectrophotometer, UV, infrared and visible diode array spectrophotometer, FT-IR spectrophotometer, high performance liquid chromatography, ion chromatography; Future: microwave synthesizer, fluorescence spectrophotometer, liquid chromatography/mass spectrophotometer
  - Supported Activities: qualitative and quantitative analyses of inorganic and organic molecules including nucleic acids and proteins, structural analyses of organic molecules, analyses of environmental samples including pesticides and heavy metals

CompCore: Support for high capacity computing and visualization
  - Equipment: 40-core cluster system; large 9-panel display wall; cluster-driven immersive projected display; workstations with modern graphics cards
  - Supported Activities: Faculty and student projects include mathematics visualization, immersive display for panoramic photographs, statistics simulations, surround audio research, graphics rendering algorithms for GPUs

The Department of Chemistry and Biochemistry maintains laboratory equipment and instruments typical of comparable institutions. The Nuclear Magnetic Resonance (NMR) spectrometer is a 500 MHz instrument that allows structure elucidation of small molecules and biological compounds. Other instruments include UV, FTIR visible (diode array) and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, environmental field sampling equipment, thermocyclers and ultracentrifuge. The AA, HPLC, IC and GC/MS are all available online so that students can spend
The Department of Engineering maintains four laboratories:

- **Computer Integrated Manufacturing/Quality Testing:** Serves as a teaching lab; designed and developed to support various engineering courses with equipment ranging from table-top machine tools, robots, coordinate measuring machine and computer workstations to control this equipment.

- **Computer Laboratory:** Houses 36 computer workstations equipped with the latest versions of IE and manufacturing software; open to engineering students to work on projects and homework.

- **Human Performance Laboratory:** The newest laboratory in Engineering; equipped with various types of work measurement hardware and software, a treadmill and a work simulator machine. It also houses two Segway vehicles to study ergonomic design concepts. This laboratory is equipped with multi-media presentation equipment.

- **Material Testing Laboratory:** Houses an MTS machine, a torsion tester, an engineering microscope, and other measurement equipment. The lab houses a plastics processing equipment that is capable of demonstrating various plastics processes such as injection molding, blow molding, and extrusion.

The Department of Earth and Environmental Sciences is equipped with modern research and field instruments including a laser liquid-water isotope analyzer, vibrating tube densimeters, laser diffraction particle-size analyzer, cathodoluminescence microscope; X-ray diffractometer; petrographic and ore microscopes; ground penetrating radar; 24-channel seismographic system, and a proton magnetometer.

Field equipment includes a portable kitchen and other field supplies and a small power boat with sampling equipment for shallow water studies. Laboratories are equipped for sediment analysis, thin-section preparation, and photomicrography. The department also has large collections of minerals, rocks, fossils, and maps.

Computer science and math students at Cal State East Bay have access to some of the most modern and powerful computer equipment available. The campus provides a network backbone, including connection to the Internet and hundreds of personal computers. The department also has equipment of its own, including a network of Unix workstations and classrooms equipped for computerized demonstrations. Several computer labs on campus offer remote access and assistance with problems. CompCore is an advanced computing facility the department shares with the College of Science. Student and faculty projects can use its 40-core cluster system, large 9-panel display wall, immersive projected display system, and several workstations with modern graphics cards.

In the Nursing Skills Lab, nursing students practice in a simulated health care setting under the guidance of the Skills Lab Coordinator. This prepares them to move into local hospitals and community health agencies for their clinical patient/client experience.

Students in physics have access to world-class experimental facilities for undergraduate research and research training. One research laboratory is dedicated to thin film material science; i.e. organic polymer photovoltaics and metamaterials. Facilities include a thermal evaporator for preparation and characterization tools for electronic transport and THz spectroscopy. Another research laboratory, funded by grants from the National Science Foundation, is dedicated to tests of fundamental physical laws using atomic spectroscopy with state-of-the-art laser systems, magnetic shields, magnetic and electric field controls, and data acquisition systems. Research training facilities include an atom trapping and cooling laboratory, an electron-spin and nuclear magnetic resonance system, solar spectroscopy setup, and high-resolution grating spectrometers.

The Department of Psychology maintains laboratories and equipment for conducting student research in development, personality, social psychology, industrial psychology, physiological psychology, perception, conditioning, and cognition. The Psychology department also maintains a computer lab for use by students and faculty.

A computer lab, funded originally by the National Science Foundation, is equipped primarily for instruction of Statistics majors and minors, but is available for use by students in other areas as well. The laboratory has 20 personal computers networked to servers with professional statistical software and data sets. Both hardware and software are state-of-the-art. Applied and theoretical statistics classes use the lab for demonstrations of statistical computing and for class projects in which students learn practical data analytic skills that aid them in the transition from school to work.

Some rooms in the science building have also been set aside to function as computer centers. The Science Computer Lab is a 36-station lab with all the software needed by science students to do their homework. The flex classroom, Science South 149, is wired for students to bring laptops to use in the classroom.

**University Union**

As a program of the Associated Students, Inc., the University Union is the community center for Cal State East Bay providing services, facilities, and programs to meet the various social, recreational, and cultural needs of the students, faculty, staff, and community.

Campus dining service, a game room, lounges, Automatic Teller Machine (ATM) service, meeting rooms, a television lounge, a Sundries/Information center, copy machines, UU Exhibit Area, multipurpose rooms, and offices of the student government (Associated Students) are some of the service facilities housed in the modern and fully-furnished building. A student lounge is provided at the Concord Campus.

A variety of programs are planned by the ASI/UU Programs Department throughout the year to meet the cultural, social, and entertainment needs of the Cal State East Bay community.

**Reservation Procedures**

Reservations may be made by telephone (510-885-3902) or in person at the University Union Office, Monday through Friday, 8 a.m. to 5 p.m. Organizations that have access to the University Union facilities include university-recognized student organizations, academic and administrative departments, Cal State East Bay-affiliated groups, and off-campus groups.

All recognized Cal State East Bay student organizations may make tentative reservations directly, with confirmation pending approval obtained through the Student Life Programs Office. Academic/administrative/service departments can make reservations directly. The Union facilities shall not be used for regular academic classes. Deviation from this policy requires approval from the Executive Director of Associated Students, Inc.

Groups not directly affiliated with the university should make reservations directly with the Building Operations Coordinator and will be required to pay all charges and fees associated with their planned event prior to the event.
Room Rental Fees

Rental fees will be levied according to the University Union room rental fee structure. If special services (i.e., technical support, catering, special equipment) are requested, the University Union will levy the charge appropriate for the service requested. Set-up fees may be assessed for use of the University Union when the sponsor requires set-ups beyond those normally provided.

A-V Equipment

Audio-visual equipment is available upon request at the time of reservation. Data projectors, screens, overhead projectors, a cassette player, P.A. systems, and VCR monitors are available.

Cancellations

The policy of notifying the University Union Scheduling Coordinator of cancellations enables the Union to meet the growing demand for space. Organizations are encouraged to make reservations as early as possible. Groups that frequently violate the cancellation policy will not have the opportunity to continue reserving space. Appeals can be directed to the Executive Director of Associated Students, Inc.

Banners/Posters

Recognized Student Organizations, Associated Students, and university departments may place banners announcing events on one of four (4) designated banner spaces on the South balcony. Banner space is available for a maximum of one week on a first-come, first-served basis and must be reserved through the University Union Building Operations Coordinator at 885-7245.

Title 5, California Administrative Code, Subchapter 5, Article 9, Sections 42350-42353 specifies certain restrictions on the posting and distribution of printed materials on campuses of the California State University. Campus Presidents and/or designees are granted authority for implementing and for issuing directives pertaining to such regulations. The policy for posting can be found at: Posting Policy.
What undergraduate fees do I pay when I register at Cal State East Bay?

Schedule of Undergraduate Registration Fees

The CSU makes every effort to keep student costs to a minimum. Fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU must reserve the right, even after initial fee payments are made, to increase or modify any listed fee, without notice, until the date when instruction for a particular semester or quarter has begun. All CSU listed fees should be regarded as estimates that are subject to change upon approval by The Board of Trustees.

The following "Undergraduate Registration Fees" schedule reflects applicable systemwide fees and applies only to students who do not hold a bachelor's degree. If you already hold a bachelor's degree, regardless of your current educational objective, you will pay the fees listed in the Fees: Graduate section of the Admission/Graduate chapter.

All Students:

Application Fee (nonrefundable), payable by check or money order at the time application is made: $55

<table>
<thead>
<tr>
<th>Undergraduate Registration Fees, effective Fall 2011</th>
<th>0.1 to 6.0 Units</th>
<th>6.1 or More Units</th>
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</thead>
<tbody>
<tr>
<td>Tuition Fee*</td>
<td>$1,058</td>
<td>$1,824</td>
</tr>
<tr>
<td>Student Body Fee</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Facilities Fee</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>University Union Fee</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>University Union Recreational Fee</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Instructionally Related Activities Fee</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Health Services Fee</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Athletics Fee</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Academic Excellence Fee, effective Winter 2012</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Photo I.D. (quarterly fee)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total Hayward</td>
<td>$1,385</td>
<td>$2,151</td>
</tr>
<tr>
<td>Total Concord Only</td>
<td>$1,325</td>
<td>$2,091</td>
</tr>
<tr>
<td>Total Online Only</td>
<td>$1,193</td>
<td>$1,959</td>
</tr>
</tbody>
</table>

*Note: The Tuition Fee for the academic year (three quarters) is $3,174 for 0.1 to 6.0 units a quarter and $5,472 for 6.1 or more units a quarter. The total fees paid per quarter will be determined by the number of units taken, including those in excess of fifteen. (Please see Errata page for corrections to this content.)

Mandatory systemwide fees are waived for individuals who qualify for such exemption under the provisions of the California Education Code. (See "Who qualifies for fee waivers?" in this chapter.)

How should I pay my fees?

Credit Cards, Cash, Check

You may use credit cards (American Express, Discover, and MasterCard), cash, or check for payment of registration fees. See the current Class Schedule for additional information.

Installment Payment Plans

Installment Payment Plans have been authorized if you are assessed Nonresident Tuition or Tuition Fees. See the current Class Schedule for additional information about payment plans.
The residence determination dates for quarter term campuses (Cal State East Bay) are:

- Fall: September 20
- Spring: April 1
- Winter: January 5
- Summer: July 1

The residence determination dates for the CalStateTEACH are as follows:

- Fall: September 20
- Spring: January 5
- Summer: June 1

Questions regarding residence determination dates should be directed to Cal State East Bay's Student Enrollment Information Center in the Student Services Building.

Campus Residence Classification Appeal

Students classified as non-residents may appeal a final campus decision within 120 days of notification by the campus. A campus residence classification appeal must be in writing and submitted to:
The Office of General Counsel can either make a decision on the appeal or send the matter back to the campus for further review.

Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is also subject to discipline pursuant to Section 41301 of Title 5 of the California Code of Regulations.

Resident students who become nonresidents, or who no longer meet the criteria for an exception, must immediately notify the Admissions Office.

Changes may have been made in the rate of nonresident tuition and in the statutes and regulations governing residence for tuition purposes in California between the time this information is published and the relevant residence determination date. Students are urged to review the statutes and regulations stated above.

Am I responsible for other fees?

In addition to the fees required of all students, you may have to pay fees for the following items:

Miscellaneous Course Fees

You may have to pay a miscellaneous course fee for instructional materials and field trips for some courses. If courses have such fees, it is noted in their course descriptions in this catalog. Also refer to the Class Schedule for additional information and specific fee schedules for these courses.

CSU reserves the right, even after initial fee payments are made, to increase or modify any listed fees, without notice, until the date when instruction for a particular quarter has begun. All CSU listed fees should be regarded as estimates that are subject to change upon approval by The Board of Trustees.

<table>
<thead>
<tr>
<th>Fee</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late registration fee</td>
<td>$25</td>
</tr>
<tr>
<td>Failure to meet administratively-required time limit</td>
<td>$20</td>
</tr>
<tr>
<td>Graduation and diploma fee</td>
<td>$48</td>
</tr>
<tr>
<td>Lost ID card fee</td>
<td>$10</td>
</tr>
<tr>
<td>Returned check</td>
<td>$25</td>
</tr>
<tr>
<td>Parking fee per quarter: Auto</td>
<td>$130</td>
</tr>
<tr>
<td>Parking fee per quarter: Motorcycle</td>
<td>$65</td>
</tr>
<tr>
<td>Official transcript of record (single)</td>
<td>$4</td>
</tr>
<tr>
<td>Additional transcripts prepared at same time up to ten (2-10)</td>
<td>$2(each)</td>
</tr>
<tr>
<td>Additional transcripts prepared at same time after first ten (11+)</td>
<td>$1(each)</td>
</tr>
<tr>
<td>Unofficial transcript of record</td>
<td>$2(each)</td>
</tr>
<tr>
<td>Items lost or broken</td>
<td>COST</td>
</tr>
<tr>
<td>Test fees</td>
<td>COST</td>
</tr>
<tr>
<td>Laboratory and/or activity fee</td>
<td>COST</td>
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<tr>
<td>Certificate program fee</td>
<td>$4</td>
</tr>
<tr>
<td>Entry Level Math (ELM) Exam</td>
<td>$18</td>
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<tr>
<td>English Placement Test (EPT)</td>
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</tr>
<tr>
<td>Writing Skills Test (WST)</td>
<td>$25</td>
</tr>
<tr>
<td>Limited Administration of WST (guaranteed computer)</td>
<td>$50</td>
</tr>
<tr>
<td>Miscellaneous Course fee</td>
<td>$5-$500</td>
</tr>
</tbody>
</table>

(Notes: The graduation fee does not include the cost of cap and gown rental.)

What are the fees for Continuing and International Education courses?

Nonresident Tuition is not charged for Continuing and International Education or Open University courses. Fees for Cal State East Bay Continuing Education courses vary, depending on the type of course selected. Visit the Continuing and International Education website at: http://www.ce.csueastbay.edu for the latest information on fees for specific courses, as well as detailed descriptions of programs and courses offered by the Division of Continuing and International Education.

Where can I get information on financial assistance?
whether a student is part-time, full-time, resident, or nonresident. enroll in, or attend the university was $5,285. However, the costs paid by individual students will vary depending on campus, program, and 2010-11 academic year, resident, undergraduate student basic tuition fee and other mandatory fees required to apply to, CSU Operating Fund. Net Basic Tuition fee revenue and other income represents campus 2010-11 budgets submitted November 2010. State Appropriation includes a decrease of $106 million reflecting a shift of costs on a one time basis to the federal American Recovery and Reinvestment Act State Fiscal Stabilization Fund. "State Appropriation includes a decrease of $106 million reflecting a shift of costs on a one time basis to the federal American Recovery and Reinvestment Act State Fiscal Stabilization Fund." ** Net Basic Tuition fee revenue and other income represents campus "other fee" 2010-11 final budget revenues submitted, as well as reimbursements in the CSU Operating Fund. The average CSU 2010-11 academic year, resident, undergraduate student basic tuition fee and other mandatory fees required to apply to, enroll in, or attend the university was $5,285. However, the costs paid by individual students will vary depending on campus, program, and whether a student is part-time, full-time, resident, or nonresident. Information concerning the cost of attending Cal State East Bay is available on the university website or by calling Financial Aid at (510) 885-2784, and includes tuition and fees; estimated costs of books and supplies; estimates of typical student room, board, and transportation costs; and, if requested, additional costs for specific programs. What is the California State University's average support cost per full-time equivalent student? The total support cost per full-time equivalent student (FTES) includes the expenditures for current operations, including payments made to students in the form of financial aid, and all fully reimbursed programs contained in state appropriations. The average support cost is determined by dividing the total cost by the number of FTES. The total CSU 2010-11 budget amounts were $2,617,435,000 from state General Fund appropriations (not including capital outlay funding), $1,244,603,000 from net basic tuition fee revenue, and $320,211,000 from other fee revenues and reimbursements for a total of $4,182,249,000. The number of projected 2010-11 FTES was 339,873 resident and 14,509 non-resident students. FTES is determined by dividing the total academic student load by 15 units per term (the figure used here to define a full-time student's academic load). The 2010-11 average support cost per FTES based on General Fund appropriation and net basic tuition fee revenue only was $11,213 and when including all sources as indicated below was $12,117. Of this amount, the average net basic tuition fee revenue and other income & reimbursements per FTES was $4,416, which includes all fee revenue in the CSU Operating Fund (e.g. tuition fees, application fees, other miscellaneous fees, and reimbursements).

<table>
<thead>
<tr>
<th>Sources of Funds and Average Cost per FTE Student</th>
<th>Amount</th>
<th>Average Cost per FTE Student</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Support Cost</td>
<td>$4,182,249,000</td>
<td>$12,117</td>
<td>100%</td>
</tr>
<tr>
<td>State Appropriation*</td>
<td>2,617,435,000</td>
<td>7,701</td>
<td>64%</td>
</tr>
<tr>
<td>Net Basic Tuition Fee Revenue**</td>
<td>1,244,603,000</td>
<td>3,512</td>
<td>29%</td>
</tr>
<tr>
<td>Other Income and Reimbursements**. ***</td>
<td>320,211,000</td>
<td>904</td>
<td>7%</td>
</tr>
</tbody>
</table>

* "State Appropriation includes a decrease of $106 million reflecting a shift of costs on a one time basis to the federal American Recovery and Reinvestment Act State Fiscal Stabilization Fund.* ** Net Basic Tuition fee revenue and other income represents campus "other fee" 2010-11 final budget revenues submitted, as well as reimbursements in the CSU Operating Fund. The average CSU 2010-11 academic year, resident, undergraduate student basic tuition fee and other mandatory fees required to apply to, enroll in, or attend the university was $5,285. However, the costs paid by individual students will vary depending on campus, program, and whether a student is part-time, full-time, resident, or nonresident.

Who qualifies for fee waivers? The California Education Code includes provisions for the waiver of mandatory systemwide fees as follows:

**Dependents of Deceased or Disabled Military Veterans; Congressional Medal of Honor Recipients or Dependents of Recipients**

Section 66025.3. Qualifying children, spouses/registered domestic partners, or unmarried surviving spouses/registered domestic partners of a war period veteran of the U.S. military who is totally service-connected disabled or who died as a result of service-related causes; children of any veteran of the U.S. military who has a service-connected disability, was killed in action, or died of a service-connected disability and meets specified income provisions; any dependents or surviving spouse/registered domestic partner who has not remarried of a member of the California National Guard who in the line of duty and in active service of the state was killed or became permanently disabled or died of a disability as a result of an event while in active service of the state; and undergraduate students who are the recipient of or the child of a recipient of a Congressional Medal of Honor and meet certain age and income restrictions. For further information, contact Enrollment Management to speak with a Veterans’ Affairs Benefits Specialist.

Alan Pattee Scholarships
Section 68120. Qualifying children and surviving spouses/registered domestic partners of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of active law enforcement or fire suppression duties (referred to as Alan Pattee Scholarships); and

Dependents of Individual Killed in September 11, 2001 Terrorist Attack

Section 68121. Qualifying students enrolled in an undergraduate program who are the surviving dependent of any individual killed in the September 11, 2001 terrorist attacks on the World Trade Center in New York City, the Pentagon building in Washington, D.C., or the crash of United Airlines Flight 93 in southwestern Pennsylvania, if the student meets the financial need requirements set forth in Section 69432.7 for the Cal Grant A Program and either the surviving dependent or the individual killed in the attacks was a resident of California on September 11, 2001. Students who may qualify for these benefits should contact the Admissions/Registrar's Office for further information and/or an eligibility determination.

For Additional Information

Students who may qualify for any of these benefits listed above should contact Enrollment Management for further information on the specific requirements and/or an eligibility determination.

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What are Cal State East Bay's refund policies?

Refund of Mandatory Fees, Including Nonresident Tuition

Regulations governing the refund of mandatory fees, including nonresident tuition, for students enrolling at the California State University are included in Section 41802 of Title 5, California Code of Regulations. For purposes of the refund policy, mandatory fees are defined as those systemwide and campus fees that are required to be paid in order to enroll in state-supported academic programs at the California State University. Refunds of fees and tuition charges for self-support, special session, and extended education programs or courses at the California State University are governed by a separate policy established by the University.

In order to receive a full refund of mandatory fees, including nonresident tuition, a student must cancel registration or drop all courses prior to the first day of instruction for the term. Information on procedures and deadlines for canceling registration and dropping classes is available in Class Schedule.

For state-supported semesters, quarters, and non-standard terms or courses of four (4) weeks or more, an astudent who withdraws during the term in accordance with the university's established procedures will receive a refund of mandatory fees, including nonresident tuition, based on the portion of the term during which the student was enrolled. No student withdrawing after the 60 percent point in the term will be entitled to a refund of any mandatory fees or nonresident tuition.

For state-supported non-standard terms or courses of less than four (4) weeks, no refunds of mandatory fees and nonresident tuition will be made unless a student cancels registration or drops all classes prior to the first day in accordance with the university's established procedures and deadlines.

Students will also receive a refund of mandatory fees, including nonresident tuition, under the following circumstances:

- The fees were assessed or collected in error;
- The course for which the fees were assessed or collected was cancelled by the university;
- The university makes a delayed decision that the student was not eligible to enroll in the term for which mandatory fees were assessed and collected and the delayed decision was not due to incomplete or inaccurate information provided by the student;
- The student was activated for compulsory military service.

Students who are not entitled to a refund as described above may petition the university for a refund if he or she determines that the fees and tuition were not earned by the university.

Information concerning any aspect of the refund of fees may be obtained from the Accounting and Fiscal Services Office, 2nd Floor, Student Services and Administration Building, (510) 885-3642.

Refund Regulations

Refund disbursements are not made automatically. If you request a refund check (see below) and it is approved, it will be available in approximately four to six weeks.

If you are eligible for a refund of Registration fees (including nonresident tuition) because you withdrew or reduced units before the published deadlines, the amount of the refund will automatically be credited to your university account. If you take no action, the university will leave the balance on your account to apply toward future charges.

A few refund situations are listed below for your information.

a. If you find it necessary to withdraw officially from Cal State East Bay, you may be eligible for a partial refund of your Registration fees. Also, see 3) below. A "Refund Request" form is available at the Cashier's on the first floor of Student Service Building or in the Concord Campus Academic Services Lobby.

b. If you withdraw before the first day of instruction for the term, all quarterly fees, including the Facilities fee, Instructionally Related Activities fee, Associated Students fee, Health Services fee and University Union fee are refunded in full. A $10.00 processing fee will be assessed if a refund check is generated. Information on procedures and deadlines for canceling registration and dropping classes is available in the Class Schedule. The Late Registration fee is not refundable except when due to university error.

c. If you have been called to active military duty and, as a result, find it necessary to withdraw from Cal State East Bay, you are eligible for a refund of fees. You must file a "Refund Request" form available at the Cashier's on the first floor of Student Service Building with a copy of the orders.

d. Refunds owed to financial aid recipients will be used to repay the funds from which the student has received financial aid.

Information concerning the refund policy of Cal State East Bay for the return of unearned tuition and fees or other refundable portions of costs is available from the Accounting and Fiscal Services Office, (510) 885-3767.

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What is Cal State East Bay's policy regarding fees or debts owed to the institution?

Should a student or former student fail to pay a fee or a debt owed to Cal State East Bay, the institution may "withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt" until the debt is paid (see Title 5, California Code of Regulations, Sections 42380 and 42381).
Prospective students who register for courses offered by the university are obligated for the payment of fees associated with registration for those courses. Failure to cancel registration in any course for an academic term prior to the first day of the academic term gives rise to an obligation to pay student fees, including any tuition, for the reservation of space in the course.

The institution may withhold permission to register or to receive official transcripts of grades or other services offered by the institution from anyone owing fees or another debt to the institution. The institution may also report the debt to a credit bureau, offset the amount due against any future state tax refunds due the student, refer the debt to an outside collection agency and/or charge the student actual and reasonable collection costs, including reasonable attorney fees if litigation is necessary, in collecting any amount not paid when due.

If a person believes he or she does not owe all or part of an asserted unpaid obligation, that person may contact the campus business office. The business office, or another office on campus to which the business office may refer the person, will review all pertinent information provided by the person and available to the campus and will advise the person of its conclusions.

What is the procedure for the establishment or abolishment of a student body fee?

The law governing The California State University provides that fees defined as mandatory, such as a student body association fee and a student body center fee, may be established. A student body association fee must be established upon a favorable vote of two-thirds of the students voting in an election held for this purpose (Education Code, Section 89300). A student body center fee may be established only after a fee referendum is held which approves by a two-thirds favorable vote the establishment of the fee (Education Code, Section 89304). (The student body fee was established at Cal State East Bay by student referendum in the 1960-61 academic year.) The campus president may adjust the student body association fee only after the fee adjustment has been approved by a majority of students voting in a referendum established for that purpose (Education Code, Section 89300). The required fee shall be subject to referendum at any time upon the presentation of a petition to the campus president containing the signatures of 10% of the regularly enrolled students at the university. Once bonds are issued, authority to set and adjust student body center fees is governed by provisions of the State University Revenue Bond Act of 1947 including, but not limited to, Education Code sections 90012, 90027, and 90068. Student body association fees support a variety of cultural and recreational programs, childcare centers, and special student support programs.

The process to establish and adjust other campus-based mandatory fees requires consideration by the campus fee advisory committee and a student referendum. The campus president may use alternative consultation mechanisms if he/she determines that a referendum is not the best mechanism to achieve appropriate and meaningful consultation. Results of the referendum and the fee committee review are advisory to the campus president. The president may adjust campus-based mandatory fees, but must request the Chancellor establish a new mandatory fee. The President shall provide to the fee advisory committee a report of all campus-based mandatory fees. The campus shall report annually to the Chancellor a complete inventory of all campus-based mandatory fees.

For more information or questions, please contact the Budget Office in the CSU Chancellor's Office at (562) 951-4560.

Footnote

1. Fee adjustments subject to the policies established in Executive Order 661.
Grading and Academic Standards

These are university grading and academic standards which apply to all academic courses and programs offered at Cal State East Bay, including, but not limited to, courses offered in self-support, state-support or special sessions.

- What is the grading policy at Cal State East Bay?
- What are the academic grading symbols for undergraduates, and what do they signify?
- What are the administrative grading symbols, and what do they signify?
- How is my grade point average (GPA) computed?
- When are final examinations scheduled?
- When will I receive my grades?
- How can I qualify for the Dean's and Honors Lists?
- What constitutes probation and disqualification?
- Can I qualify for Grade Forgiveness?
- What recourse do I have if I believe I have received a grade that is inappropriate?
- How does Cal State East Bay define and handle academic dishonesty?

What is the grading policy at Cal State East Bay?

It is an integral part of the teaching responsibility of the faculty to provide careful evaluation and timely assignment of an appropriate grade to each enrolled student. There is a presumption that grades assigned are correct. It is the responsibility of anyone appealing an assigned grade to demonstrate otherwise. In the absence of compelling reasons, such as instructor or clerical error, prejudice, or capriciousness, the grade determined by the instructor of record is to be considered final. Final course grades must be submitted by the faculty to Planning, Enrollment Management, and Student Affairs by the established deadline. Also see "Policies and Procedures" in the Graduate Degree Information chapter.

If you believe that an appropriate grade has not been assigned, and you cannot resolve the matter informally with the instructor, department chair, and/or college dean/associate dean, you should present your case to the President's appointee to the Fairness Committee, 510-885-3716, no later than one quarter after you received the grade. The Fairness Committee may authorize a change of grade under certain circumstances (see "What recourse do I have if I believe I have received a grade that is inappropriate?" in this chapter.). If the instructor of record does not assign a grade to an individual student, the appropriate failing grade for nonattendance ("WU" or "NC") is automatically recorded by Planning, Enrollment Management, and Student Affairs. You have one quarter to petition the Fairness Committee if you believe the instructor should have assigned an academic grade. If the instructor of record is unable to assign course grades, the Fairness Committee is authorized to ensure that other qualified faculty assign grades.

For purposes of correcting an error, an instructor may change a grade with approval of his/her department chair and college dean. No grade may be changed once graduation has been recorded. The administrative symbol for withdrawal cannot be assigned by a faculty member. See the Registration chapter for the description of withdrawal policies and procedures.

What are the academic grading symbols for undergraduates, and what do they signify?

<table>
<thead>
<tr>
<th>Academic Symbols</th>
<th>Definitions</th>
<th>Grade (Quality) Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>Excellent</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>Good</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>Good</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>Satisfactory</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>Satisfactory</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>Poor</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>Poor</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0.0</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>0.0</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit</td>
<td>0.0</td>
</tr>
</tbody>
</table>

"A-F" Grading Pattern

Courses required for your major in your major department are taken in this pattern. Specific department exemptions are noted in the course description. Faculty use of "+" or "-" is optional.

Credit/No Credit and A/B/C/No Credit Grading Patterns (CR/NC and A/B/C/NC)

You may enroll in up to 60 units in credit/no credit patterns as an undergraduate. There are two credit/no credit patterns: (1) "CR/NC," and (2) "A/B/C/NC." Some courses are only offered in the "CR/NC" or "A/B/C/NC" patterns. You can select the "CR/NC" pattern for most other courses subject to certain restrictions. You can choose the "CR/NC" pattern during Registration until the end of the Late Add period. No changes to, or from, the credit/no credit pattern are permitted after the Late Add period. There are no exceptions to this rule. No course in your major department, regardless of course prefix, may be taken "CR/NC," unless that is the only grading pattern in the course.

Units that you earn in courses taken under these grading patterns will apply to your degree requirements as long as they are not remedial courses (courses numbered 0800 - 0999). "CR" signifies you mastered the material at the level of "C-" or higher. "NC" signifies a work level of "D+" or lower. Faculty use of "+" or "-" is optional.
What are the administrative grading symbols, and what do they signify?

<table>
<thead>
<tr>
<th>Administrative Grading Symbols</th>
<th>Definitions</th>
<th>Grade (Quality) Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP</td>
<td>Report in Progress</td>
<td>0.0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete (Authorized)</td>
<td>0.0</td>
</tr>
<tr>
<td>IC</td>
<td>Incomplete Charged</td>
<td>0.0</td>
</tr>
<tr>
<td>RD</td>
<td>Report Delayed</td>
<td>0.0</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>0.0</td>
</tr>
<tr>
<td>WU</td>
<td>Withdrawal Unauthorized</td>
<td>0.0</td>
</tr>
<tr>
<td>AU</td>
<td>Audit</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Report in Progress (RP)**

The symbol "RP," Report in Progress, is used in connection with courses that extend beyond an academic term. It indicates that work is in progress, but that a final grade cannot be assigned until additional work is completed. The work is to be completed within one year, except in the case of graduate theses or dissertation. A graduate thesis or dissertation must be completed and approved within five years of the student's initial enrollment in a thesis or dissertation course. If the work is not completed within the established time limit (one year, and for graduate theses and dissertation, five years), the "RP" grade will be changed to an "F" or "NC," depending on the grading pattern of the course.

**Incomplete (I)**

The symbol "I," Incomplete (Authorized), indicates that (1) a discreet portion of the required coursework has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified, reasons; (2) attending a future offering of the class is not required to complete the work, and (3) your instructor believes it likely that you will earn credit for the course upon completion of that work. Students who are currently failing a course are not eligible for an Incomplete. It is your responsibility to bring pertinent information to the attention of the instructor and to determine from the instructor the remaining course requirements that must be satisfied to remove the Incomplete. A final grade is assigned when the work agreed upon has been completed and evaluated. Your instructor will specify the work needed for completion and will communicate the requirements to you in writing with a copy to the department or program chair.

An "I" must normally be made up within one calendar year immediately following the end of the term during which it was assigned. This limitation prevails whether or not you maintain continuous enrollment. You may not repeat a course in which you currently have an incomplete grade.

When you complete the required work and it has been evaluated, your instructor will submit a change of grade form and the academic grade will be recorded. If you do not complete your work within the allowed time limit, the grade will be recorded as an "IC" (Incomplete Charged).

**Incomplete Charged (IC)**

The symbol "IC," Incomplete Charged, is used if you received an authorized incomplete ("I"), but did not complete the required coursework within the allowed time limit, and the original grading pattern of the course was "A-F." The "IC" replaces the "I" and is counted as a failing grade for computing your grade point average. You may be able to receive up to two one-quarter extensions from the instructor. These extensions are for cause and must be approved by both your instructor and department chair. (Examples of cause include military service, serious health or personal problems, or instructor's leave of absence.) If you want credit for a course after an "I" has been converted to an "IC," you must reregister and pass the course.

You can graduate with an "I" grade on your record if the course is not necessary for you to graduate. Remember that no grade may be changed once graduation has been posted.

**Report Delayed (RD)**

You will be assigned this administrative grade for a course if the instructor notifies Planning, Enrollment Management, and Student Affairs that grade reports have been delayed by circumstances beyond his or her control. An example is the illness of the instructor at the end of the quarter. Your instructor will replace the "RD" grade with an academic grade as soon as possible. If the instructor fails to replace it with an academic grade by the end of the following term, the grade "RD" will be converted to a "WU" or an "NC" depending on the grading pattern.

**Withdrawal (W)**

This administrative grade indicates you were permitted to withdraw from a course after the end of the Drop period with the approval of the instructor and appropriate campus officials. This grade does not reflect the quality of your performance and is not used in computing your grade point average. Your instructor is urged to provide you with a mechanism to evaluate your progress in the course during the first two weeks so that you can make an informed decision regarding your continued enrollment before the beginning of the withdrawal period.

Withdrawal after the seventh week is normally not permitted. If you have attended the class, done the work, and have a valid reason for failing to complete the course, your instructor should normally assign the "I," Incomplete (Authorized) grade.

Withdrawal from a class after the seventh week requires verification of the reason by an impartial third party, written on letterhead stationery, and approval by the instructor, the department chair and university registrar. The requirements for withdrawal from the university from the third through the seventh weeks must also be fulfilled.

You may not withdraw if you have taken the final examination.

If you do not attend class and do not have an approved withdrawal petition, you will receive a failing grade of "WU" or "NC," depending on the grading pattern you selected for the course.

Details on the withdrawal process are documented in the Registration chapter.

**Withdrawal Unauthorized (WU)**

This administrative grade indicates that you enrolled in a course, but did not withdraw from the course and also failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities, or both, were insufficient to make
normal evaluation of academic performance possible. The "WU" is counted in your grade point average as an "F" grade.

**Audit (AU)**

You may take courses for instruction only (Audit), attending class but not receiving credit. You will pay the same fees and enjoy the same instructional privileges as students enrolled for credit. You may participate in class, take examinations or complete other assignments, but you are not required to do so.

You may not petition to change your enrollment status from, or to, "Audit" after the Late Add period has ended.

Details on the audit process are covered in the Registration chapter.

**How is my grade point average (GPA) computed?**

**Grade Point Averages and Their Significance**

You earn grade (quality) points on the following basis:

- 4 quality points per unit of A,
- 3.7 quality points per unit of A-,
- 3.3 quality points per unit of B+,
- 3 quality points per unit of B,
- 2.7 quality points per unit of B-,
- 2.3 quality points per unit of C+,
- 2 quality points per unit of C,
- 1.7 quality points per unit of C-,
- 1.3 quality points per unit of D+,
- and 1 quality point per unit of D.

A grade of "F" or "WU" earns no quality points.

Your grade point average (GPA) is computed by dividing the total number of quality hours (units attempted), whether or not they were passed (but excluding "CR/NC" courses and those in which administrative grades were assigned except for the "WU"), into the number of quality (grade) points earned. A 2.00 (C) average in all college/university courses, all Cal State East Bay courses, and all major courses is required for a baccalaureate degree (excluding "CR," "NC," "W," and "AU" grades). All courses required by a major, including those in other departments, must be included in the calculation of the major GPA.

"CR" and "NC" grades and units are not included in your GPA calculation.

"RP" and "I" grades and units are not included in your GPA calculation. An "RP" or "I" grade becomes an "F" if you do not complete the coursework in the specified time frame. The "F" will be included in your GPA calculation in the quarter in which the "RP" or "I" changes.

"WU" grades are regarded the same as "F"s" in your GPA calculation.

"RD" grades and units are not included in your GPA.

"W" grades and units are not included in your GPA.

**When are final examinations scheduled?**

Your instructor will fully inform you of the manner of his/her evaluation as well as requirements and assignments. Typically, there will be periodic examinations, graded assignments, and a final examination. Final examinations are administered only during final exam week and only at the times scheduled by the university in the quarterly Class Schedule. Exceptions for compelling reasons are authorized in writing by the department chair with a copy to the college dean. The day and start time of the first lecture in the week determine the final examination time. Some courses contain a separate laboratory, activity, or discussion segment. If your instructor desires, s/he may give a final examination on that segment during the last class meeting of that segment. You will find the final examination policy and schedule in the Class Schedule.

**When will I receive my grades?**

At the end of each quarter you will be notified of your academic standing and grades achieved. Grades for the current quarter are available online after the faculty submit their official grade rosters. To check your grades visit MyCSUEB at: https://my.csueastbay.edu.

**How can I qualify for the Dean's and Honors Lists?**

Undergraduate students who achieve academic distinction in any academic quarter, as evidenced by a grade point average of 3.80 or higher in 12 units or more, in addition to any units graded CR/NC, will be included on the Dean's List for that quarter. Students with a grade point average in the range of 3.60-3.79 will be included on the Honor's List for that quarter. Recognition of these honors will be posted to the student transcript for each quarter that the student is on the list.

Honors at Graduation is covered in detail in the Baccalaureate Degree Information chapter.

**What constitutes probation and disqualification?**

The following policies govern undergraduate academic probation and disqualification:

**Academic Probation**

According to Title 5 of the California Code of Regulations, you must achieve at least a 2.00 grade point average (GPA) in all university work, all work at Cal State East Bay, and all work in your major to receive a baccalaureate degree. Academic probation warns you that your academic performance is below the state minimum required for graduation, and that you must improve your GPA before a degree can be granted.
There are various services to assist you in improving your academic standing. If you are an EXCEL or Educational Opportunity Program (EOP) student, you must contact your counselor. All other undergraduate students should contact the Academic Advising and Career Education office at 510-885-3621 and make an appointment to meet with an academic advisor.

When both your cumulative higher education GPA and your Cal State East Bay GPA reach 2.00, you are removed from academic probation.

**Administrative Academic Probation**

As authorized by Title 5 of the California Code of Regulations, you may be placed on administrative academic probation for:

- withdrawal or administrative disenrollment from all or a substantial portion of a program of studies in two successive quarters or in any three quarters. (Note: A student whose withdrawal is directly associated with a chronic or recurring medical condition or its treatment is not subject to administrative academic probation for such withdrawal);
- repeated failure to progress toward the stated degree objective or other program objective, including that resulting from the assignment of 23 units of "NC," when such failure appears to be due to circumstances within your control;
- failure to comply, after due notice, with an academic requirement or regulation, as defined by campus policy, which is routine for all students or a defined group of students, such as failure to complete the writing skills test, failure to complete a required practicum, failure to comply with professional standards appropriate to the field of study, or failure to complete a specified number of units as a condition for receiving student financial aid or making satisfactory progress in the academic program;
- earning only grades of "F," "NC," and/or "WU" for two consecutive quarters or any three quarters.

**Academic Disqualification**

As authorized by Title 5 of the California Code of Regulations, as an undergraduate student on academic probation you will be subject to academic disqualification when:

- as a freshman (fewer than 45 quarter hours of college work completed) you fall below a grade point average of 1.50 in all units attempted or in all units attempted at Cal State East Bay;
- as a sophomore (45 through 89 quarter hours of college work completed) you fall below a grade point average of 1.70 in all units attempted or in all units attempted at Cal State East Bay;
- as a junior (90 through 134 quarter hours of college work completed) you fall below a grade point average of 1.85 in all units attempted or in all units attempted at Cal State East Bay;
- as a senior (135 or more quarter hours of college work completed) you fall below a grade point average of 1.95 in all units attempted or in all units attempted at Cal State East Bay.

**Administrative Academic Disqualification**

As authorized by Title 5 of the California Code of Regulations, if you have been placed on administrative academic probation, you may be disqualified from further attendance if:

- the conditions for removal of administrative academic probation are not met within the period specified;
- you become subject to academic probation while on administrative academic probation;
- you become subject to administrative academic probation for the same or similar reason for which you have been placed on administrative academic probation previously, although not currently in such status.

If you are not on probation, you may be subject to administrative academic disqualification if:

- at the end of any term, you have a cumulative grade point average below 1.0;
- your cumulative grade point average is so low that in view of your overall educational record, it seems unlikely that the deficiency will be removed within a reasonable period.

**How can I be readmitted after Academic Disqualification?**

To be readmitted/reinstated following Academic Disqualification, you must have earned good grades at another accredited institution, or through Open University, have improved your CSUEB and Cumulative GPA to 2.00 or better, and have completed any required remediation. Typically, you will not be considered for readmission for one year, certainly not for at least a quarter. If you are not admitted within three quarters, you must reapply for admission.

The Admissions Review Committee will decide on petitions for reinstatement, on a case-by-case basis, if you do not meet the above-mentioned criteria but feel you have compelling and/or extenuating circumstances which prevent you from achieving the reinstatement requirements. The committee may reinstate you on probation if, in their judgment, you are likely to remove any grade point average deficiencies within the subsequent two terms.

If you are readmitted/reinstated, you must maintain a minimum term GPA of 2.5.

If you are academically disqualified a second time, you will not be readmitted/reinstated a second time.

**Can I qualify for Grade Forgiveness?**

Grade Forgiveness is the process that matriculated students seeking a bachelor's degree follow, under limited circumstances, to remove the punitive effect of past academic failures. (A matriculated student is regularly enrolled after being admitted to the university.)

There are two ways to achieve Grade Forgiveness, Repetition of a Course and Forgiveness of Previous Term(s).

**Repetition of Courses**

You may repeat a course in which you have earned a grade of C-, D+, D, F, WU, NC, or IC for grade forgiveness two times, which means your earlier attempt(s) is ignored in GPA calculations, but not removed from your record, subject to the following conditions:

General Education course equivalencies:

- ART 1010, 1011;
You must file a "Petition for Grade Forgiveness" with the General Education Office, Room 1500, Student Services and Administration Building, if:

1. the course prefix and/or number has changed, or the course is Independent Study.
2. your first attempt was at another accredited post-secondary institution.

You pick up the petition in the department offering the course at Cal State East Bay. The chair of the department must certify that the courses are equivalent. (This means the course content is substantially identical. It does not mean merely that the courses meet the same requirement.) After the petition has been approved by the chair of the department offering the course, you must file it with the GE Director in the GE Office before the end of the Late Add period for that quarter. The GE Director must then approve your petition. A denied petition is promptly mailed to you by the GE Office. An approved petition is sent to Planning, Enrollment Management, and Student Affairs. The previous attempt will be excluded from your GPA calculations after the end of the quarter in which you repeat the course and may not be reflected in that quarter's grade report.

Note: The CSU system normally forbids retroactive Grade Forgiveness. File your petition before reregistering for the course to give yourself time to adjust your program if your petition is denied.

Unit Limit on Grade Forgiveness.

Students are normally limited to 42 units, 24 of which will be forgiven and the additional 18 will be averaged.

1. You can only receive grade forgiveness for 24 units of coursework.
2. You may repeat an additional 18 units of coursework for grade averaging. The quality hours and quality points of the repeated courses will be averaged, while the units earned for these subsequent attempts will not be counted.
3. After completing the 42 units of grade forgiveness and grade averaging, students who require additional units may petition through their advisor (AACE, [EOP or EXCEL if member of program], GE, major). If the petition is approved, the GE Office will also decide if the additional units will be given grade forgiveness or grade averaging.

Grade Forgiveness is not possible in the following circumstances (except with approved petition):

1. You cannot repeat any one course for Grade Forgiveness, more than twice. (Some departments may restrict grade forgiveness to only one repeat.) If you do, the quality hours and quality points of all subsequent repeats will be averaged, while the units earned for these subsequent attempts will not be counted. These units will be counted as part of the 18-unit limit described in 2, above.
2. You cannot renew a grade of "C" (2.0) or better. If you do repeat a class in which your original grade was a "C" or higher, the quality hours and quality points of all attempts will be used to calculate your grade point average, while only the units earned for the first attempt will be counted. These units will be counted as part of the 18-unit limit described in 2, above.
3. Grade Forgiveness cannot be approved for any grade assigned as a result of academic dishonesty.
4. If the original grade(s) was assigned at Cal State East Bay, Grade Forgiveness by repeating a course at another institution is normally not possible. (Exceptions can be made for disqualified students who file an approved petition prior to repeating the course elsewhere, but only to the extent necessary for their readmission.) Disqualified students repeating courses through Open University at CSUEB, only to the extent necessary for their readmission, do not need to file a petition.

Cal State East Bay honors the Grade Forgiveness policies of other institutions as stated on their transcripts.

You should not file a "Petition for Grade Forgiveness" if the original grade is still an "I." You cannot get Grade Forgiveness because the "I" does not affect your GPA. If the grade has been changed to an "IC," Grade Forgiveness is possible.

Forgiveness of Previous Term(s)
Under the most extenuating circumstances, you can petition to exclude from degree requirements and GPA computations up to three quarters (or up to two semesters) of coursework taken at any institution. To have your petition approved, you must meet certain conditions and follow the process described below.

Approval of your petition requires satisfaction of all the following conditions:

- the coursework to be excluded does not represent your scholastic ability, and that this substandard performance was due to an extenuating circumstance;
- you would be compelled to complete additional courses or enroll in additional quarters to achieve your baccalaureate degree if your petition is not approved;
- five years have elapsed since the most recent coursework to be excluded was completed
- you completed at least 22 units at Cal State East Bay since the last term to be disregarded, with a 3.0 GPA, 45 units with a 2.5 GPA, or 67 units with a 2.0 GPA.

You must complete the following steps:

- complete your portion of the “Petition for Forgiveness of Previous Term”
- obtain your major advisor's approval on the petition
- file the petition in the Student Information Lobby. If you are eligible, Planning, Enrollment Management, and Student Affairs certifies that you meet the above conditions, attaches a copy of your academic record, and forwards the package to the Grade Forgiveness committee in the Provost’s Office. The committee acts upon all petitions by majority vote.

If Planning, Enrollment Management, and Student Affairs determines you do not meet the conditions, you are notified and no action is taken.

Cal State East Bay honors the exclusion policies of the originating institution. Each term excluded by another institution reduces by one the number of terms that Cal State East Bay will consider for exclusion.

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What recourse do I have if I believe I have received a grade that is inappropriate?

If you question the grade you received in a course, attempt to resolve the problem with your instructor. If you are not satisfied, discuss the issue with the chair of the department in which the course is offered. If the issue is not resolved, see the dean or associate dean of the college in which the course is offered. If all previous actions fail, contact the Presidential Appointee to the Fairness Committee by calling 510-885-3716 (the Academic Programs and Graduate Studies Office). If you are a candidate for a degree, notify your graduation evaluator that a question is pending resolution. Remember, once your degree has been posted, no grade changes will be recorded.

Fairness Committee

This is your recourse to resolve serious cases of alleged academic unfairness. After every effort by all parties to resolve the dispute has been ineffective, discuss your case with the President's appointee to the Fairness Committee. The Presidential Appointee will assist you in exhausting all normal channels and, if necessary, in filing a Petition for a Fairness Hearing. Submit your Petition and supporting documentation to the Academic Programs and Graduate Studies Student Services Office (Student Services and Administration Building). The Fairness Committee will review your documentation and the response(s) filed by the other parties involved in the dispute. If the committee finds possible grounds for a grievance, a Hearing Panel will be convened to hear the case. Under normal circumstances, you must file your Petition before the end of the quarter following the quarter in which the alleged incident took place.

The Fairness Committee is empowered to change a grade in accordance with the Fairness Document and to assign a grade in cases where the instructor may have assigned an unfair academic grade. The Fairness Committee is authorized to change a grade only after it has conducted a proper review of the case.

More information is available from the Office of Academic Programs and Graduate Studies (Student Services and Administration Building; Tel. 510-885-3716).

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How does Cal State East Bay define and handle academic dishonesty?

Faculty members are expected to instill in their students a respect for integrity and a desire to behave honestly. Deception for individual gain is an offense against the members of the university community. To this end, faculty will take measures to discourage dishonesty, adjust grades appropriately if dishonesty is discovered, and recommend that additional administrative sanctions be considered. Grading policies are the exclusive prerogative of faculty. Non-academic administrative sanctions are the province of the Student Conduct Administrator at the Office of Student Development and Judicial Affairs. Telephone: (510) 885-3763.

Academic Dishonesty includes, but is not limited to:

- cheating, which includes possessing unauthorized sources of information during examinations, copying the work of others, permitting others to copy your work, submitting work done by others, completing assignments for others, altering work after grading and subsequently submitting it for re-grading, submitting the same work for two or more classes without the permission of all instructors involved, or retaining materials that you have been instructed to return to your instructor;
- plagiarism, which includes taking the words, ideas, or substance of another and either copying or paraphrasing the work without giving credit to the source through appropriate use of footnotes, quotation marks, or reference citations;
- providing materials to another with knowledge they will be improperly used;
- possessing another's work without permission;
- selling, purchasing, or trading materials for class assignments (includes purchasing term papers via the World Wide Web);
- altering the work of another;
- knowingly furnishing false or incomplete academic information;
- altering documents that make up part of the student record;
- forging signatures or falsifying information on any official academic document;
- inventing data or falsifying an account of the method through which data was generated.

If there is evidence of dishonesty:

- involving cheating: the student should be informed promptly, in private if possible, that he/she is suspected of cheating. If an exam is in progress, unauthorized materials should be confiscated, and the student allowed to finish. If relevant, the names of students in adjoining seats should be noted.
- involving plagiarism: your instructor should assemble documentation and notify you promptly in private.
Whenever dishonesty occurs, your instructor will take appropriate action and file an "Academic Dishonesty Incident Report" detailing the infraction and the action taken. The report will be filed in the Academic Affairs Office, and you will receive a copy. The report will remain on file for five years or until you graduate, whichever comes first. If the office receives two or more reports on an individual, the Director of the Office of Student Development and Judicial Affairs ("OSDJA") is notified.

Depending on the circumstances, you may: (a) be warned; (b) be required to resubmit work or retake an exam under specified conditions and with a possible grade penalty; (c) have your grade adjusted for the assignment; or (d) have your grade adjusted in the course, including assignment of an "F" at the discretion of the faculty. If the course grade is adjusted, it is not subject to Grade Forgiveness.

You may appeal an instructor's action to the Fairness Committee (see above). Your appeal of an instructor's academic sanction is governed by the "Fairness Document."

Depending upon the severity of the offense or the number of offenses, the instructor may directly refer the instance of academic dishonesty to the OSDJA to determine if further action is necessary. (In any instance of academic dishonesty, however, whereby an academic sanction is imposed, the instructor will file an "Academic Dishonesty Incident Report." See three paragraphs above.) At the discretion of the OSDJA, administrative sanctions such as warning, probation, suspension, or expulsion may be imposed. As prescribed in Executive Order 1043, Article V. Sanctions, paragraph 5 entitled Record Discipline, "Probation is entered on a student's transcript, with its beginning and end date, for the period of time that the probation is in effect. Suspension is entered on the student's transcript, with the beginning and end date, for the period of time that the suspension is in effect, but remains on the transcript permanently if the suspension is for longer than one academic year.” Expulsion is entered on the student's transcript permanently along with the date it takes effect. (If an appeal to the Fairness Committee regarding an academic sanction imposed by the instructor is pending, action by the Student Disciplinary Officer will be postponed until after the adjudication of the appeal.)

The complete text of Title 5, section 41301 of the California Code of Regulations and of Chancellor's Executive Order 1043 can be accessed on the Student Development and Judicial Affairs website.

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Organizations and Activities

Activities

Cultural Activities

Art, music, and theatre and dance engage, enrich and vitalize society. They are natural outgrowths of the educational mission of the university. The university’s calendar includes world-class gallery exhibitions, performances and exhibits by our distinguished faculty, and a wide variety of student productions and events, as well as visiting artists, performers, and speakers of note.

For a copy of Cal State East Bay’s music or theatre calendars, contact the College of Letters, Arts, and Social Sciences Publicist at 510-885-3183.

Intercollegiate Athletics, Instructional, Intramural and Recreational Programs

Cal State East Bay sponsors intercollegiate athletic programs for both men and women through the Department of Intercollegiate Athletics. The university is a member of the NCAA in provisional membership for Division II. Teams compete in the California Collegiate Athletic Association (CCAA). The sports offered include basketball, soccer, cross country, outdoor track and golf for men and women, plus baseball, softball, women’s swimming, women’s volleyball and women’s water polo.

The university encourages you to participate in some form of physical activity. In addition to the program of intercollegiate athletics, opportunities exist for you to participate in instructional, intramural, and recreational programs. The Department of Kinesiology offers for credit instructional programs in sports, games, and exercise. The Department of Recreation and Community Services offers instructional programs in outdoor activities. The Recreational Activities Program, sponsored by the Associated Students, provides competitive and recreational opportunities during fall, winter, spring, and summer quarters.

The university has two swimming pools, two racquetball courts, a martial arts facility, a basketball/multipurpose gymnasium, a dance studio, a stadium, a track, a baseball diamond, a softball diamond, a soccer field, and a multipurpose practice field. Information regarding programs should be obtained from the Department of Kinesiology (885-3061). Groups interested in renting the facilities should contact the Office of Facility Reservations (885-3548). Student clubs or organizations interested in reserving facilities should contact the office of Student Life (885-3657).

The California State University is committed to providing equal opportunities to men and women CSU students in all campus programs, including intercollegiate athletics. Information concerning athletic opportunities available to male and female students and the financial resources and personnel that Cal State East Bay dedicates to the men’s and women’s teams may be obtained from the Athletic Director, Department of Intercollegiate Athletics, TR 900, 885-3038.

Student Clubs and Organizations

More than 100 student clubs and organizations are active at Cal State East Bay. They encompass a broad range, including academic, cultural, recreational, religious, special interest and Greek. They also offer important opportunities for personal growth and friendship, as well as valuable educational experiences beyond the traditional classroom setting. Student clubs and organizations sponsor many special events—lectures, films, music, and social activities each quarter.

The Student Life and Leadership Programs staff provides support and consultation to student clubs and organizations in planning programs and events; fund raising, publicity and promotion; and developing service projects and cultural programs. The staff also assists students interested in forming new student organizations or participating in a leadership development program.

Fraternities and sororities are active at Cal State East Bay. The Greek system includes eight social sororities and six social fraternities, one coed community service fraternity and four coed academic fraternities. In addition to offering friendship and social activities, fraternities and sororities encourage scholarship, leadership and community service, and affiliation to national organizations that last a lifetime. Student Life and Leadership Programs provide support and assistance to individual chapters, as well as to the Greek governing councils.

Getting involved in student clubs and organizations is an excellent way to meet other students, develop leadership skills, and pursue special interests. The university encourages you to become active and involved in student clubs and organizations. More information is available from Student Life and Leadership Programs located in the University Union, Room 2011, 510-885-3657; email: studentlife@csueastbay.edu; website: http://www.csueastbay.edu/stlife.

Alumni Association

The Cal State East Bay Alumni Association was formed in 1961 to establish a lifelong connection with the University’s alumni and encourage their active participation in university life. The Association hosts alumni events through the Bay Area, provides financial support for the university magazine, promotes online alumni networking opportunities, and honors distinguished alumni each year with a gala event.

The Alumni Association plays an important role in representing and promoting the alumni of California State University, East Bay while supporting initiatives that strengthen the University. The directors and staff of the Association work closely with the Office of University Advancement and the Office of the President to increase alumni involvement through volunteer, advisory and leadership roles; fundraising and personal financial support; advocacy; and participation in university events.

Alumni who wish to get involved should contact alumni@csueastbay.edu or 510-885-2877. Follow the Alumni Association on the web, on Twitter (twitter@CSUEBalumni) and become a fan on Facebook.

Leadership Development Programs

Student Life and Leadership Programs and the Division of Planning, Enrollment Management, and Student Affairs offer students the opportunity to enhance their leadership skills through a variety of seminars, classes and conferences presented by campus and community leaders.
Through these leadership programs, students gain the insight and skill to assume a leadership role on campus, in their career or in the community; build alliances with faculty, staff, alumni and community leaders; and enhance their future leadership potential.

Various leadership programs, depending on the student's class level and interest, are offered fall, winter, and spring quarters and are open to all Cal State East Bay students. For additional information, contact Student Life and Leadership Programs in the University Union, Room 2011, 510-885-3657; email: studentlife@csueastbay.edu; website: http://www.csueastbay.edu/slife.

Student Government

Associated Students, Inc.  
Phone: 510.885.4843  
http://www.csueastbay.edu/asi

As a 501.3c non-profit auxiliary corporation of the CSU, the Associated Students, Inc. (ASI) is the official voice of the students of CSU East Bay. The ASI represents and advocates on behalf of the interests, needs, and concerns of our diverse and dynamic student body, providing you with the services and resources to supplement and support your college experience. Each Spring elections are held to fill the Board of Directors which consists of 15 students representing all the colleges and executive offices.

Business Office

Located in Suite 314 of the Original University Union, ASI Staff work with students to fulfill their organizational needs by providing special services to recognized student clubs and organizations.

Programming

ASI Presents produces a variety of special programs and events to meet the social, cultural and entertainment needs of the CSU East Bay community.

Recreation Program

ASI's newest facility, the Recreation and Wellness Center, offers a full program in campus recreation, outdoor education, environmental education programs, fitness, and wellness program. Students are encouraged to participate in intramural recreation programs for fun and health.

University Union

The Associated Students, Inc. operates the University Union Program which features two University Union Facilities. Located within the University Union are food service operations along with our games room, lounge areas, study areas, and the Art Gallery. Also located within the facility is the Diversity Center (offering multicultural programs and social justice issues awareness), and the Office of Student Life and Leadership (oversees student clubs and organizations and offers the leadership program). Rooms are available to all students, faculty, and staff for meetings and events. Contact the Reservations Desk at 510.885.7245 to make arrangements.

Student Media

The university newspaper, The Pioneer, is produced in the Department of Communication. Student involvement in production of The Pioneer includes writing, editing, graphics, photography and advertising. The Pioneer is also published on the Internet. For more information about The Pioneer, call The Pioneer office at 510-885-3175. For more information about the advertising agency which sells ads in The Pioneer, call the agency office at 510-885-3526.
Orientation and Advising

What orientation programs are offered at Cal State East Bay?

Cal State East Bay offers orientation and advisement programs prior to each quarter to introduce new students to the university and to prepare students for registration. Through special programs planned for freshmen, transfer, and graduate students, Orientation provides essential information about degree requirements, campus resources, and academic advising to help prepare students for course selection.

Both the Hayward Hills and Concord campuses offer orientation programs. Detailed information about Orientation is mailed to all individuals who have been admitted. Students awaiting final notice of admission may attend Orientation, although attendance does not constitute admission by the university.

In addition to the information mailed directly to applicants, the Class Schedule published each quarter provides specific information regarding the dates and locations of orientation programs. For additional information, contact Student Life and Leadership Programs at 510-885-3657. The Class Schedule may be viewed online at: www.csueastbay.edu/schedule.

What academic advising is available to me?

Every student who enters Cal State East Bay is entitled to receive academic advising from a faculty member in the department or committee housing his or her major. Undeclared students, as well as most undergraduate students, are advised by Academic Advising and Career Education (AACE). (See the "Academic Assistance" section of the Student Services chapter for information on Academic Advising and Career Education.) All new students must see their advisors (major advisor and one of the AACE academic counselors) at least once each quarter during their first year at Cal State East Bay.

First-time freshmen, during their first quarter at Cal State East Bay, should develop a program with their advisor which will satisfy all requirements (general education, major, and minor or option if required) for the degree. Undergraduate transfer students are encouraged to attend orientation for their first advising session or contact Academic Advising and Career Education (AACE) at (510) 885-3621. Once the university’s evaluation of previous college credit has been received, students should develop with their advisor a complete program of courses leading to the baccalaureate degree. This program should serve as a guide to the student throughout his or her university career, and changes in program should not be made without the approval of the advisor.

For information on the catalog requirements under which a student may graduate, see the Baccalaureate Degree Information chapter.

Faculty Office Hours

The faculty of the university is available during regularly scheduled office hours, which are at times other than scheduled classes. The times of the office hours are posted outside each faculty office, at the faculty member's department, on the department website, and on the faculty member's course syllabi. The faculty member informs the department of his/her office hours the first day of classes each quarter.

Full-time faculty members maintain a minimum of three office hours per week and also make provision for meeting with students by appointment at a mutually convenient time beyond the stated office hours. The full-time faculty member's office hours shall be held over at least two days and at least in half-hour blocks. Part-time faculty will maintain the equivalent of one office hour per week for each course of their teaching load.

Faculty teaching online must also hold office hours and may make alternative arrangements with the Department Chair to be available online or by telephone. Online faculty's office hours must include at least one hour of availability by telephone per week.

If for any reason a faculty member cannot meet the posted office hours, the faculty member will inform the Department Chair. If possible, the department will note the absence on the faculty office door.

Normal office hours are maintained during the Final Examination period. If a final examination conflicts with a posted office hour, an alternative hour is to be posted for that week alone.

How do I receive course requirement information?

Faculty shall provide you with a written statement containing the following information:

1. office number, office hours, and office telephone number;
2. required texts and any other required and/or recommended material;
3. specific course requirements, such as exams, quizzes, papers, field trips, labs, and so on;
4. grading policy (the relative weight of examinations, quizzes, papers, class participation, and other factors);
5. approximate due dates for assignments and exams;
6. attendance requirements (if any);
7. policy on makeup work.

The faculty is also encouraged to include items such as:

a. daily and/or weekly assignments,
b. type of quizzes and exams (subjective, objective, etc.), and
c. description of the course (format, objectives, etc.).

Furthermore, faculty should advise you of their expectations for you in the course no later than the end of the second class. Any changes in course requirements should be communicated to you in a timely manner. It is your responsibility to read the course statement and to request
any clarification of course policies. If you add the course after the first week of class, you must seek course information in a timely manner.

This policy is to be implemented by each department.

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What honors programs does the university offer?

There is a University Honors Program open to any student who meets the criteria for admission. See the University Honors Program section of the Student Services chapter of this catalog. Individual departments may also develop honors programs. Departmental Honors Programs are upper division programs designed to provide special courses and advanced, independent reading and research for superior students in the individual majors. Contact the chair of the department for additional information.

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Where can I get additional information on Cal State East Bay’s academic programs?

Data regarding student retention and graduation at Cal State East Bay and the number and percentage of students completing the program in which the student is enrolled or has expressed interest is available online at: www.csueastbay.edu/ira. You may also contact the Associate Vice President, Enrollment Management Systems, on the 2nd floor of the Student Services and Administration Building (Tel. 510-885-3362). For information concerning teacher preparation programs and other credential programs at Cal State East Bay, including the pass rate on teacher certification examinations, contact the Director of the Credential Student Service Center in the College of Education and Allied Studies by calling 510-885-2272. The Credential Student Service Center is located in the Art and Education Building (AE 235), Director, Ms. Laty Johnson.

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Welcome to California State University, East Bay. Our mission is to provide you with an academically rich, multicultural learning experience that will prepare you not only to realize your goals and pursue meaningful lifework, but also to be a socially responsible contributor to your community — locally and globally.

Although you are joining the University family at a challenging time for our nation and for public higher education, earning a college degree is more crucial than ever for success in today’s fast changing world. As a regionally focused, nationally recognized institution of higher education, our outstanding faculty and staff are dedicated to supporting you in your quest to gain the knowledge and skills necessary to compete and thrive in an increasingly technological and culturally diverse world.

This catalog reflects the University’s ongoing commitment to that journey, offering you a breadth of study that includes degrees at the bachelor’s and master’s level, as well as a doctoral program in educational leadership. And with campuses in Hayward, Concord, and online, as well as a professional development center in downtown Oakland, Cal State East Bay also offers a choice of learning communities, convenient locations, and academic programs — all designed to meet your needs and those of the regional communities we serve.

Our distinguished faculty exemplify the integrated role of scholarship, instruction, and service learning — offering you rich opportunities to acquire new skills through participation in research, project-based learning, artistic efforts, and community-based learning projects. As a result, as a student at Cal State East Bay, you can make a significant difference in the lives of children, adults, and families in the East Bay through internships, cooperative learning programs, and other initiatives that offer real-life experiential learning while benefiting the communities we serve.

The catalog is also your official guide to your academic program and to Cal State East Bay’s policies and procedures. Much of what you will need to know to succeed and make the most of your experience at Cal State East Bay is noted here. I encourage you to become familiar with its contents and learn how the campus functions to help you achieve your personal and professional aspirations.

Sincerely,

Leroy M. Morishita
Interim President
California State University, East Bay
Registration

- What general policies affect a student's enrollment at Cal State East Bay?
- What information do students need to enroll in classes?
- What determines a student's classification?
- How do students enroll for classes?
- What changes can students make in their enrollment status?
- Which undergraduate placement examinations do I need to take?
- How may I obtain credit by examination as an undergraduate student?

What general policies affect a student's enrollment at Cal State East Bay?

1. To enroll at Cal State East Bay, students must be admitted to the university.
2. Enrollment is complete only when all enrollment requests have been properly recorded and students have paid all fees, deposits, and charges. Instructions and dates for enrolling in MyCSUEB, the Cal State East Bay enrollment system, are published quarterly in the online Class Schedule (http://www.csueastbay.edu/schedule).
3. Students are given credit only for those courses in which they are officially enrolled in at the conclusion of the Late Add period, except for any course which they have officially filed a Withdrawal form(s) and received an approved withdrawal.
4. Students will be held responsible for completing all courses for which they are enrolled, except for those courses from which they withdrew.
5. If students enrolled in a course and do not attend initial class meetings, they may be dropped from the class if demand for the course exceeds capacity. Departments following this practice will make reasonable efforts to inform students of this action. Students should not assume, however, that non-attendance will result in them being automatically dropped.
6. The university does not guarantee the availability of particular courses or sections because admission to classes is authorized only until the maximum number of students allowable in any section has been reached.
7. Approved by the University Academic Senate, the priority for enrollment is as follows:
   a. Students authorized to receive priority enrollment
   b. Graduating undergraduate seniors and graduating graduate students (who have filed for graduation and have completed 150 or more units at the time registration appointments are set in the case of an undergraduate or in the case of a graduate or doctoral student, have filed for graduation and/or been advanced to candidacy by the faculty of the graduate program)
   c. Freshmen
   d. Post-baccalaureate credential and doctoral students, and conditionally classified/classified graduate students in masters programs
   e. Seniors
   f. Juniors
   g. Sophomores
   h. Second baccalaureate, post-baccalaureate certificate program, and unclassified post-baccalaureate students
8. The priority for enrollment for students enrolling in 6000-level and 8000-level courses is as follows:
   a. All graduate students
   b. Undergraduate students majoring in the department concerned
   c. All other students
9. If a student or former student fails to pay a debt owed to Cal State East Bay, the university may "withhold permission to enroll, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt" until the debt is paid (see Sections 42380 and 42381 of Title 5, California Code of Regulations). For example, Cal State East Bay may withhold production of official transcripts of grades to any person owing a debt. If you believe that you do not owe all or part of an unpaid obligation, contact the Accounting Office. They will review the pertinent information, including information you may wish to present, and will advise you of their conclusions with respect to the debt. Check MyCSUEB (http://my.csueastbay.edu) on the university website to verify whether any holds exist that will block your registration for the next or subsequent term.
10. Health Requirements

Entering CSU students are required to present proof of the following immunizations to the CSU campus they will be attending before the beginning of their first term of enrollment.

a. Measles and Rubella Immunization. All new and readmitted students must provide proof of full immunization against measles and rubella prior to enrollment. Failure to comply with this requirement will result in a hold being placed on your registration.
   b. Tuberculin Skin Test or Chest X-Ray. International students must provide written proof of a Tuberculin Skin Test or chest x-ray performed in the U.S.A. within the past 12 months. Failure to comply with this requirement will result in a hold being placed on your registration.
   c. Hepatitis B. All new students who will be 18 years of age or younger at the start of their first term at a CSU campus must provide proof of full immunization against Hepatitis B before enrolling. Full immunization against Hepatitis B consists of three timed doses of vaccine over a minimum 4 to 6 months period. If you need further details or have special circumstances, please consult with Student Health and Counseling Services. Each incoming freshman who will be residing in on-campus housing will be required to return a form indicating that he/she has received information about meningococcal disease and the availability of the vaccine to prevent contracting the disease and indicating whether or not the student has chosen to receive the vaccination. These are not admission requirements, but are required of students as conditions of enrollment in CSU. Failure to comply with this requirement will result in a hold being placed on your registration. Hepatitis B immunization is available at Student Health and Counseling Services for no, or low cost. Call Student Health and Counseling Services at (510) 885-3735 for more information or to make an appointment. For your convenience, a form is available online for you to download and complete. See the Student Health and Counseling Services website for this form or for additional information at: www.csueastbay.edu/shs
   d. Meningococcal Disease. Meningococcal disease is a potentially life-threatening bacterial infection known to occur more frequently among students living in residence halls. It is recommended that all incoming residential students consider the Meningococcal Vaccine as a way to reduce their risk for this potentially fatal disease. Each incoming freshman who is residing in on-campus housing is required to return a form indicating that he/she has received information about meningococcal disease and the availability of the vaccine to prevent contraction of the disease, and to indicate on the form whether or not he/she has chosen to receive the vaccination. The vaccine is available at Student Health and Counseling Services.
for students at low cost by appointment. For more information, call Student Health and Counseling Services at (510) 885-3735 or visit the Student Health and Counseling Services website at: http://wwwsa.csueastbay.edu/~shsweb. (Note: To remove a registration hold for measles/rubella, tuberculin tests, or Hepatitis B, bring written proof to the Reception Desk at the Student Health Center.)

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What information do students need to enroll in classes?

To begin, view the Class Schedule online (www.csueastbay.edu/schedule). Consult with a faculty advisor to decide what courses you need and read the following information.

Class Schedule

A Class Schedule, prepared each quarter, lists general information, courses offered, hours, rooms, instructor names, and final examination times. The online Class Schedule is available before enrollment begins in MyCSUEB each quarter. Important information such as the quarterly calendar, orientation, important dates, registration, fees, course selection, and student services contact information may be viewed at: www20.csueastbay.edu/students/

Enrollment Appointment Times

Students enroll during two enrollment times. This process is designed to allow students the opportunity to enroll in their first choice classes during their first enrollment block and attaining full-time status. Existing enrollment priorities will be kept based on class levels, with graduating seniors having highest priority.

Approximately one week before enrollment begins, continuing students are e-mailed notification to their CSUEB Horizon accounts to check MyCSUEB for their enrollment appointment. The appointment times include your date and time to begin enrolling for classes. New students will be able to view their enrollment appointments on MyCSUEB.

Units

All college courses at Cal State East Bay have unit values based on the number of 50-minute hours they meet each week. In most lecture, lecture-discussion, and seminar courses, each hour/week is a unit, but in laboratories, activities, and performances, you may put in two or more hours per week for each unit of credit. Because each classroom hour normally requires two hours of outside study per week, working students should carefully balance the time required for academic preparation with outside commitments. Courses meeting for more hours per week than their units have the amount of weekly class time noted in their course descriptions.

Academic Load

1. Undergraduate Students. The normal academic load for full-time undergraduate students is 15-16 units of coursework (12 units is the minimum for full-time status) per quarter.

2. Graduate Students. A graduate student who wishes to receive a 45-unit master's degree in one year needs to enroll in 15 units for three quarters or 11-12 units for four quarters. (Eight units a quarter is the minimum for full-time status.) A graduate student who wishes to receive a 90-unit doctoral degree in Education should check the Educational Leadership chapter in this catalog, as well as consult the Doctoral Handbook (available from the Department office) for academic load information.

Prerequisites

A prerequisite may be another course or group of courses containing necessary background material for full understanding of the course content or a non-course requisite. Prerequisites, if any, are noted in course descriptions.

Auditing Courses

An auditor pays the same fees and enjoys the same instructional privileges as a student enrolled for credit, but is not held responsible for examinations or term papers. Regular class attendance is expected, and enrollment as an auditor may be deleted if the expected attendance is not observed. If students wish to enroll in a course as an auditor, they must obtain permission from the instructor of the course. Enrollment as an auditor is permitted only after students otherwise eligible to enroll on a credit basis have had an opportunity to do so. Once enrolled in a course as an auditor, students may not change their enrollment to a credit basis unless such a change is requested no later than the last day to add classes. Students who are enrolled in a course for credit, may not change to an audit basis after the Late Add period has ended.

Maximum Units for Enrollment

In MyCSUEB, students may enroll for a maximum of 16 units during the first enrollment period. During the second enrollment period and scheduled open enrollment times, they will then be permitted to enroll in up to the maximum of 22 units.

To enroll in more units exceeding the maximum allowable, approval must be secured by the student's major department advisor. The student's major department will notify Planning, Enrollment Management, and Student Affairs; and the student will then be permitted to add the additional units during the Add period.

The normal academic load for full-time undergraduate students who expect to graduate by enrolling for three quarters per year for four years is 15-16 units per quarter. Because each classroom hour normally requires two hours of outside study per week, working students should carefully balance the time required for academic preparation with outside commitments.

Course Numbers

The course numbering system indicates the level at which courses are offered. Generally, 1000 courses are freshman level, 2000 courses are sophomore level, 3000 courses are junior level, and 4000 courses are senior level. If students have completed the prerequisites, they may enroll for undergraduate courses irrespective of numbers.

English 1001 and Math Requirements

If students have earned 90 or more baccalaureate-level quarter units without having passed English 1001, Expository Writing, or an equivalent course, they will not be permitted to register for additional coursework at Cal State East Bay. In addition, if they have earned 90 or more baccalaureate-level quarter units without having passed a course satisfying the General Education, Area B4 requirement in Quantitative Reasoning, they will not be permitted to register for additional coursework at Cal State East Bay.

Additional Credit Request

If students wish credit for work taken at another institution while continuing student status at Cal State East Bay, they must, upon completing the work, have an official transcript sent to Planning, Enrollment Management, and Student Affairs.

Individual Study Courses

An Individual Study course is a course which is listed in the Cal State East Bay Catalog, but is not being offered during the term in which a student must gain course credit to complete a specified objective. Permission to take such a course may be granted only in cases of necessity, and arrangements must be made to determine how the faculty teaching overload (if any) will be made up. Students may obtain applications for Individual Study (Special Registration Petition) in departmental offices. They then return the application, with signatures of approval, to the departmental office during the enrollment period for that term.
Independent Study Courses
An Independent Study course is a program of study which is above and beyond the regular offerings of a department. The number of such a course is 4900, 5900, 6900 or 8900 depending on the level and content of the work. Such a course is considered as elective credit in the program of a student working for a specified objective. Students may apply no more than 12 units of independent study in the major department and 8 units in other departments to a baccalaureate degree.

The privilege of Independent Study is limited to undergraduate students who have at least a 2.0 (C) grade point average and graduate students with at least a 3.0 (B) grade point average in all courses in the field or department in which the Independent Study is to be taken, both at this institution and in any work attempted at other institutions. If you are on academic probation, you are ineligible for Independent Study. Independent Study is restricted to students who are able to work with minimal supervision. No faculty member is required to teach an Independent Study course, and arrangements must be made to determine how the faculty teaching overload (if any) will be made up.

Students may obtain applications for Independent Study (Special Registration Petition) in departmental offices. The application, with signatures of approval, is to be returned to the department office during the enrollment period for that term.

A course offered by Independent (or Individual) Study shall be taught only by a professor in the department offering the credit or by a professor the department judges to be competent to teach the particular course.

Non-catalog Courses
Each quarter, Cal State East Bay offers a variety of new courses whose descriptions are not yet in the catalog. Such courses carry full credit and fulfill the same requirements as regular courses in the curriculum. Students, therefore, should not hesitate to take them. (Remedial courses, whose numbers begin with "0," are not applicable to the baccalaureate degree, but are applicable to the student's class load for that term.)

Descriptions of new, non-catalog courses appear in the Class Schedule each quarter. A new course may be passed by examination or challenged only after it has been listed in the Class Schedule and has been or is being taught.

Dual Matriculation for High School Students
Information pertaining to dual matriculation is available in the Student Enrollment Information Center on the first floor of the Student Services and Administration Building. Under these programs, eligible high school students may enroll for university credit if they satisfy the requirements for admission to this status.

Late Add Period
You may enroll in classes during the Late Registration period. You may also enroll during the Late Add period with consent of the instructor and department offering the course. If students complete the enrollment process during the Late Registration or Late Add period, you are assessed a nonrefundable Late Registration fee.

Drop Period
You may drop a course during the Drop period without it appearing on your permanent record. Courses dropped on or after the first day of the term may result in prorated charges.

Cancellation of Enrollment
Students who fail to fulfill enrollment or matriculation requirements, or otherwise fail to adhere to academic or Cal State East Bay regulations, are subject to immediate administrative action which may result in the student being placed on Administrative Probation, or having enrollment for that term cancelled. Students who do not maintain continuous enrollment for three consecutive terms are subject to cancellation of enrollment.

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What determines a student's classification?
In general, students are classified as a full- or as a part-time student, and are classified by grade level.

Classification of Students as Full- or Part-Time
The following classifications apply to students enrolled in the fall, winter, spring, and summer quarters (not Continuing Education and summer sessions):

1. Full-time undergraduate students (including students seeking a second baccalaureate) are those enrolled in 12 or more units in a regular quarter. Part-time undergraduate students are those enrolled in fewer than 12 units. (Note that in order to graduate in 4 years or 12 quarters, students must complete 15-16 units per quarter.)
2. Full-time enrollment for "Unclassified Post-baccalaureate" students not enrolled in a graduate degree program is 12 or more units in a regular quarter.
3. Full-time enrollment for "Graduate" students and "Classified Post-baccalaureate" students is 8 or more units.
4. Full-time enrollment for veterans (or dependents of disabled or deceased veterans), or reservists under Chapter 30, 31, 33, 34, 35, or 106 is 12 or more units, according to V.A. regulations. Each quarter, veterans and eligible dependents should come to Planning, Enrollment Management, and Student Affairs before the first day of classes and submit their forms requesting certification of enrollment for V.A. benefits.

Note: Undergraduate and graduate students who apply for Veterans' Benefits (or for benefits as dependents of disabled or deceased veterans), international students wishing INS certification, student athletes wishing to compete in intercollegiate sports, and students on most types of financial aid must be enrolled in courses that apply to a definite program (baccalaureate or master's degree and/or credential).

Classification of Undergraduates by Grade Level
Undergraduates are assigned a class level according to the following plan:

<table>
<thead>
<tr>
<th>Class Level</th>
<th>Quarter Units Earned Toward the Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>Fewer than 45</td>
</tr>
<tr>
<td>Sophomores</td>
<td>45 but fewer than 90</td>
</tr>
<tr>
<td>1. Lower Division</td>
<td></td>
</tr>
<tr>
<td>2. Upper Division</td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>90 but fewer than 135</td>
</tr>
<tr>
<td>Seniors</td>
<td>135 or more</td>
</tr>
</tbody>
</table>

Graduating Seniors 150 or more, filed, and paid fee
International Student Enrollment Policies
The U.S. Immigration and Naturalization Service requires students on non-immigrant F-1 and J-1 visas to pursue a full course of study in a specific program. Therefore undergraduate students are expected to complete a minimum of 12 units per quarter for three consecutive quarters. Graduate and second baccalaureate students must complete a minimum of 8 units per quarter for three consecutive quarters.

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How do students enroll for classes?
Students enroll for classes in the preceding quarter using MyCSUEB, an automated online enrollment system. Approximately one week before enrollment begins, continuing students are e-mailed notification to their CSUEB Horizon accounts to check MyCSUEB for their enrollment appointment. New students may review their enrollment appointments on MyCSUEB.

The Class Schedule is generally available online around the same time as students receive their "Enrollment Appointment." Read the Class Schedule, and then meet with their academic advisor to plan your program of classes. Enrollment times are determined by the student's class level. Students will be able to enroll or make adjustments to their class schedule any time after their assigned enrollment time. See the Class Schedule for MyCSUEB's operating hours and for enrollment procedures. If students have any difficulties enrolling, call Planning, Enrollment Management, and Student Affairs at 510-885-2784.

To enroll for a Cooperative Education course, students must complete a "Cooperative Education Agreement" form available from the Academic Advising and Career Education/Cooperative Education office, on the second floor of the Student Services and Administration Building. After obtaining the necessary approvals, the student may then enroll through MyCSUEB. [Note: International students on F-1 visas should contact the Center for International Education (tel. 510-885-2880) to discuss employment authorization for a Cooperative Education course before enrolling for the course.]

Students will not be able to enroll for Independent Study, Individual Study, Project, Departmental Thesis, University Thesis or Dissertation courses in MyCSUEB. A "Special Registration Petition" available from the department which offers the course, is required for enrollment.

Schedule Changes
Students may add, swap and waitlist courses using MyCSUEB during your enrollment appointment, open enrollment, and the Late Registration period. Students may also add courses during the Late Add period with the consent of the instructor and academic department offering the course. Dropping courses may be done online through MyCSUEB during the first two weeks of the term, and students may change their grade type until the end of the Late Add period. If you are on a Wait List and wish to add a class, it is important that you attend the first class meeting. See "Registering for Classes" on the university’s website for specific instructions. Although departments may drop students from a class for failure to attend the first meeting, they do not have to do so. Therefore, if a student wishes to drop a class, they should be sure to do so in MyCSUEB during the first two weeks of the quarter during the Drop period.

Fee Refunds
If students are eligible for a fee refund, see "Paying Your Fees" on the university's website for information. The refund policies are also available in the Fees and Expenses chapter of this catalog under the section "What are Cal State East Bay's refund policies."

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What changes can students make in their enrollment status?
You may add other classes, drop or withdraw from classes, and make a few other changes as discussed below.

Adding Courses
You may add classes during your enrollment appointment, open enrollment and the Late Registration period either by (a) using MyCSUEB, or (b) coordinating your enrollment with the appropriate academic department office for Independent Study, Individual Study, Project, and/or Thesis courses. You have the right to add classes during these enrollment periods, subject to your having successfully completed the prerequisites (coursework and/or consent of instructor as stated in the Catalog) and to the availability of sufficient capacity in the class to accommodate you. You may also add courses during the Late Add period with the consent of the instructor and academic department offering the course.

Dropping Courses
The word "drop" refers to official deletion of a course from your record. If you cannot continue enrollment in a course for which you enrolled in for that particular quarter, you must officially drop the course using MyCSUEB. You may drop courses through the end of the Drop period without the course appearing on your permanent record. After the Drop period, students may only withdraw from courses. See the next section "Withdrawal from the University" if you plan to withdraw from all courses for which you enrolled in for the term.

Departments offering a class may drop you if you do not attend the first class meeting or if you have not met the course prerequisites that are published in the University Catalog. Some departments may call or email you as a matter of courtesy when they are dropping you, but other departments may not. There is no university policy and this will vary by department. Do not assume that you will be dropped automatically if you do not attend class.

Withdrawal from Course(s)
You can not "drop" after the end of the Drop period, but you can "withdraw." The word "withdrawal" refers to official termination of enrollment in a class after the Drop period. You can withdraw from a class only for serious health or personal problems beyond your control. If you withdraw from a class, the class will appear on your record with a grade of "W." The administrative symbol "W" indicates that a student was permitted to withdraw from a course after the Drop period with the approval of the instructor and appropriate campus officials. It carries no connotation of quality of student performance and is not used in calculating grade point average. Beginning the third week of classes, you will be permitted to withdraw from courses by printing the downloadable "Withdrawal" form from the Enrollment Management website. On the form, state the reason, obtain approvals of the instructor and department chair and return the completed form to the Student Information Lobby or the Academic Services Office. The Concord Campus Academic Services may approve Withdrawals for courses offered at Concord.

Undergraduate students may withdraw from no more than 28 quarter units of coursework in their undergraduate career, including any courses taken in CSUEB Open University. When serious illness or accidents are documented and used as a basis for approval of withdrawal from all classes in the term, the units will not count against the 28 unit maximum allowed. Students who will exceed the maximum units allowed may petition for a waiver of the requirement to allow for additional withdrawals.

Withdrawals from individual courses are normally not permitted after the seventh week of the quarter. Students who have completed work up to that point and cannot continue should normally be assigned an "I" (Incomplete) grade. If you have serious and compelling non-academic reasons for withdrawal from a class after the seventh week you must obtain written documentation of the circumstances from an impartial third party such as a doctor or lawyer. It should be an original document (not a copy) on letterhead; then complete the procedures outlined above.
Students must submit the form and documentation to the Student Enrollment and Information Center, 1st Floor, Student Services and Administration Building, or the Concord Campus Academic Services Office for approval of the Registrar. Approval of the withdrawal is not automatic. Withdrawal from any class in which the final examination was taken is not permitted, regardless of circumstances or documentation. Withdrawals will not be processed if students have taken the final examination for the course or have satisfied all the requirements for the course.

If you enroll for a course and fail to attend, but do not officially drop or withdraw, you will receive an appropriate administrative grade indicating failure ("WU" or "NC" depending on the grading pattern in which you enrolled). Refer to the Grading and Academic Standards chapter of this catalog.

**Withdrawing from the University**

If you find it necessary to cancel your enrollment or to withdraw from all classes after enrolling for any academic term, you are required to follow the university's official withdrawal procedures described above. Failure to follow formal university procedures may result in an obligation to pay fees, as well as the assignment of failing grades in all courses. You may also need to apply for readmission if you have not enrolled for three consecutive terms before being permitted to enroll in another academic term. Additional information on canceling enrollment and withdrawal procedures is available from Enrollment Management, including the Student Information Lobby.

Undergraduate students may withdraw from no more than 28 quarter units of coursework in their undergraduate career, including any courses taken in CSUEB Open University. When serious illness or accidents are documented and used as a basis for approval of withdrawal from all classes in the term, the units will not count against the 28 unit maximum allowed. Students who will exceed the maximum units allowed may petition for a waiver of the requirement to allow for additional withdrawals.

If you receive financial aid funds, you must consult with a financial aid counselor in Enrollment Management prior to withdrawing from the university regarding any required return or repayment of grant or loan assistance received for that academic term or payment period. If a recipient of student financial aid funds withdraws from the institution during an academic term or a payment period, the amount of grant or loan assistance received may be subject to return and/or repayment provisions.

Submitting a "Withdrawal" form is not required if you find it necessary to drop all courses in which you enrolled in using MyCSUEB during during the Add period. For refund information, refer to the Refund of Fees section in the Fees and Expenses chapter.

If you find it necessary to withdraw from the university after the Drop period has ended (during the third through the seventh week of instruction), you must complete a "Withdrawal" form, obtain approval signatures from each instructor and department chair, and return it to the Student Information Lobby. Withdrawal at this time can be only for serious health or personal problems beyond your control. Normally, withdrawal is not permitted beyond the seventh week of the quarter. If you have attended classes up to that time, you should discuss with the instructor the possibility of receiving an "I" (Incomplete) grade if circumstances prevent completion at the time. Withdrawals after the seventh week of instruction must have the reason substantiated in writing by an impartial third party and require the approval signature of an associate director in Enrollment Management, in addition to the signatures stated above. A quarter from which you withdraw is not counted as an interruption of enrollment for continuing student status.

A Withdrawal (W) will be recorded for each course in the term on your permanent record if you withdraw from the university after the Drop period. The administrative symbol "W" indicates that a student was permitted to withdraw with the approval of the instructor and appropriate campus officials. It carries no connotation of quality of student performance and is not used in calculating grade point average. If you withdraw from the university, but do not file an official "Withdrawal" form, you will receive appropriate administrative grade(s) indicating failure ("WU" or "NC" depending on the grading pattern in which you are enrolled).

**Change of Major, Degree, Minor, or Credential Objective**

Undergraduate or post-baccalaureate students who wish to change their baccalaureate major or degree objective or declare a minor, and graduate students who wish to change to unclassified or second baccalaureate status, must obtain the required form in the Student Enrollment and Information Center on the first floor of the Student Services and Administration Building. A change is not official until the form has been signed and returned to Planning, Enrollment Management, and Student Affairs. You should be aware that you will be responsible for the major or minor requirements in the Catalog in effect at the time you file the form.

**Change of Address**

Students may change their address online in MyCSUEB (https://my.csueastbay.edu). Students must officially notify the university of an address change in order to ensure that all official correspondence is sent to the correct address. The university is not responsible for mailing correspondence to the incorrect address unless the student has formally made an address change.

**Change of Name**

Students may download the Personal Data Change form (for name changes) found on the University website under "current students," complete and submit the form with copies of required government issued documentation (e.g., marriage certificate, driver's license, or passport) to the Student Enrollment Information Center in the Student Services and Administration Building. Forms may also be mailed to the Office of the Records and Registration at Cal State East Bay.

**Planned Educational Leave**

Students may petition for a Planned Educational Leave to pursue educationally related activities which will enhance the prospect of successful completion of your academic program, but which do not require enrollment at Cal State East Bay or any other institution of higher education. Students who are unable to enroll due to compulsory military service or because of a documented disability or because of pregnancy may apply for a leave of absence. Students should be in good academic standing in a program leading to a degree.

A Planned Educational Leave may be for a period of up to a total of two years (eight consecutive terms) if you are enrolled in a program leading to a degree. The leave must be approved by your faculty advisor or department chair and the Office of the Records and Registration. If approved, you will retain graduation catalog rights and may enroll as a continuing student, provided you return and enroll in the same major for the quarter indicated. Failure to return from a planned educational leave by the quarter indicated means loss of catalog rights and you will be required to apply for readmission and pay an application fee. The Planned Educational Leave form is available online; visit the University website under "Current Students" to download the form.

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Which undergraduate placement examinations do I need to take?

Placement examinations are given in Chemistry, English, Mathematics, and Music. These are not admission tests, but a way to determine what courses best match your level of preparation. We strongly recommend completion of these tests before your first quarter of registration.

**Systemwide Placement Test Requirements**

The California State University requires that each entering undergraduate, except those who qualify for an exemption, take the CSU Entry Level Mathematics (ELM) examination and the CSU English Placement Test (EPT) prior to enrollment. These placement tests are not a condition for
admission to the CSU, but they are a condition of enrollment. These examinations are designed to identify entering students who may need additional support in acquiring College entry-level English and mathematics skills necessary to succeed in CSU baccalaureate-level courses. Undergraduate students who do not demonstrate college-level skills in both English and mathematics will be placed in appropriate remedial programs and activities during the first term of their enrollment. Students placed in remedial programs in either English or mathematics must complete all remediation in their first year of enrollment. Failure to complete remediation by the end of the first year may result in denial of enrollment for future terms.

Students may register for the EPT and/or ELM at their local CSU campus, or at any CSU. For test dates and registration materials, as well as other information, please visit the Testing Office in Library, Room LI 3165A or call (510) 885-3661.

**English Placement Test (EPT)**

The English Placement Test (EPT) is designed to assess the level of reading and writing skills of students entering the California State University. The CSU EPT must be completed by all non-exempt entering undergraduates prior to enrollment in any course, including remedial courses. Students who score 147 or above on the EPT will be placed in college-level composition classes.

Exemptions from the EPT are granted only to those who present proof of one of the following:

- A score of 500 or above on the critical reading section of the College Board SAT Reasoning Test
- A score of 22 or above on the American College Testing (ACT) English Test
- A score of 3 or above on either the Language and Composition or Composition and Literature examination of the College Board Scholastic Advanced Placement Program
- Completion and transfer to CSU of the credits for a college course that satisfies the CSU General Education requirement in English Composition, provided such a course was completed with a grade of C or better
- A score of “Exempt” or “Ready for college-level English courses” on the CSU Early Assessment Program (EAP) taken along with the English Language Arts California Standard Test in grade 11

If special circumstances make it impossible for you to take the test at the first available administration following admission, you must plan to meet the requirement at the next scheduled opportunity. Failure to take the English Placement Test as required, at the earliest opportunity after admission and before initial enrollment, will lead to a hold on the student’s registration. Each test administration requires a separate registration form. If your religious convictions prevent you from taking the EPT on the scheduled test dates, you must request special arrangements by including a letter, from an appropriate religious authority, when you send your registration forms to the campus Testing Office. Persons with verified disabilities should consult the Accessibility Services about possible alternative arrangements for meeting the EPT requirement.

Information bulletins and registration materials for the EPT will be mailed to all students subject to the requirements. The materials may also be obtained from the Testing Office.

**Appropriate Coursework Based on EPT Results**

Students should consult the Office of the Director of the General Education Program, Dr. Sally Murphy, 1st Floor, Student Services and Administration Building, for placement advising if their EPT score is below 147. Students who score 147 or above on the EPT are eligible to enroll in English 1001.

Students who are required to enroll in remedial English coursework must enroll in such coursework in their first quarter and every quarter thereafter, including summer, until remediation is completed. A student who fails the same remedial course twice or does not complete remediation in six consecutive quarters (including summer) has a hold placed on future registration (and is disenrolled if already registered). The hold can only be removed by 1) completing the remedial course which was failed, or 2) completing all remedial courses (if six quarters have expired), or 3) completing the baccalaureate level English course satisfying G.E. Area A2, Written Communication, (if 90 quarter units have been completed). Students who have completed more than 90 quarter units must complete the G.E. course before reentry. A student who wishes to transfer any baccalaureate-level units must reapply and pay the $55 application fee.

Remedial courses are not applicable to the baccalaureate degree requirements. However, they do count towards full-time enrollment for financial aid.

You may take the EPT only once. Students whose EPT scores require them to complete remedial English coursework can gain admission to freshman English composition (ENGL 1001) only upon recommendation of the instructor of their last remedial course (ENGL 0735, 0803, or 0910).

**Entry-Level Mathematics (ELM) Exam**

The Entry Level Mathematics (ELM) Examination is designed to assess and measure the level of mathematics skills acquired through three years of rigorous college preparatory mathematics coursework (Algebra I and II, and Geometry) of students entering the California State University (CSU). The CSU ELM must be completed by all non-exempt entering undergraduates prior to enrollment in any course, including remedial courses. Students who score 50 or above on the ELM will be placed in college-level mathematics classes.

Exemptions from the ELM are granted only to those who present proof of one of the following:

- A score of 550 or above on the mathematics section of the College Board SAT Reasoning Test
- A score of 550 or above on a College Board SAT Subject Test in Mathematics (level 1 or level 2)
- A score of 23 or above on the American College Testing (ACT) Mathematics Test
- A score of 3 or above on the College Board Advanced Placement Calculus AB or Calculus BC exam
- A score of 3 or above on the College Board Advanced Placement Statistics examination
- Completion and transfer to CSU of a college course that satisfies the requirement in Quantitative Reasoning, provided such a course was completed with a grade of C or better
- A score of “Exempt” or “Ready for college-level Mathematics courses” on the CSU Early Assessment Program (EAP), taken in grade 11 in conjunction with the CST in Summative High School Mathematics or Algebra II
- A score of “Conditionally ready for college-level Mathematics courses” or “Conditional” on the CSU Early Assessment Program (EAP) taken in grade 11 along with the California Standards Test in Summative High School Mathematics or Algebra II, provided successful completion of a CSU-approved 12th grade math course that require Algebra II as a prerequisite

Students required to take this examination must do so as soon as possible after admission and before their first enrollment. (The results of this examination do not affect admission.)

Prepare for the test seriously. Review your high school math or take a math refresher course. A performance that is less than your best will make you take more math than necessary. The exam consists of 50 multiple choice questions from three areas: algebra; geometry; and numbers and data.
The class being challenged for credit must be listed in the Class Schedule. Students who wish credit under this plan must enroll for the course during the enrollment period for the units to be earned by the examination. Each course may be challenged only once. An examination is normally from three to six hours in length and may be oral as well as written. No instructor is obliged to offer credit-by-examination for a course. Students may challenge courses by taking examinations developed at Cal State East Bay. Credit shall be awarded to those who pass them successfully. No instructor is obliged to offer credit-by-examination for a course.

Challenging Courses

Students who are required to enroll in remedial math coursework must enroll in such coursework in their first quarter and every quarter thereafter, including summer, until remediation is completed. A student who fails the same remedial course twice or does not complete remediation in six consecutive quarters (including summer) has a hold placed on future registration (and is disenrolled if already registered). The hold can only be removed by (1) completing the remedial course failed, or (2) completing all remedial courses (if six quarters have expired), or (3) completing a baccalaureate level mathematics course satisfying G.E. Area B4, Quantitative Reasoning, (if 90 quarter units have been completed). Students who have completed more than 90 quarter units must complete the G.E. course before reentry. A student who wishes to transfer any baccalaureate-level units must reapply and pay the $55 application fee.

Placement examinations are given to place students at appropriate levels of achievement as follows. Check the Class Schedule each quarter for specific details.

Modern Languages and Literatures
Placement exams in French and Spanish languages are offered on a continuing basis through the Department of Modern Languages and Literatures. If you have prior language experience but are uncertain of your level of ability (elementary, intermediate, or advanced), you are encouraged to consult with a faculty advisor before enrolling in a French or Spanish language course. Placement exams are given only on the recommendation of faculty.

Music Auditions and Proficiency Examinations
Students who declare a major in music must complete examinations and auditions to determine: (1) theory placement, (2) level of applied study, (3) piano proficiency, and (4) major performance ensemble. These examinations are not a substitute for the Advanced Placement Test in Music and should not be confused with the Advanced Placement Program. Auditions and examinations are scheduled prior to the first week of each quarter. For additional information and specific appointment times, contact the Department of Music, MB 2871, or telephone 885-3135.

How may I obtain credit by examination as an undergraduate student?

Cal State East Bay grants credit to those students who pass examinations that have been approved for credit systemwide. These include the Advanced Placement Examinations and some CLEP examinations. Also see "Challenging Courses" in this section.

Credit by Examination Policy
The award of credit for successfully passing any approved examination is subject to the following conditions:

1. Credit shall not be awarded for successful passage of any examination if the student previously took that examination during the past quarter. Credit shall not be awarded for successful passage of any examination if the student previously took that examination during the past quarter.
2. Credit shall not be awarded when equivalent degree credit has been granted for regular coursework, credit-by-evaluation, or other instructional processes such as correspondence.
3. Credit shall not be awarded when credit has been granted at a level represented by the examination in question.
4. Duplicate credit shall not be awarded where there are overlapping tests, university level work, or both. Where there is partial overlap, the amount of examination credit shall be reduced accordingly.
5. The total amount of credit earned on the basis of externally developed tests which may be applied to a baccalaureate degree shall not exceed 45 quarter units. Advanced Placement credit is excluded from this limit.

Challenging Courses
Students may challenge courses by taking examinations developed at Cal State East Bay. Credit shall be awarded to those who pass them successfully. No instructor is obliged to offer credit-by-examination for a course.

The university recognizes that exceptional students, by reason of special studies or experiences, may already have achieved the objectives of certain courses in the basic program; therefore, students with this background may petition to receive credit in selected courses by special examination. Such an examination is normally from three to six hours in length and may be oral as well as written. Each course may be challenged only once.

Students who wish credit under this plan must enroll for the course during the enrollment period for the units to be earned by the examination. The class being challenged for credit must be listed in the Class Schedule for the particular quarter. Obtain a petition for credit by examination from the office of the department offering the course, and get the permission of both the instructor and department chair. The examination must be administered during the first two weeks of the quarter and the results, in grade form, must be submitted to the Office of Records and Registration by the end of the third week. The instructor is responsible for notifying you of the results of the examination.

If the exam is passed with a grade of "C-" or higher, the letter grade and credit by examination will be indicated on your permanent record. If students receive a grade of "D+," "D," or "F" on the examination, they must either continue taking the course formally or officially withdraw from it within one week after completing the examination. (Note: The instructor need not inform the Office of the Records and Registration of the grades "D+," "D" or "F"). Some departments (e.g., Modern Languages and Literatures) only allow their courses to be challenged for a "CR"
No more than 36 quarter units of credit obtained by challenging courses may be applied toward the baccalaureate degree. No credit earned by examination may be used to satisfy the requirement of 45 quarter units in residence at Cal State East Bay.

**Advanced Placement**
Cal State East Bay grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of The College Board. Students who present scores of 3 or better will be granted 4-12 quarter units of transfer college credit.

The Advanced Placement Examinations referred to below are prepared and offered by the College Board. Unit credit will be granted to those passing the exams, but no letter grade will be assigned or computed in a student's grade point average.

If you have Advanced Placement credit, request the College Board to send your test score(s) to Planning, Enrollment Management, and Student Affairs at Cal State East Bay.

Normally, if Advanced Placement course credits satisfy G.E. Area B, C, and/or D requirements, they will apply to sophomore year general education requirements and not to freshmen clusters because all freshmen benefit from participating in these learning communities. Only if the amount of Advanced Placement credit exceeds what can be applied to the second year will it be applied to freshmen clusters.

Please see the list of [Advanced Placement Examinations](#), and credit awarded.

**International Baccalaureate Program**
Cal State East Bay recognizes the International Baccalaureate (IB) as a challenging college-preparatory program. Four (4) to fifteen (15) units of college credit will be awarded for each IB Higher Level Examination passed with a score of 4, 5, 6, or 7. (No credit will be awarded for IB Subsidiary Level passes.) A copy of the official IB transcript must be supplied to the university when credit is requested. All credit is granted in terms of existing Cal State East Bay courses with equivalent subject matter determined by the department.

Please see the list of [IB Higher Level Examinations](#) and the Cal State East Bay credit awarded.

**College Level Examination Program**
Please see the list of [College Level Examination Program (CLEP) Tests](#) and the Cal State East Bay credit awarded.

**Science Equivalency Test Program**
Students who pass the American Chemistry Society Cooperative Examination in General Chemistry at or above the 50th percentile will receive 5 units of credit.

**Credit for Non-Collegiate Instruction**
Cal State East Bay grants undergraduate degree credit for successful completion of non-collegiate instruction (either military or civilian) appropriate to the baccalaureate degree that has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. Military courses and schools must be documented by forms DD214 or DD295. Such credit shall be clearly identified on the permanent record.

Credit for the following types of courses may be granted:
- Lower division baccalaureate/associate degree credit courses which are comparable to courses offered on most CSU campuses. (Credit is not allowed for occupationally oriented courses designed to enable a student to function only as a technician.)
- Upper division baccalaureate degree credit courses.
- Graduate degree credit courses.

The numbers of units allowed are those recommended in the [Guide to the Evaluation of Educational Experience in the Armed Services and the National Guide to Educational Credit for Training Programs](#).

Cal State East Bay shall determine which units shall be applied as general education, major, or elective credit.

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Student Services

Cal State East Bay provides a variety of services to students under the direction of the Provost, the Vice President for Planning, Enrollment Management, and Student Affairs, the Vice President for Administration and Finance, and the Associated Students. These services offer a number of special programs which help students derive the maximum benefit from their university experience.

- Academic Assistance
- Accessibility Services
- Admission
- Career Preparation
- Concord Campus Student Services
- Counseling
- Evening Offices
- Financial Aid Services
- Graduation
- Health Services
- Housing And Residential Life
- International Education and Student Exchange Programs
- Orientation
- Outreach
- Registration Assistance
- Safety Programs
- Servicemember's Opportunity College
- Special Services
- Testing Services
- Transcripts
- Transfer Information
- University Honors Program
- Veterans’ Services

Academic Assistance

Several sources for advising services exist on campus. For detailed information, see "Advising" in the Orientation and Advising chapter. The quarterly Class Schedule (available online at www.csueastbay.edu/schedule) also includes information regarding advisement services.

Academic Advising and Career Education

Academic Advising and Career Education (AACE) provides a full range of excellent academic advising and counseling services to all undergraduate students. Services include guidance and official updates on your progress toward completing your general education and graduation requirements (other than major requirements); assistance in developing realistic educational goals and a plan to achieve those goals; an explanation of complex academic policies and procedures; workshops throughout the year, and individual and group advising for new students.

AACE is the academic advising home for undergraduate students who have not yet declared a major at California State University, East Bay. We offer academic counseling and specialized assistance in exploring, researching and selecting a major based on your individual, educational and career goals. Undeclared students who are placed on academic probation are required to see an AACE academic counselor and/or attend one workshop “Understanding Academic Probation” each quarter until good standing is achieved.

In addition, AACE provides counseling and support services for all undergraduates who are experiencing academic difficulties such as those on academic probation or those who have been recently disqualified. Students (non-EOP or EXCEL) on academic probation are encouraged to meet with an AACE counselor to discuss strategies for improving their grades and academic standing.

Educational Opportunity Program

Established in 1969, the Educational Opportunity Program (EOP) provides admission and retention support services to low-income and educationally disadvantaged California residents who demonstrate the motivation and potential to succeed in college. Although 80% of EOP students entering Cal State East Bay meet the CSU eligibility for regular admission, the program also provides access for a limited number of first-time freshmen who do not qualify for regular admission but have demonstrated the academic potential and motivation to pursue a college education - if given the opportunity to do so. EOP provides its participants with a broad range of support services during their undergraduate studies, as long as they maintain full-time status, make satisfactory progress, and fulfill program requirements.

Student services provided by EOP include recruitment, preadmission counseling, special admissions, a Summer Bridge program (for entering EOP freshmen), specialized orientation sessions, academic advisement, personal counseling, skill-enhancement workshops, career guidance, peer advising, support groups, social/cultural activities, referral services, and EOP grants for eligible students.

To apply for admission to the program, you must complete the online CSU Mentor CSU Application for Undergraduate Admission and check the appropriate box for EOP services. EOP applications are available at http://www.csumentor.edu. Once the Cal State East Bay application is submitted (online), EOP applicants will have access to an online EOP link to the EOP Application Information Form and two EOP recommendation letters for online processing for Fall term.

EOP is a high-demand program which only accepts applications for Fall term from applicants new to the CSU system. Currently enrolled and/or previously enrolled students (not formerly in an EOP CSU program) are not eligible to apply. Applicants who submit all required documents will be reviewed and if qualified, will be admitted on a first-come, first-serve basis. For assistance in filling out the application forms, and/or for further information about the program's eligibility requirements, please visit our website at www.csueastbay.edu/eop or contact the EOP Admissions Office at 510-885-4883.

The EXCEL Program

The EXCEL program (a TRiO Student Support Services program) is funded by the U.S. Department of Education. The program provides a
variety of educational services for Cal State East Bay undergraduates who have a demonstrated academic need and are low-income, first-generation college or disabled. The major goals of the program are to increase the retention and graduation rates of program participants and to create a supportive environment that encourages academic success.

EXCEL Academic Life Planning Counselors assist students in developing academic plans to complete their undergraduate degrees and solve academically related problems. They also provide advising in general education requirements, career and goal planning, scholarship assistance, guidance on balancing academic and personal life, and graduate school admission.

Learning skills improvement is provided by the Learning Resources Counselor. Assistance includes diagnosing academic weaknesses in learning and language skills and providing support in test-taking, reading textbooks, taking lecture notes, study skills, time management, and offering tutoring in basic academic subjects.

EXCEL students also have access to a variety of reference books on careers, learning skills, English, mathematics, reading and scholarships on non-federal financial assistance available to women, minorities, and people with disabilities in California and throughout the United States. Information about summer programs and internships is also available.

To apply to the EXCEL Program or to find out more about its services, call 510-885-3722 or visit the main office located in the Library Complex (LI) Room 2450. Additional information can also be found on the website at www.csueastbay.edu/excel.

McNair Scholars Program

The Ronald E. McNair Post Baccalaureate Achievement Program (McNair Scholars Program) is a federally funded program designed to prepare selected CSUEB undergraduate students for admission and study at the doctoral level. Each year, twenty-five McNair Scholars participate in both academic year and summer activities.

Students who have obtained 45 quarter units or more, have a GPA of 3.0 or higher and meet low income and first generation guidelines, or are from groups underrepresented in graduate education are program eligible (as defined by federal regulations). McNair staff recruits students from all disciplines. However, extra efforts are taken to attract students majoring in Science, Technology, Engineering, or Mathematics (STEM).

Participant levels of academic preparedness and career aptitudes are assessed, and individualized plans of action for each Scholar are developed. Tutoring, seminars, self-paced computer programs, and other forms of academic assistance are provided to help Scholars achieve successful admission to graduate school.

McNair Scholars are engaged in research and other scholarly activities with faculty mentors from the academic community and receive a stipend for their work. Results of their research projects are presented at professional meetings and conferences and prepared for publication in peer reviewed and other professional journals.

The program encourages participant entrance into graduate programs and tracks their progress to successful completion of advanced degrees. The primary goal of the McNair Scholars Program is to increase the attainment of the Ph.D. and to diversify the professoriate, thereby producing role models for underrepresented communities.

For more information about the McNair Scholars Program, visit the website at www.csueastbay.edu/mcnair.

The Renaissance Scholars Program

Jointly funded by the University, private foundations, non-profit organizations, and individual donations, the Renaissance Scholars Program provides a variety of educational and support services for current or former foster youth attending Cal State East Bay. The major goals of the program are to create the retention and graduation rates of program participants and to create a supportive environment that encourages academic success.

Renaissance Scholars assists students in developing life and leadership skills while providing a wide variety of services including year-round on-campus housing, academic, career, and psychological counseling, scholarship opportunities, emergency assistance, recognition events, mentoring, workshops, field trips, and tutoring.

To qualify for Renaissance Scholars, a student must meet the following criteria:

- Be a current or former foster youth attending Cal State East Bay between the ages of 17-23
- Qualify for “Independent Student Status” under federal financial aid guidelines
- Qualify for admissions to the Educational Opportunity Program (EOP)
- Be a California resident
- Be a graduating high school senior or incoming community college transfer student
- Have a minimum high school GPA of 2.2
- Transfer students must have earned a 2.5 GPA in all transferable coursework
- Demonstrate high motivation and potential

To find out more about Renaissance Scholars, visit the main office located in the Library Complex (LI), Room 2500, browse the website at www.csueastbay.edu/renaissance, email us at renaissance@csueastbay.edu, or call 510-885-3747.

Project IMPACT

Project IMPACT is funded by a grant from the U.S. Department of Education TRIO/Student Support Services Programs to help eligible students with disabilities succeed in their academic program. The services provided by Project IMPACT are beyond the legally mandated services afforded to students with disabilities by Accessibility Services. Project IMPACT offers selected students individualized services such as:

- Academic Advising
- Tutoring Resources
- One-on-One Support
- Wellness Counseling
- Skills Building Classes
- Financial Aid and Scholarship Information
- Help with Choosing a Major and a Career
- Assistive Technology Computer Lab and Training

You are eligible for this program if:

1. You are admitted to Cal State East Bay
2. Provide documentation of a permanent disability
3. Registered with and referred by Accessibility Services
4. U.S. Citizen, national or permanent resident alien
5. Working toward your FIRST baccalaureate degree
6. For more information about Project IMPACT contact a counselor at 510-885-3868.

Student Center for Academic Achievement

The Student Center for Academic Achievement provides learning assistance such as individual and group tutoring, problem-solving sessions, and online resources for regularly enrolled students of the university. Students can receive tutoring in writing, math, or statistics. Workshops are conducted each quarter to improve students' academic skills. Workshops include topics such as preparing for the WST, taking notes, studying for exams, managing time, and reading textbooks. Cal State East Bay students are encouraged to use the Center regularly to improve their academic performance no matter what their skill level or class standing. Students are also encouraged to attend events sponsored by the Center, such as contests and community service projects.

The Student Center for Academic Achievement is located in the Library Complex (LJ), UM3133, across from the University Library and hours vary. Call 510-885-3674 or visit our website for information regarding hours, specific tutoring times, workshop dates, event information, or to schedule an appointment.

Summer Bridge Program

Summer Bridge is a non-residential five-week academic program designed to help a select group of newly admitted Educational Opportunity Program (EOP) freshmen make a smooth transition from high school to college. The Summer Bridge Program combines academic coursework with an introduction to the campus community.

The Summer Bridge Program offers courses that help sharpen skills in writing, reading, and math. In addition, tutorials, workshops, and other activities are included in the Summer Bridge experience. Students participating in the program receive academic advising, registration assistance, and opportunities to socialize and network with other students and campus administrators. There are no direct costs to eligible students or to their families. Summer Bridge is fun and gives new students a definite advantage as they begin their university career.

The program is held annually during the months of July and August. All EOP first-time freshmen receiving exception admission are required to successfully complete the Summer Bridge Program. Regularly admissible freshmen are also encouraged to apply to the program. For further information about the program, please contact the EOP Admissions Office via email at eopadmissions@csueastbay.edu or by calling our office direct at 510-885-4683. EOP applicants interested in attending the Summer Bridge program are encouraged to visit our website at www.csueastbay.edu/summerbridge.

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Accessibility Services

Accessibility Services provides academic accommodations and support services to address the individual needs of students with permanent disabilities or temporary disabling conditions. Students with documented disabilities and functional limitations are eligible for services designed to provide equivalent access to general campus and classroom programs and activities. Accessibility Services also offers campus referrals for advising, counseling, transportation, and employment needs.

At the Hayward Hills campus, Accessibility Services is located in the Library Complex (LJ 2400) and can be reached by phone or TDD at 510-885-3868. At the Concord Campus, it is located in the Academic Services Building, room 113 (Tel. 925-602-6716; TDD 925-602-8616). The staff of Accessibility Services is committed to ensuring the rights and promoting the dignity, self-awareness and self-advocacy of students with disabilities throughout the university. They value the diversity of the Cal State East Bay student body and work with the faculty, staff, and administration to create and maintain an inclusive environment where individuals with disabilities have full and equal access to all university programs.

To learn more about Accessibility Services, including information about their services, policies, resources and the ADA faculty handbook, visit Accessibility Services website.

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Admission

Planning, Enrollment Management, and Student Affairs is responsible for all domestic admission- and evaluation-related services for prospective and new students. International students on F or J visas (and applicants with transcripts issued by schools outside the United States) are served by the International Admissions Office.

All applicants and current students should use "MyCSUEB" at https://my.csueastbay.edu to check admission and financial aid status, grades, holds, account status, and to update information. For complete information, see the Undergraduate Admissions chapter.

International Student Information

All matters pertaining to the admission of international students are handled by the International Admissions Office. Students from other countries should consult with the International Admissions Office regarding visas, eligibility for employment, and any special academic requirements. (See "Are there special admission and eligibility requirements for international students?" in the Undergraduate Admissions chapter.)

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Career Preparation

Academic Advising and Career Education (AACE)

AACE provides, in addition to advising, counseling, information and employment services to assist students in transitioning from the university to graduate school or the professional workplace. These services include career advising and coaching, career exploration and assessment, occupational information, job search assistance, and employment information and referral. The office maintains a comprehensive Career Library with books, periodicals, videos, and online resources pertaining to job search, career guidance, and labor market information. A searchable online database of all books in the AACE Library is available on its website.

AACE offers regularly scheduled walk-in hours for resume critiques and career-related questions. Appointments are also available for longer counseling sessions. In addition, career assessments are available in AACE and on the AACE website to provide personal assessment and occupational information.

AACE offers workshops throughout the year, at both the Hayward Hills and Concord campuses. Subjects include resume writing, interview techniques, finding an internship, and personal skills assessments. Workshop and event schedules are listed on the website and in the Events Calendar. Calendars are available in AACE, online, and at eight "Career Corner" locations on campus.
Employers conduct on-campus interviews for graduating seniors and alumni in the fall, winter, and spring quarters. Participants are encouraged to attend an orientation session, either online or in the Center, before registering for interviews.

AACE hosts job fairs throughout the academic year for all undergraduates and graduates to explore career options and employment opportunities. Job fairs feature employers from local, national, and worldwide organizations. AACE also sponsors targeted recruitment events with a specific career or employment focus.

AACE maintains an online job database listing hundreds of part-time, full-time, temporary, and seasonal jobs and internships.

AACE also provides specialized employment services for students and alumni who are registered with the California Department of Rehabilitation (DOR) through the WorkAbility-IV (WA-IV) program. These services include career counseling, job development, job placement, follow up, and technical assistance support for successful transition to, and retention in, the work environment.

Cal State East Bay alumni and other working professionals in a variety of career fields provide CSUEB students with valuable career exploration information by telephone, e-mail, or in person. These "Career Contacts," available on the AACE website, offer valuable insight into their career fields and experiences.

AACE's website (www.csueastbay.edu/aace) provides 24/7 access to information about its services, workshops and events, major and career information, job listings, resume and interviewing guidelines, and other career resources. Students can search for jobs, obtain information about occupations and career fields, participate in the On-Campus Interview program, and view the calendar of upcoming career workshops and job fairs.

Cooperative Education

The goal of the Cooperative Education program is to enrich your educational experience by demonstrating the relevance of university study to the world of work and by providing on-the-job experience that will make interns attractive to future employers after the degree is completed.

Students have completed internships in private businesses and public and non-profit agencies, including I.R.S./C.I.D., Shaw Environmental, P.G. & E., and many more.

Normally, a co-op experience should begin during the sophomore year or later. The work schedule varies depending on the needs of the employer. Some students are offered employment with their co-op employer when they graduate.

To participate in the program, students must have at least a 2.0 GPA, be in good academic standing, and be enrolled as a regular student in the university. To register in a Co-op Ed course, students must meet the requirements of the Cooperative Education program and the academic department. Co-op courses are numbered 3898 for undergraduate students and 6898 for graduate students. If a Co-Op Ed course is available, it will be listed in the Class Schedule. Students must complete forms in AACE, as well as register for the course in order to receive credit.

In addition to Co-op Ed courses, many departments offer regular courses in internships or field practice in which students may enroll to receive academic credit for their work.

Note: International students on F-1 visas who are interested in registering for Co-op, internship, or field practice courses should contact the Center for International Education (510-885-2880) to discuss employment authorization for such courses.

Concord Campus Student Services

The Concord Campus provides a full range of student support services designed to enhance students' abilities to succeed in their academic endeavors. In addition, academic advising is available for general education.

The following student services are available on the Concord Campus: Associated Students, Academic Advising, Bookstore, Career Services, Cashier, Clubs and Organizations, Counseling and Psychological Services, Financial Aid, Food Service, New Student Orientation, Accessibility Services, Student Health and Counseling Services, Tutoring Services.

Additionally, the Academic Services (AS) Lobby serves as a one-stop center for students to complete registration, records and enrollment services functions on the Concord Campus. For assistance, or information on any of these services, call (925) 602-6700.

Counseling

Counseling and Psychological Services (CaPS) provides personal counseling services to all registered students at Cal State East Bay. The professional staff provides a range of counseling, outreach, emergency and wellness services.

CaPS offers you culturally sensitive support in dealing with many issues and concerns that may interfere with your ability to perform at your best while studying at CSUEB. These may include a death in the family, relationship difficulties, alcohol or drug abuse, a physical illness, sexuality issues, depression, anxiety, family difficulties, cultural/intergenerational concerns, study problems, eating concerns or other challenges.

Complete information is available on our website: http://www.csueastbay.edu/caps

Counseling Services

All currently registered students at Cal State East Bay are eligible to receive time-limited personal counseling at Counseling and Psychological Services (CaPS). Individual, couples, and group counseling are available. Group counseling sessions are unlimited. CaPS is open Mondays through Thursdays 8:30 a.m. to 6:00 p.m. and on Fridays from 8:30 a.m. to 5:00 p.m. CaPS also offers counseling services on the Concord Campus on Mondays and Thursdays, 1:00 p.m. to 7:00 p.m. To make an appointment, call CaPS at 510-885-3690.

Outreach Services

Staff members provide outreach programs to university classes and other groups on various topics such as stress management, time management, test anxiety, depression, grief and loss, anger and violence, rape education, self-esteem, assertiveness, and others. A staff member can also give a presentation to your group or class on the counseling services that are available. To schedule an outreach program, call (510) 885-3690.

Emergency Services

A walk-in service is available Monday through Friday 10:00 a.m.-12:00 p.m., 3:00-5:00 p.m., for those who require immediate care. It is helpful if you call ahead to let the staff know that you are coming. You will be seen as promptly as possible. For assistance with emergencies when CaPS is closed, contact the University Police at 9-1-1 on campus or call the 24-hour Crisis Support Services of Alameda County at 800-309-2131, off campus.
applicants who enroll at CSUEB, from Planning, Enrollment Management, and Student Affairs, or the Financial Aid Department. You may obtain additional information on eligibility requirements for financial assistance, and the criteria used to distribute aid among eligible students. The maximum of $200 with repayment due within 9 months.

Short-Term Loans: CSUEB offers short-term loans to registered students. Short-term loans are available for limited funds and must be used to pay university charges and are usually limited to $300 with repayment due in 30 days. If you are a non-U.S. citizen, you may apply for a short-term loan of up to $200 with repayment due within 30 days.

Scholarships: CSUEB offers scholarship opportunities to students. Both on-campus and off-campus scholarships are available. Scholarships are based on academic merit and financial need. Information is available on the university's website.

Work-Study Program: CSUEB offers Work-Study opportunities to students. Work-Study is earned through part-time employment in on-campus and certain off-campus jobs. If you are eligible, Work-Study employment can assist you in meeting your educational expenses without incurring indebtedness. Financial Aid will use the information provided on your FAFSA to determine your eligibility for Work-Study.

Scholarships: You may obtain information on scholarship opportunities from Financial Aid and from various departments. Both on-campus and off-campus scholarships are available. You can find more information on the university's website.

Short-Term Loans: CSUEB offers short-term loans to registered students. Short-term loans are available for limited funds and must be used to pay university charges and are usually limited to $300 with repayment due in 30 days. If you are a non-U.S. citizen, you may apply for a short-term loan of up to $200 with repayment due within 9 months.

(Also see "Fee Waivers for Senior Citizens" in the Fees and Expenses chapter.)

You may obtain additional information on eligibility requirements for financial assistance, and the criteria used to distribute aid among eligible applicants who enroll at Cal State East Bay, from Planning, Enrollment Management, and Student Affairs, or the Financial Aid Department.

Financial Aid Services
Planning, Enrollment Management, and Student Affairs coordinates all university-administered financial aid programs. You may obtain financial aid information and assistance at the Student Enrollment Information Center (1st floor of the Student Services and Administration Building).

Academic Advising and Career Education (AACE) is open 9:00 a.m. to 6:00 p.m. Monday through Thursday, and until 5:00 p.m. on Fridays. Academic advising is available for all undergraduate students regarding their non-major degree requirements. Drop-in advising is available Tuesday and Wednesday, 10:00 a.m. to 12:30 p.m., and 3:00 p.m. to 5:30 p.m. Appointments may also be scheduled in advance and, if needed, 6:00 p.m. appointments are available. Students should bring all their advising records including their most recent general education evaluation or degree audit when they come for advising. Please call ahead (510-885-3621) for any current changes to advising hours, or go to www.csueastbay.edu/aace.

The Concord Campus Academic Services Office also provides academic advising. Please call (925) 602-6700 for more information or visit the Concord Campus website at: www.csueastbay.edu/concord.

CaPS Staff Credentials and Office Location
CaPS counselors have earned Master's or Doctoral degrees in counseling or clinical psychology, marriage and family therapy, and clinical social work. Pre-licensed counselors, many of whom have years of experience in providing counseling, are supervised by licensed staff members. A board certified medical doctor, Dr. Cathleen Coulman, is the director of CaPS, and a board certified psychiatrist, Dr. Ulka Agarwal, is Supervisor of CaPS. CaPS is located in the Student Health and Counseling Services building (the red brick building between the library and the gym).

Evening Offices
The Hayward Campus Student Enrollment Information Center is located on the first floor of the Student Services and Administration Building. It provides general information and forms related to admission, financial aid, records and registration, VA benefits, and graduation evaluation. The Student Enrollment Information Center is open Monday from 8:30 a.m. to 6:30 p.m.; Tuesday through Thursday from 8:30 a.m. to 5:30 p.m.; and Friday from 10:30 a.m. to 5:00 p.m. Extended hours during the first five days of instruction each quarter are offered. The Cashier's Office, also located on the 1st floor of Student Services and Administration Building adjacent to the Student Enrollment Information Center, is open Monday from 8:30 a.m. to 6:00 p.m.; Tuesday through Thursday from 8:30 a.m. to 5:00 p.m.; and Friday from 9:30 a.m. to 4:30 p.m. Students seeking service from departments should contact those offices directly.

The Concord Campus Academic Services Lobby (925-602-6700) provides the same services as the Hayward Campus, with the exception of graduation evaluation. The Academic Services Lobby is open Monday through Thursday, 11:30 a.m. to 6:30 p.m. Extended hours are offered during the first week of instruction.

CaPS Staff Credentials and Office Location
CaPS counselors have earned Master's or Doctoral degrees in counseling or clinical psychology, marriage and family therapy, and clinical social work. Pre-licensed counselors, many of whom have years of experience in providing counseling, are supervised by licensed staff members. A board certified medical doctor, Dr. Cathleen Coulman, is the director of CaPS, and a board certified psychiatrist, Dr. Ulka Agarwal, is Supervisor of CaPS. CaPS is located in the Student Health and Counseling Services building (the red brick building between the library and the gym).

Evening Offices
The Hayward Campus Student Enrollment Information Center is located on the first floor of the Student Services and Administration Building. It provides general information and forms related to admission, financial aid, records and registration, VA benefits, and graduation evaluation. The Student Enrollment Information Center is open Monday from 8:30 a.m. to 6:30 p.m.; Tuesday through Thursday from 8:30 a.m. to 5:30 p.m.; and Friday from 10:30 a.m. to 5:00 p.m. Extended hours during the first five days of instruction each quarter are offered. The Cashier's Office, also located on the 1st floor of Student Services and Administration Building adjacent to the Student Enrollment Information Center, is open Monday from 8:30 a.m. to 6:00 p.m.; Tuesday through Thursday from 8:30 a.m. to 5:00 p.m.; and Friday from 9:30 a.m. to 4:30 p.m. Students seeking service from departments should contact those offices directly.

The Concord Campus Academic Services Lobby (925-602-6700) provides the same services as the Hayward Campus, with the exception of graduation evaluation. The Academic Services Lobby is open Monday through Thursday, 11:30 a.m. to 6:30 p.m. Extended hours are offered during the first week of instruction.

Academic Advising and Career Education (AACE) is open 9:00 a.m. to 6:00 p.m. Monday through Thursday, and until 5:00 p.m. on Fridays. Academic advising is available for all undergraduate students regarding their non-major degree requirements. Drop-in advising is available Tuesday and Wednesday, 10:00 a.m. to 12:30 p.m., and 3:00 p.m. to 5:30 p.m. Appointments may also be scheduled in advance and, if needed, 6:00 p.m. appointments are available. Students should bring all their advising records including their most recent general education evaluation or degree audit when they come for advising. Please call ahead (510-885-3621) for any current changes to advising hours, or go to www.csueastbay.edu/aace.

The Concord Campus Academic Services Office also provides academic advising. Please call (925) 602-6700 for more information or visit the Concord Campus website at: www.csueastbay.edu/concord.

Financial Aid Services
Planning, Enrollment Management, and Student Affairs coordinates all university-administered financial aid programs. You may obtain financial aid information and assistance at the Student Enrollment Information Center (1st floor of the Student Services and Administration Building).

Financial Aid Applications:
The Free Application for Federal Student Aid (FAFSA) is available on the web at: www.fafsa.ed.gov. You are strongly encouraged to complete the FAFSA each year by the March 2 priority filing date. The FAFSA helps determine your eligibility for grants, Work-Study, and loans. Eligibility for limited funds is determined by financial need and FAFSA priority filing. If you are a California resident, you may also apply for a Cal Grant by completing the FAFSA and asking your school to submit your grade point average (GPA) to the California Student Aid Commission by March 2 for high school/college students, and September 2 for California Community College transfer students.

Note: The federal Military Selective Service Act requires most males between the ages of 18 and 25, who reside in the United States, to register with the Selective Service System. If you are subject to the Act and fail to register, you are ineligible to receive all need-based student grants funded by the state or a public postsecondary institution. See "Military Selective Service Act" in the Appendix for additional information.

Loans and Grants:
If you demonstrate financial aid need, you may be considered for one or more of the following programs: Pell Grant, Federal Supplemental Educational Opportunity Grant, Academic Competitiveness Grant, SMART Grant, State University Grant, Cal Grant A or B, Work-Study, Perkins Loan, Stafford Loan, Parent PLUS Loan, and Graduate PLUS Loan. You may qualify for Unsubsidized Stafford Loan Program and Parent PLUS Loan, and Teach Grant without demonstrating need.

Work-Study Program:
Work-Study is earned through part-time employment in on-campus and certain off-campus jobs. If you are eligible, Work-Study employment can assist you in meeting your educational expenses without incurring indebtedness. Financial Aid will use the information provided on your FAFSA to determine your eligibility for Work-Study.

Scholarships:
You may obtain information on scholarship opportunities from Financial Aid and from various departments. Both on-campus and off-campus scholarships are available. You can find more information on the university's website.

Short-Term Loans:
Financial Aid and Student Financial also administers the University's short-term Emergency Loan Program and the intermediate term Foreign Student Loan Program. You are not required to apply for financial aid to receive these interest free loans. Emergency Loans may not be used to pay university charges and are usually limited to $300 with repayment due in 30 days. If you are a non-U.S. citizen, you may apply for a maximum of $200 with repayment due within 9 months.

(Also see "Fee Waivers for Senior Citizens" in the Fees and Expenses chapter.)

You may obtain additional information on eligibility requirements for financial assistance, and the criteria used to distribute aid among eligible applicants who enroll at Cal State East Bay, from Planning, Enrollment Management, and Student Affairs, or the Financial Aid Department.

Graduation
seniors who have 150 units can apply for graduation. Be sure to consult your academic department regarding fulfillment of major requirements, and the academic advising and career education center regarding the fulfillment of general education requirements. Degree audits are available online through mysueb. Students with questions regarding their online audit should consult planning, enrollment management, and student affairs. You must apply for graduation by the end of the late add period of the quarter prior to your final quarter. (late filing causes graduation to be delayed.) for complete information, see the baccalaureate degree information chapter. final graduation evaluation or "check-out" is typically completed within three months following the posting of grades from your final quarter of attendance. Diplomas are typically printed and mailed 4-6 weeks following the completion of final graduation evaluation and the posting of your degree.

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Health Services

Student health and counseling services (SHS) offers affordable, convenient, high-quality health care to all Cal State East Bay students. Its goal is to assist you in achieving and maintaining optimal health while pursuing your academic and career goals. The SHS staff is committed to the promotion of healthy behaviors and the prevention of illnesses within the campus community.

Student health and counseling services is located between the library and the P.E. building and is open five days a week to serve you. The current hours (while classes are in session) are Monday through Thursday from 8:30 a.m. to 5:45 p.m., and Friday from 8:30 a.m. to 5:00 p.m. Students can be seen on an appointment basis. Same day appointments are available for urgent needs. Limited services are also offered during quarter breaks. Some services are available at the concord Campus on Mondays and Thursdays from 3:00 to 6:30 p.m.

Funded in part by a student health fee, SHS provides an extensive array of outpatient health care services at no or low cost to students. These services include appointments with a physician, nurse practitioner, or nurse; routine X-ray procedures; allergy injections; EKG's; immunizations; and physical exams. Specialty services are also provided such as free and anonymous HIV testing, massage therapy, physical therapy, sports medicine, optometry, and internal medicine. SHS houses a full-service pharmacy where registered students may purchase a wide variety of prescription and non-prescription medications at much reduced prices.

To cover health services not provided by student health and counseling services, all students are encouraged to purchase their own supplemental health insurance available through associated students.

Student Health and Counseling Services is fully accredited by the Accreditation Association for Ambulatory Health Care, Inc. (AAAHC).

How Can I Get Involved?

Student Health and Counseling Services has an active student health advisory committee (SHAC) which is made up of Cal State East Bay students, staff, and faculty. If you are interested in being a member, contact Andrea Wilson, director of Student Health and Counseling Services, at 885-3639. There are many other exciting opportunities available for you at SHS. Come in and get to know the staff! If you would like more information about SHS services or about getting involved, please call 885-3735 or visit our website: http://www.csueastbay.edu/shs.

Important Telephone Numbers

Appointments and information: 885-3735. On-campus medical emergency: dial 911 and the University Police will notify Student Health and Counseling Services. Information concerning the prevention of drug and alcohol abuse and other wellness concerns may be obtained from the Health Promotions Department in Student Health and Counseling Services at 885-2356.

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Housing And Residential Life

Enrolled students have the option of living on campus in the Pioneer Heights Student Apartments/Suites. First-time freshmen meeting the established criteria are guaranteed housing. (See below.) All other space reservations are provided on a first-come, first-served basis.

On-Campus Housing (Pioneer Heights)

Located conveniently on campus, the Cal State East Bay Student Apartments/Suites are comfortable and affordable. Living in a community designed to meet the needs of students can help you in gaining the most from your university experience.

The Pioneer Heights on-campus apartments and suites are spacious, attractive, and fully furnished. The apartments feature single (for upper division students) or double bedroom accommodations, a kitchenette with refrigerator and microwave oven, a living and dining area and two bathrooms. High-speed Internet access and basic cable is included as part of the rent. Phone service is available in each unit. Computing labs, as well as study, exercise, laundry, and recreation rooms with television, billiard and ping-pong tables, are among the amenities. Outdoors, you'll find lighted basketball courts, as well as barbecue and picnic areas. Convenient meal plans are required for all students living on campus making it easy to save time and have fun sharing a meal with friends.

The Residential Life Program was developed as an integral part of your educational experience and provides a climate where the living atmosphere complements the educational mission of the university. Professional staff and trained student assistants work together to develop educational, cultural, social, leisure, and personal development programs that serve to enhance academic learning.

Housing applications are accepted year round. Applicants are notified once the official housing license contract is available, typically in early May. Students who submit their completed housing license contract and payment by June 1 will receive priority when assigning space. It is important to note that the university's admission application is separate from the housing application.

Housing is guaranteed to first-time freshmen admitted to the University who submit their housing license contract and payment by June 1 each year. Additional information regarding first-time freshmen guaranteed housing, payment plans, and financial aid assistance is provided in the Student Housing Information Packet.

For more information contact student housing at 510-885-7444 or stop by Lassen Hall.

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International Education and Student Exchange Programs

Center for International Education

The center for international education (cie) provides a range of services to international students and scholars that is designed to facilitate their transition to a new environment and to optimize their educational opportunities while at Cal State East Bay. These services include

1. pre-departure advising
2. orientation for new students
3. assistance in understanding and complying with university rules and regulations
4. counseling designed to help students adjust to life in the USA
5. advice on relevant immigration regulations
6. guidance for students regarding legal employment while in student status
7. referrals for on-campus support services
8. workshops on topics of special interest to international students.

Study Abroad Programs

The study abroad opportunities offered through California State University, East Bay allow Cal State East Bay students to study overseas for one semester or an academic year and earn academic credit towards their degree. The experience leads to personal growth and acquisition of valuable skills, such as language fluency and cross-cultural understanding. Financial aid (except Work-Study) may apply, and study abroad scholarships are available.

CSU International Programs: Students can study abroad for a full academic year through the CSU system. (See the International Programs of the CSU chapter in the undergraduate section of this catalog).

Bilateral Programs: Bilateral exchange programs are one-to-one exchanges with another university overseas. Program length varies from one quarter to a full academic year.

International Student Exchange Program (ISEP): Through ISEP, students have the opportunity to study in over 120 study sites around the world for a semester or a full academic year.

National Student Exchange Program

Cal State East Bay students can study at another university in the United States or Canada through the National Student Exchange Program (NSE). NSE offers study opportunities in diverse university settings and provides access to a wide array of courses and programs. Students may use financial aid. Coursework applies to their degree.

For additional information on the Center for International Education's services or the programs listed above contact:

Center for International Education
LI 2550
Tel: 885-2880; Fax: 510-885-2787
Email: cie@csueastbay.edu
Web: www.csueastbay.edu/CIE

Orientation

Orientation and advisement programs offered prior to registration each quarter ensure that entering students are provided with the information and resources needed to ensure their success at Cal State East Bay. Orientation also provides essential information about academic requirements, campus services, registration procedures, and academic advising. Student Life and Leadership Programs recognizes that students enter the university from a variety of backgrounds. As a result, special Orientation activities are offered to address the concerns of freshmen, transfer, re-entry, and graduate students and their guests. First time freshmen who attend Orientation for fall quarter are allowed to register before all other students.

Specific information about Orientation is mailed directly to all new students and is included in the quarterly Class Schedule. Additional information about Orientation programs is available through Student Life and Leadership Programs, Student Services Hub 1351, 510-885-3657, email: studentlife@csueastbay.edu; website: www.csueastbay.edu/slife. Also see the Orientation and Advising chapter in this catalog.

Outreach

Outreach services to students in high schools and community colleges are provided through Enrollment Management. In addition to on-campus tours and events, pre-admission advising (both on-campus and at high schools and community colleges), attendance at college fairs, and other efforts, Enrollment Management has a comprehensive communications program for prospective students.

All programs and activities are designed to promote interest in Cal State East Bay and to encourage application and matriculation to the university. For more information about outreach programs, call (510) 885-2784 or send an e-mail to admissions@csueastbay.edu. To schedule a tour or pre-admission advising appointment, call (510) 885-2556.

Lower Division Transfer Program

Cal State East Bay is participating in the CSU's Lower Division Transfer Program (LDTP). The LDTP is designed to help community college students who wish eventually to transfer to the CSU to choose efficient patterns of classes so that they may graduate in a more timely fashion and without having taken excess units.

CSU faculty have identified patterns of lower-division coursework to be taken in community college for high-demand majors. Students who take the recommended path may be given priority in admission when they apply to transfer to a CSU campus.

Prospective students may hold an LDTP agreement with one CSU institution for a pre-determined term of entry.

Transfer Admission Guarantee

Cal State East Bay's Transfer Admission Guarantee (TAG) program is designed to assist students with baccalaureate degree objectives who plan to begin their college education at a community college before entering the university.

The TAG agreement outlines the community college coursework necessary to guarantee later entry into Cal State East Bay. Combined with early advising, the program helps to ensure the completion of the necessary and recommended coursework for admission, and for general education and lower-division major requirements. A dual admission component to the TAG program allows participants to obtain a Cal State East Bay photo identification card which permits access to the university library and other facilities.

TAG agreements must be completed no later than one year prior to intended entry into Cal State East Bay. Once a TAG agreement is completed, students are ready to apply and be admitted to Cal State East Bay for a pre-selected term of entry.

Additional details and TAG forms are available from participating community college transfer centers and from CSUEB enrollment counselors.

Upward Bound
Upward Bound is a federally funded program designed to assist low-income and first generation high school students gain access to a college education. Upward Bound provides traditionally under-represented students a simulated college experience, rich in academic and motivational support.

By providing tutoring, counseling, and individualized instruction during the academic year and summer, Upward Bound helps students bridge the gap between their performance and their potential, thus increasing their likelihood of being admitted to college.

Students are selected from the Hayward, San Lorenzo, and New Haven Unified School Districts and attend one of our five target schools (Hayward, Tennyson, Mt. Eden, San Lorenzo, and James Logan High Schools). To qualify, a student must be in the process of completing the eighth or ninth grade at entry, come from a low-income and/or first-generation college family, and have the desire and commitment to pursue a college education.

Upward Bound also provides parent involvement workshops to the participating students’ parents/guardians. Workshops are to assist families in understanding the college application, financial aid, and scholarship application process. There are also workshops for parents/guardians on developing safe and healthy communications with their child and accepting the transition that happens after high school.

Upward Bound at Cal State East Bay is made possible by a grant from the U.S. Department of Education. For more information contact Upward Bound at 510-885-2960 or stop by the Student Services Hub 1161.

Registration Assistance

Students at Cal State East Bay can register for classes prior to each quarter via the university’s online registration system in MyCSUEB. Demonstrations and instructions for the enrollment process can be found within the "Help" feature in MyCSUEB. Students requiring assistance may call Planning, Enrollment Management, and Student Affairs at (510) 885-2784 or visit the Student Enrollment Information Center on the first floor of the Student Services and Administration Building.

Safety Programs

Cal State East Bay enjoys low crime statistics due to an on-campus, professionally trained police department which delivers public safety services to the campus community. The University Police Department programs such as the Bicycle Patrol and Escort Service provide Cal State East Bay with a community-oriented form of police services, which allows for personal interaction between police personnel and members of the university community while providing an increased level of crime prevention patrol on campus grounds.

The department also has parking officers and student services interns who, in addition to enforcing state and campus parking regulations, assist in emergency situations (such as traffic control), and provide general information and assistance to all members of the campus community upon request.

The department offers several on-going programs available to staff, faculty, and students on the following topics: alcohol and drug awareness, acquaintance rape and awareness, and self-protection for women. The department also distributes a wide variety of crime prevention materials and offers vehicle lockout, battery failure, fingerprinting, and lost and found assistance.

The following information may be obtained from the University Police Department, (510) 885-3791:

- Information concerning Cal State East Bay policies, procedures, and facilities for students and others to report criminal actions or other emergencies occurring on campus.
- Information concerning Cal State East Bay's annual campus security report. This information is also available on the CSUEB website at Campus Security Report.
- Information concerning the prevention of drug and alcohol abuse.

Servicemember's Opportunity College

Cal State East Bay is a Servicemember's Opportunity College (SOC) and provides educational assistance for active duty servicemembers. SOC institutions offer the following benefits to servicemembers:

1. Admission procedures which ensure access to higher education for academically qualified military personnel;
2. Credit awarded for knowledge acquired through military experiences, if applicable to the servicemember's program of study;
3. Credit awarded for non-traditional learning, if applicable to the servicemember's program of study;
4. Acceptance of inter-institutional transfer credits, if they are appropriate for the servicemember's program and are consistent with the university's curriculum;
5. Residence requirements may be adjusted for military students who transfer, when there are other assurances of program balance;
6. Personnel with appropriate academic qualifications and experience administer and supervise SOC-related activities;
7. Educational services for veterans.

For information about the SOC program, contact Planning and Enrollment Management.

Special Services

Cal State East Bay offers several commuter services via the Alternative Transportation Office, (510) 885-4638.

A free shuttle service is available between the Hayward campus and the Hayward BART station for students, staff, and faculty. The shuttle bus schedule is available on the Web at: www20.csueastbay.edu/af/departments/parking/alt-trans/csueb_shuttle.html. Call the Alternative Transportation Office for any other questions concerning the current service or for more information on possible shuttle service expansion.

If you are interested in sharing a ride to Cal State East Bay, a student carpool database and a staff/faculty carpool database are available. Free carpool matching is available by logging on to: www.rides.org. (Click on "commute options," then choose "carpool partners"). You may also call the Alternative Transportation Office. (Home addresses are kept confidential and all other information will be used for carpool purposes only.) Carpool matching is available for both the Hayward Hills and Concord campuses.

The Commute Information Center (CIC) sells passes for AC Transit and has detailed schedules of the campus shuttle, BART, and AC Transit bus #92. The CIC is sponsored by the Associated Students and the Alternative Transportation Office.
Other tests for Cal State East Bay students to be aware of include the following:

**Financial Services**
A variety of financial services are offered to students and staff, including cashier services, the sale of parking decals, and the processing of registration payments. The student financial services offices also assist students in answering questions, and accept authorizations to bill third party sponsors for student registration fees. The main office (Accounting and Fiscal Services) is located in Student Services and Administration Building (SSA), 2nd Floor. The Cashiers’ office is located in SSA, 1st Floor and is open weekdays from 8:00 a.m. to 5:00 p.m., except Friday the hours are 9:00 a.m. to 5:00 p.m., with extended hours during the first two weeks of the quarter. Consult the online quarterly Class Schedule for the exact dates and hours of operation. There is a secured drop box located in the front of the Cashiers’ office for those wishing to drop off payments after normal business hours. The Cashiers’ office accepts checks, cash and money orders only. Credit cards are not accepted at the Cashiers’ office; however, students may pay their registration fees online with their American Express, Discover or MasterCard with a 2.9% convenience fee. (Visa is not accepted at this time.) You may also choose to pay with an electronic check free of charge. Consult the online Class Schedule for additional payment information.

**Testing Services**
The Testing Office is located in the Library, Room LI 3165A, 510-885-3661, and provides standardized testing and scoring for students, faculty, and administration. The office administers a variety of tests including placement and proficiency tests for Cal State East Bay and other CSU campuses and national admission and matriculation tests for undergraduates and graduates.

**Transcripts**
Students may obtain official transcripts of coursework taken at Cal State East Bay (including extension and special session courses) from Planning, Enrollment Management, and Student Affairs. Refer to Planning, Enrollment Management, and Student Affairs information on the university website for current costs and online ordering procedures and costs.

For transcript requests that arrive via the mail, the request should include: name, other name(s) which may appear on records, NetID or Social Security number, address, dates of attendance, and the complete address to which the transcript is to be sent. The university cannot be responsible for the consequences of failure to supply any of the above information. Mailed requests must also include a check (payable to Cal State East Bay) for the current fee. Please do not send cash with mailed requests. Address the request to Planning, Enrollment Management, and Student Affairs, Transcript Request.

Students with financial and judicial holds placed by the university, or with academic, document, library, equipment, or other obligations to Cal State East Bay, are not permitted to receive transcripts or to request transcripts to be sent to other institutions.

**University Honors Program**

**Academic Programs and Graduate Studies**

**Student Services and Administration Building, 1st Floor**

**Phone:** (510) 885-3286

**E-mail:** robert.phelps@csueastbay.edu
Director: Robert A. Phelps (History)

Program Description

The University Honors Program provides outstanding students the opportunity for academic challenge through the completion of specialized courses, seminars and projects under the direction of faculty mentors. University Honors Students in good standing gain priority registration for most university classes, attend educational and social events with other Honors Students, have exclusive use of the Main Library's University Honors Study Room, and may be considered for periodic awards and scholarships. University Honors Students also receive recognition on their official transcripts and diplomas, and enjoy special acknowledgement at both the Honors Convocation and Graduation ceremonies.

Admission

Admission to the program is open to:

a. undergraduate students admitted to the university with a minimum 3.60 GPA, and
b. students who have maintained a 3.60 GPA in their last 36 quarter (or equivalent semester) units of baccalaureate-level coursework. In addition, eligible students must have satisfied the EPT/ELM requirements.

Maintaining Membership

To remain in good standing in the program, students must complete at least one University Honors course per academic year with grades of "B" or better, and maintain a minimum GPA of 3.50 for all CSUEB coursework taken subsequent to being accepted to the University Honors Program. Students who fail to meet the maintenance requirements for two consecutive quarters will be dropped from the program.

Types of University Honors Courses

University Honors courses are of several types:

a. regular classes in which the instructor agrees to design and grade a special extra project to be completed by the Honors student,
b. one-unit seminar classes, restricted to University Honors students.
c. independent study/research classes at the upper division level in which a University Honors student works closely with a faculty member on a project.

Graduation from Honors Program

Students must complete 20 University Honors units with a minimum GPA of 3.60 to graduate from the University Honors Program. University Honors students must be in the University Honors Program for at least one year and take the one-unit "Honors Seminar" to graduate from the program. "Honors" units will only be assigned upon completion of courses approved by the University Honors Program Director in which the student earns a "B" or better and completes an honors project to the satisfaction of the instructor of the course. University Honors courses may be in the student's major or minor, as well as in general education, and/or free electives. At least 6 honors units, however, must be taken outside the student's major. University Honors courses may not be taken "credit/no credit."

Additional Program Information

Priority Registration

Senior and Junior students in good standing in the University Honors Program shall have priority registration for most classes.

Special Recognition

University Honors students will receive special recognition at the Honors Convocation and/or at graduation. University Honors students will also receive recognition on their transcripts and their diplomas, as well as a certificate of recognition from the program.

Program Director

The director coordinates the development and maintenance of University Honors courses, as well as special learning/cultural events for University Honors students and faculty. The director tracks student progress and invites eligible students to join the program, giving notice to students who are failing to meet the maintenance requirements and removing students from the program who fail to meet the maintenance requirements after two quarters.

Veterans' Services

Educational allowances, benefit counseling, advocacy, discharge upgrading assistance, tutorial assistance, and social service referrals are available to veterans attending Cal State East Bay under the Veterans' Administration or Cal-Vet programs, and to dependents of service-connected disabled and deceased veterans.

A permanent GI bill providing college educational allowances and other benefits for veterans is now in effect. For information on eligibility and procedures, contact Planning and Enrollment Management or the Veterans' Administration at (800) 827-1000.

Each quarter veterans and eligible dependents should come to Planning and Enrollment Management before the first day of classes and submit their forms requesting certification of enrollment for V.A. benefits. You are also responsible for reporting any changes in enrollment to Planning and Enrollment Management and the V.A. as they occur. See "What Determines a Student's Classification at Cal State East Bay?" in the Registration chapter for additional information.
The San Francisco East Bay Area's Regional University

California State University, East Bay is a comprehensive four-year institution that enrolls approximately 14,000 students and offers undergraduate and graduate programs in a wide range of disciplines. Cal State East Bay's spacious 342-acre Hayward campus, situated in the rolling hills above San Francisco Bay, offers students and visitors panoramic views of the bay and bridges, as well as the vibrant cities and open space that surround the campus. With its wide expanses of lawns, tree-lined walkways, fountains, and beds of native California plants, the campus is one of the most beautiful in the CSU system. The university is recognized as a "Best in the West" college by the Princeton Review and as a "top-tier" masters-granting university by U.S. News & World Report in its "America's Best Colleges" guide.

Facilities

Outstanding instructional facilities include 175 classrooms and teaching laboratories and over 200 specialized instruction rooms, including 67,000 square feet of state-of-the-art classrooms and teaching facilities in the new Wayne and Gladys Valley Business and Technology Center. Discipline-specific computer labs and seven general access labs with PCs and Macintosh computers are available for student use. The University Library, with its rich collections and online catalog, features individual and group study areas, as well as an innovative Learning Commons offering expert information technology support, access to extensive information resources, library reference services, and information literacy instruction.

The University Union, a popular student gathering-place, includes food services, lounges, and meeting rooms. It also offers specialized services such as a credit union and an automatic teller machine. A major expansion of the University Union includes new retail food outlets, and space for growing student social and academic activities.

Other campus facilities include a 500-seat theater with computerized lighting and sound equipment, a television studio, a bookstore, and a student health center. Pioneer Heights, the university's on-campus student apartment complex, offers housing for more than 1,200 residents, as well as a new full service Dining Commons and a 100,000 square foot student services and administration building.

Cal State East Bay's Concord Campus, in central Contra Costa County, offers upper division and graduate instruction. Blending the natural beauty of its foothill setting with attractive facilities, small classes, and a personalized approach to teaching and learning, the Concord Campus serves more than 1,500 students. Classes are conducted in 32 classrooms, five teaching laboratories, a 125-seat auditorium and a spacious Art Studio.

Further demonstrating the university's regional commitment, Cal State East Bay's Oakland Professional Development Center specializes in programs for working adults and offers professional development and certificate courses.

Cal State East Bay is also part of a university consortium that operates the Moss Landing Marine Laboratories in Monterey Bay. In addition, the university runs a San Francisco Bay shore lab with marine and freshwater craft operating in the bay and Sacramento river delta.

Location

- San Francisco Bay--campus overlooks the Bay and region from the East Bay hills
- Pacific Coast--45 minutes west
- San Francisco, Berkeley, Oakland, Walnut Creek, and Concord--30 to 45 minutes northeast and northwest via BART (Bay Area Rapid Transit) trains and freeways
- Lake Tahoe and Yosemite Valley--four hours northeast and east
- Napa and Sonoma Valleys--one hour north
- Sacramento, the state capital--one and one-half hours northeast
- Santa Cruz beaches and Monterey Peninsula--two hours south
- San Jose and the Silicon Valley--30 to 45 minutes south via freeways

Recreation

The Hayward campus recreational facilities include a 20,000 square foot main gymnasium, auxiliary gyms, a dance studio, weight room, swimming pools, racquetball/tennis/volleyball courts, several playing fields, a full-size track, and a par course. Construction has begun on a 53,000 square foot student-funded recreation and wellness center, projected to open in 2010.

In addition to its own facilities, activities, and intramural sports, Cal State East Bay's campuses are close to San Francisco and other Bay Area cities that provide unique cultural opportunities including museums, libraries, art galleries, aquariums, planetariums, theater, sports events, and concerts.

Hiking trails are near both campuses. The extensive Garin and Dry Creek-Pioneer East Bay Regional Parks are located immediately southeast of the Hayward campus. Beautiful Mt. Diablo and the Lime Ridge open space are adjacent to the Concord campus. In addition, proximity to the Pacific Ocean and Sierra Nevada mountains offers recreational diversion as well as excellent laboratories for educational studies.

Transportation

Commuting is convenient with three BART (Bay Area Rapid Transit) train stations near the Hayward Hills campus and two BART stations serving the Concord campus.

Hayward Campus

The Hayward and South Hayward stations are within three miles of the Hayward campus, and the Castro Valley station is four miles away. The AC Transit bus # 92 runs between campus and the Hayward BART station and students may ride for free (with ID). Other AC Transit bus fares are $1.75 each way and monthly passes are available. The university is a short distance from Interstate 880 (via Santa Clara Street and Harder Road) and Interstate 580 (via Foothill and Mission Boulevards).

Concord Campus

The Pleasant Hill and Concord stations serve the Concord Campus, and County Connection bus service runs from the Concord station.
University Mission, Values and Vision

Mission
To provide an academically rich, multicultural learning experience that prepares all of its students to realize their goals, pursue meaningful lifework, and be socially responsible contributors to their communities, locally and globally.

Values
The university values learning in an academic environment that is inclusive and student-centered. We value engagement in the civic, cultural, and economic life of the communities we serve—locally, regionally, and globally. We value critical and creative thinking, effective communication, ethical decision-making, and multicultural competence. We value the open exchange of ideas and viewpoints.

Vision
We strive to be known for:
- Outstanding academic programs, recognized for their excellence
- Curricula that foster active student participation through applied learning, research, and community service
- High academic standards along with services and support that ensure each student the opportunity for success
- A learning-centered experience where teaching is lively and engaging and individual differences are appreciated
- Dedication to open-minded inquiry, especially with regard to major social and global issues
- A welcoming campus atmosphere that is responsive to the unique needs of its campus community
- An inclusive campus community where students, faculty, and staff from vastly different backgrounds collaborate—creating and sustaining a vibrant learning community
- An array of activities that promote students' enjoyment and well-being
- Graduates who are innovative and effective problem solvers, skilled in organizing and expressing their ideas
- Engagement in, and essential contributions to, the civic, cultural, and economic well-being of its region and communities

Quarter System
Cal State East Bay operates on the quarter system. Each quarter (fall, winter, spring, summer) is approximately 11 weeks in length (10 weeks of instruction, plus 1 week of final exams). Enrollment in a quarter after admission to the university constitutes matriculation, including enrollment in all Special Session courses. (Special Session courses are groups of Continuing Education courses which have been approved to confer residence credit, with the exception of Open University courses.) Enrollment in Open University courses, as well as in Continuing Education Division courses, does not constitute matriculation.

One (1) semester unit is equivalent to one and one-half (1 1/2) quarter units of credit. One (1) quarter unit is equivalent to two-thirds (2/3) of a semester unit.

Accreditation
Cal State East Bay is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC), 985 Atlantic Avenue, Suite 100, Alameda, CA 94501; phone: (510) 748-8001. The Accrediting Commission is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation.

- The B.A. and M.A. in Music are accredited by the National Association of Schools of Music.
- The programs in Speech Pathology and Audiology are accredited by the American Speech-Language-Hearing Association.
- The undergraduate and graduate programs in the College of Business and Economics are accredited by the Association to Advance Collegiate Schools of Business (AACSB International).
- All of the university’s programs for teaching and services credentials are approved by the California State Commission for Teacher Credentialing.
- The professional preparation programs of the College of Education are accredited by the National Council for Accreditation of Teacher Education.
- The School Psychology credential program has received full approval from the National Association of School Psychologists.
- The B.S. in Chemistry is accredited by the American Chemical Society.
- The B.S. in Nursing is accredited by the National League for Nursing Accrediting Commission and the California State Board of Registered Nursing. The address and phone number of the National League for Nursing Accrediting Commission are: 61 Broadway, New York, N.Y., 10006: (212) 363-5555.
- The B.S. in Engineering is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.
- The Master of Social Work is accredited by the Council on Social Work Education.
- The Continuing Education certificate program in Paralegal Studies is approved by the American Bar Association (ABA).
- The Continuing Education certificate program in Chemical Dependency is accredited by the California Association of Alcoholism and Drug Abuse Counselors (CAADAC).
- The Continuing Education certificate program in Human Resource Management is approved by the Human Resource Certification Institute (HRCI) for recertification hours.
- The Continuing Education certificate program in Project Management is approved by the Project Management Institute (PMI).

Division of Continuing and International Education

Programs
Cal State East Bay’s Division of Continuing and International Education (DCIE) features a broad spectrum of courses, certificate programs, and degree programs that complement the University’s regular curriculum, and meet the academic, professional, creative and lifelong learning goals of its diverse community.

DCIE designs courses to fulfill the needs of current job market trends, enhance professional development, and promote personal enrichment. Offering more than 60 certificate and degree programs in a variety of industries and fields, DCIE allows you to explore career options and pursue opportunities for advancement.

You may take one or more individual courses, enroll in a certificate program, or attend a seminar or conference. In some cases, academic credit is awarded; while in others, Continuing Education Units (CEU) are available. In programs designed specifically for personal enrichment, no academic credit is awarded.

American Language Program
The university’s American Language Program provides instruction for international students in English speaking and writing skills and introduces them to American culture. Each year, students from more than 25 countries enroll in the program. After graduating from the American Language
Program, international students often enroll as matriculated students in the university.

Open University Concurrent Enrollment

The "Open University" program allows individuals to enroll in regular university classes without being formally admitted to the university. Regularly enrolled resident or non-resident students are not eligible to take Open University courses.

Open University students will be granted "Open University" extension credit for coursework. There are limits on the number of Open University extension units that may be applied toward university degrees. Up to 36 units may be applied towards a baccalaureate degree and up to 13 units for a master's degree.

Restrictions

Registration in most courses or programs sponsored by the Division of Continuing and International Education does not require formal admission to the university. For some programs, however, students may be required to meet certain requirements prior to being eligible to register. Only registration in Continuing and International Education Special Session classes provides "continuing student" status to admitted, matriculated students.

General Information

Information on courses, programs, and enrollment procedures is available through the Division's quarterly bulletin, on the university website (www.ce.csueastbay.edu), by phone (510-885-3605), and by e-mail (ce@csueastbay.edu).

Concord Campus

The Concord Campus is a branch campus of Cal State East Bay located in Concord, and near Clayton, Walnut Creek, Pleasant Hill, Pittsburg and Antioch in beautiful Contra Costa County. The 386-acre campus includes over 300 acres of open space, community sports fields and views of Mt. Diablo and the Sacramento Delta, and is one of the largest branch campuses within the CSU system. Located at 4700 Ygnacio Valley Road, the campus is uniquely positioned to serve the educational needs of county residents. Established in 1981, the Concord Campus was the first CSU branch campus with a permanent location, and has provided quality education and services for more than two decades. Many residents have benefited from Cal State East Bay's educational presence and have enjoyed the small class size and intimate educational experience that the Concord Campus provides.

Degree Programs

Functioning as an upper-division and graduate campus in a thriving, suburban region, the Concord Campus offers varied curriculum taught by Cal State East Bay faculty and provides quality educational programs while making use of modern educational technologies to deliver state-of-the-art programs. In Fall 2008, the Concord Campus began providing lower-division courses for Pre-nursing students only.

Academic degree and credential programs currently offered at the Concord Campus are:

Bachelor's Degree Majors

- Criminal Justice Administration, B.S.
- Liberal Studies, B.A.
- Nursing, B.S. (Pre-Licensure Program)
- Psychology, B.A.
- Sociology, B.A.

Credentials

- Multiple Subject
- Single Subject

Application and/or registration through either the Hayward or Concord Campus qualifies a student to enroll in courses at both sites. Academic expectations and standards, as well as university policies, are the same at both locations.

Services and Facilities

The Concord Campus promotes student success through a variety of services. These include academic advising on general education (GE) and graduation requirements, as well as administrative and instructional support services. Students are referred to their departments for major advising. Instructional support services include advanced computer laboratories, distance learning and smart classrooms, and a branch of the university's library. There is also an on-site café/bookstore and student lounge.

Back to top
Cal State East Bay offers a vigorous academic course of study with a real-world curriculum to prepare you for a lifetime of personal achievement and career success.

The University Catalog lists the program description, course names, numbers, descriptions, degree requirements, and career opportunities. The Department website provides detailed information about the academic department including degrees and programs, careers for majors, faculty information, course descriptions and departmental information.

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Footnotes
1. A minor from outside Business/Economics may be substituted for an option.
2. It is not necessary to select an option in these majors.
3. The upper division portions of these majors can be completed via the Program for Accelerated College Education (PACE).
4. Implementation pending. Please check with the Department.
Undergraduate Majors and Options, Concord Campus

Cal State East Bay offers a strong academic course of study with a real-world curriculum to prepare you for a lifetime of personal achievement and career success.

The University Catalog lists the program description, course names, numbers, descriptions, degree requirements, and career opportunities. The Department website gives detailed information about the academic department including degrees and programs, careers for majors, faculty information, course descriptions and departmental information.

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<td>Department of Psychology</td>
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</tr>
<tr>
<td>Sociology, B.A.,²</td>
<td>Department of Sociology and Social Services</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
</tr>
</tbody>
</table>

Footnote

1. The upper division portions of these majors can be completed via the Program for Accelerated College Education (PACE).
2. This is a degree completion program. The first two years of the program must be completed at Cal State East Bay's Hayward campus or other accredited college or university.
Online Degree Completion Programs

- **About Online Learning at CSUEB**
- **Online Classes Offered This Quarter**
- **Online BA/BS Degree Completion Programs**

**About Online Learning at CSUEB**

California State University, East Bay offers a number of online learning options. These include:

I. **Selected online classes** for enrolled students in one of two differing formats:
   - Online classes, in which 100% of the class communications and coursework are online, and exams are delivered either online via the Internet, on campus, or proctored at an off-site location.
   - Hybrid classes, in which some classroom meetings are replaced by online activities.

II. **Online Bachelor's degree completion programs**, designed for enrolled and transferring students who have completed lower-division course requirements.

Success in online learning requires certain computer skills, as well as certain learning and class participation styles. Students should be:

- knowledgeable about creating, saving, uploading, and downloading electronic files and documents;
- experienced in the use of e-mail and the Internet;
- able to read and follow written directions carefully;
- willing to log into class at least three to four times a week;
- equipped with an up-to-date firewall and virus protection program installed on their personal computer;
- motivated self-starters with good time-management skills.

See the links below for more specific information about online classes and degrees.

**Online Classes Offered this Quarter**

You can view current online and hybrid course offerings at MyCSUEB.

Note: Please be sure to check the individual class "notes" for other possible important information about the class. To see the class "notes":

1. Click the green arrow for the class you wish to view;
2. Click the bright blue section number hyperlink [for example: 02-LEC(1234)] and scroll down to "Notes".

**Online BA/BS Degree Completion Programs**

A BA/BS Degree Completion Program is for anyone who has completed their lower division general education breadth requirements. All major requirements will be taken completely online.

**Online Bachelors Degree Completion Programs**

<table>
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<tr>
<th>Majors and Options</th>
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<th>Link to College</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Administration, B.S.</strong></td>
<td><a href="#">Department of Accounting and Finance</a></td>
<td><a href="#">College of Business &amp; Economics</a></td>
</tr>
<tr>
<td></td>
<td><a href="#">Economics</a>, <a href="#">Management</a>, <a href="#">Marketing</a>, <a href="#">Entrepreneurship</a></td>
<td></td>
</tr>
<tr>
<td><strong>Ethnic Studies, B.A.</strong>*</td>
<td><a href="#">Department of Ethnic Studies</a></td>
<td><a href="#">College of Letters, Arts, and Social Sciences</a></td>
</tr>
<tr>
<td><strong>Hospitality and Tourism, B.S.</strong></td>
<td><a href="#">Department of Hospitality</a>, <a href="#">Recreation</a>, <a href="#">Tourism</a></td>
<td><a href="#">College of Education and Allied Studies</a></td>
</tr>
<tr>
<td></td>
<td><a href="#">Recreation and Women's Studies</a></td>
<td></td>
</tr>
<tr>
<td><strong>Human Development, B.A.</strong></td>
<td><a href="#">Department of Human Development and Women's Studies</a></td>
<td><a href="#">College of Letters, Arts &amp; Social Sciences</a></td>
</tr>
<tr>
<td>Adult Development and Gerontology Option (B.A.)</td>
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<tr>
<td>Early Childhood Development Option (B.A.)</td>
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<tr>
<td>Women's Development Option (B.A.)</td>
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<tr>
<td><strong>Recreation, B.S.</strong></td>
<td><a href="#">Department of Hospitality</a>, <a href="#">Recreation</a>, <a href="#">Tourism</a></td>
<td><a href="#">College of Education and Allied Studies</a></td>
</tr>
<tr>
<td>Recreation Management Option (B.S.)</td>
<td><a href="#">Recreation and Women's Studies</a></td>
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<tr>
<td>Recreation Therapy Option (B.S.)</td>
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<tr>
<td>*<em>Women's Studies, B.A.</em></td>
<td><a href="#">Department of Human Development and Women's Studies</a></td>
<td><a href="#">College of Letters, Arts &amp; Social Sciences</a></td>
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</tbody>
</table>

* Implementation pending. Please check with the Department.
Undergraduate Minors

Cal State East Bay offers a vigorous academic course of study with a real-world curriculum to prepare you for a lifetime of personal achievement and career success.

The University Catalog lists the program description, course names, numbers, descriptions, degree requirements, and career opportunities. The Department website provides detailed information about the academic department including degrees and programs, careers for majors, faculty information, course descriptions and departmental information.

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<tr>
<th>Undergraduate Minors and Options</th>
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<td>College of Business &amp; Economics</td>
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<tr>
<td>African American Studies</td>
<td>Department of Ethnic Studies</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
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<tr>
<td>American Indian Studies</td>
<td>Department of Ethnic Studies</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
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<tr>
<td>Anthropology</td>
<td>Department of Anthropology</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
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<tr>
<td>Art History</td>
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<td>College of Letters, Arts &amp; Social Sciences</td>
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<tr>
<td>Art Studio</td>
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<td>College of Letters, Arts &amp; Social Sciences</td>
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<tr>
<td>Asian American Studies</td>
<td>Department of Ethnic Studies</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
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<tr>
<td>Asian Studies</td>
<td>Department of Sociology and Social Services</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
</tr>
<tr>
<td>Biological Science</td>
<td>Department of Biological Sciences</td>
<td>College of Science</td>
</tr>
<tr>
<td>Biostatistics</td>
<td>Department of Statistics and Biostatistics</td>
<td>College of Science</td>
</tr>
<tr>
<td>Business Administration</td>
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<td>College of Business &amp; Economics</td>
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<tr>
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<td>Department of Geography and Environmental Studies</td>
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<tr>
<td>Chemistry</td>
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<tr>
<td>Children's Theater and Dance</td>
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<tr>
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<td>Computer Science</td>
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<td>Creative Video</td>
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<td>Criminal Justice Administration</td>
<td>Department of Criminal Justice Administration</td>
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<tr>
<td>Dance</td>
<td>Department of Theatre &amp; Dance</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
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<tr>
<td>Early Childhood Education</td>
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<td>Department of Economics</td>
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<td>Program</td>
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<td>Human Development</td>
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<td>Information Technology Management</td>
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<td>Department of Art</td>
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<td>Kinesiology (Physical Education)</td>
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<td>Latin American Studies</td>
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<td>Latino/a Studies</td>
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<td>College of Science</td>
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<td>College of Letters, Arts &amp; Social Sciences</td>
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<td>Department of Communicative Sciences and Disorders</td>
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<td>Urban Studies</td>
<td>Department of History</td>
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<tr>
<td>Women's Studies (Human Development)</td>
<td>Department of Human Development and Women's Studies</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
</tr>
<tr>
<td>Youth Services Administration</td>
<td>Department of Hospitality, Recreation and Tourism</td>
<td>College of Education and Allied Studies</td>
</tr>
</tbody>
</table>
Undergraduate Certificate Programs

A certificate program is a coherent set of academic courses, considerably narrower in scope and objectives than a degree or major, which leads to a certificate. A certificate program is normally oriented toward occupations and/or career skills. It contains a minimum of 12 units of courses numbered 3000 and above and a minimum of 20 total units. Each certificate program contains a required core of at least three courses and 12 units.

Some certificate programs have admission requirements that are described in the appropriate catalog chapter. (See the chapter describing the major most closely associated with the certificate.) To receive a certificate, you must earn a grade of "C" or better in each course applied to the program which is numbered below 6000 and a grade of "B" or better in each course applied to the program which is numbered 6000 and above. One course numbered below 6000 may be applied to a certificate program with a "CR" grade; no course numbered 6000 or above may be applied with a "CR" grade. At least 75% of the courses in a certificate program and all 5000- and 6000-level courses must be taken at Cal State East Bay for you to receive the certificate. You may meet this requirement with coursework taken at Cal State East Bay in matriculated or extension status. Prerequisites which are part of a regular degree major or mandatory General Education-Breadth requirements need not to be included within the certificate program, but must be clearly identified. No academic certificate program can have a title that is identical or similar to that of a legal license or certificate unless it meets the requirements for that license or certificate. You may not receive a certificate with the same title as the degree major, option, or minor that you have already received.

Certificate programs are designed to serve students who have a limited time to spend at Cal State East Bay and/or who wish to learn specific subjects, concepts, skills, and competencies. Most certificate programs add a specific occupational skill to an academic major that was previously completed or is being completed concurrently. Such programs are compatible with the related major and contain no prerequisites not included in the major and/or required G.E. Some certificate programs are designed to provide the preprofessional background for students contemplating transfer to other universities offering programs not available at CSUEB. These certificate programs have been made compatible with the professional program by including all prerequisite or strongly recommended preparatory courses that are offered by Cal State East Bay. Still other certificate programs are the equivalent of minors that can be earned without a degree. These are normally completed by students who already possess a baccalaureate degree and want to add some skills in a new field without completing another entire degree. Such certificate programs meet at least the minimum requirements for an academic minor in the discipline. A Special Certificate Program is also available. See the Interdisciplinary Studies chapters.

Undergraduate Certificate Programs

- Cartography and Geographic Information Systems (GIS), Department of Geography and Environmental Studies
- Creative Video, Departments of Art, English, Communication, Theatre and Dance
- Early Childhood Development, Departments of Human Development and Women's Studies
- Foundational Mathematics Teaching, Department of Mathematics and Computer Science
- Organization Communication, Department of Communication
- Pre-Physical Therapy, Department of Kinesiology
- Public History, Department of History
- Spanish for the Professions, Department of Modern Languages and Literatures
- Special Certificate, Interdisciplinary Studies, Office of Academic Programs and Graduate Studies
- Sustainable Resource Management, Department of Geography and Environmental Studies
- Youth Services Administration, Department of Hospitality, Recreation and Tourism
Programs by College

California State University, East Bay is organized into four colleges: Letters, Arts, and Social Sciences (CLASS); Business and Economics; Education and Allied Studies; and Science. Each college has significant responsibility for its own curricula, faculties, students, and budgets. The college dean, aided by an associate dean and an administrative assistant, is the chief administrative officer of each college. (The names of these officers appear in the University Administration chapter.) The Deans’ offices are located as follows: Letters, Arts, and Social Sciences, first floor of the Music and Business Building (885-3161); Business and Economics, fourth floor of the Valley Business and Technology Building (885-3291); Education and Allied Studies, first floor of the Art and Education Building (885-3072); and Science, first floor of the North Science Building (885-3441). The Interdisciplinary Studies Major is administered by the Associate Vice President, Academic Programs and Graduate Studies, in the Student Services and Administration Building, Suite 4500 (885-3716).

College of Letters, Arts and Social Sciences

The College of Letters, Arts and Social Sciences is the largest in the university and includes 18 departments in addition to several interdisciplinary programs. It embraces the creative arts, the humanities, the social and behavioral sciences, and several applied disciplines.

Baccalaureate Degree Majors

- Anthropology (B.A.)
- Art (B.A.)
- Art (B.F.A.)
- Communication (B.A.)
- Criminal Justice Administration (B.S.)
- English (B.A.)
- Environmental Studies (B.A.)
- Ethnic Studies (B.A.)
- French (B.A.)
- Geography (B.A., B.S.)
- History (B.A.)
- Human Development (B.A.)
- International Studies (B.A.)
- Latin American Studies (B.A.)
- Liberal Studies, B.A.
- Music (B.A.)
- Philosophy (B.A.)
- Political Science (B.A.)
- Sociology (B.A.)
- Spanish (B.A.)
- Speech Pathology and Audiology (B.S.)
- Theatre Arts (B.A.)
- Women's Studies (B.A.)

Academic Minors

- Advertising
- African American Studies
- American Indian Studies
- Anthropology
- Art History
- Art Studio
- Asian American Studies
- Asian Studies
- California Studies
- Children's Theatre and Dance
- Chinese Language and Cultural Studies
- Communication
- Creative Video
- Creative Writing
- Criminal Justice Administration
- Dance
- English
- Environmental Studies
- Ethnic Studies
- Filipino and Filipino American Studies
- French
- Genders and Sexualities in Communities of Color
- Geography
- German
- History
- Human Development
- Interactive Sculpture
- International Business
- International Studies
Certificate Programs
- Cartography and GIS (see Geography chapter)
- Creative Video (see Creative Video chapter)
- Early Childhood Development (see Human Development chapter)
- Organizational Communication (see Communication chapter)
- Public History (See History chapter)
- Spanish for the Professions (See Modern Languages and Literatures chapter)
- Sustainable Resource Management (See Geography chapter)

College of Business and Economics

Mission Statement:
The mission of the College of Business and Economics is to prepare students to make ethical choices and succeed in a dynamic business environment shaped by the challenges of a competitive global economy, emerging technologies, and diverse stakeholders.

Values
The College of Business and Economics values learning in an academic environment that is inclusive and student-centered. We value engagement in the business and economic life of the communities we serve - locally, regionally, and globally. We value research, critical and creative thinking, effective communication, ethical decision-making, and multi-cultural competence. We value the open exchange of ideas and viewpoints.

Vision
We strive to be known for:
- Outstanding academic programs, recognized for their excellence
- Outstanding faculty scholarship
- Curricula that foster active student participation through applied learning, research, and community service
- High academic standards along with services and support that ensure each student the opportunity for success
- A learning-centered experience where teaching is lively and engaging and individual differences are appreciated
- Dedication to open-minded inquiry, especially with regard to major business, economic and global issues
- Programs and opportunities for students to pursue international business programs
- A welcoming college atmosphere that is responsive to the unique needs of our CBE community
- An inclusive CBE community where students, faculty, and staff from vastly different backgrounds collaborate - creating and sustaining a vibrant learning community
- An array of activities that promote students' success and professional development
- Graduates who are innovative and effective problem solvers, skilled in organizing and expressing their ideas
- Engagement in and essential contributions to the economic well-being of our region and communities

All degree programs in the College of Business and Economics are accredited by the AACSB International - The Association to Advance Collegiate Schools of Business.

Please contact the College of Business and Economics Undergraduate Curriculum Coordinator regarding the availability of the minors listed below.

Baccalaureate Degree Majors
- Business Administration (B.S.)
- Economics (B.A.)

Academic Minors
- Advertising
- Business Administration
- Economics
- Information Technology Management
- International Business
- Marketing

College of Education and Allied Studies

The mission of the College of Education and Allied Studies is to prepare collaborative leaders, committed to social justice and democracy, who will influence a highly technological and diverse world.

The College offers programs for liberal arts instruction and professional preparation of undergraduates in the fields of kinesiology and recreation.

Baccalaureate Degree Majors
Hospitality and Tourism (B.S.)  
Kinesiology (B.S.)  
Recreation (B.S.)

Minors
- Early Childhood Education
- Hospitality and Tourism
- Kinesiology
- Recreation
- Recreation Therapy
- Youth Services Administration

Certificate Programs
- Pre-Physical Therapy (see Pre-Professional Programs chapter)
- Youth Services Administration

College of Science

The College of Science offers programs that provide a broad education in the physical, life, and health sciences; and in mathematics, statistics, and computer science. The career flexibility available to science students is one of the main advantages of a degree in the science area. The baccalaureate programs are designed to prepare students for graduate study and for careers in industry, government, and public school teaching.

Baccalaureate Degree Majors
- Biochemistry (B.A.)
- Biochemistry (B.S.)
- Biological Science (B.A.)
- Biological Science (B.S.)
- Chemistry (B.A., B.S.)
- Computer Science (B.S.)
- Construction Management (B.S.)
- Engineering (B.S.)
- Environmental Science (B.S.)
- Geology (B.A., B.S.)
- Health Sciences (B.S.)
- Mathematics (B.S.)
- Nursing (B.S.)
- Physics (B.A., B.S.)
- Psychology (B.A., B.S.)
- Statistics (B.S.)

Minors
- Biological Science
- Biostatistics
- Chemistry
- Computer Science
- Geology
- Health Sciences
- Mathematics
- Physics
- Psychology
- Software Development
- Statistics

Certificate Program
- Foundational Mathematics Teaching

Interdisciplinary Programs

Interschool interdisciplinary programs are administered by the Associate Vice President, Academic Programs and Graduate Studies.

Baccalaureate Degree Majors
- Interdisciplinary Studies (B.A.)
- Interdisciplinary Studies (B.S.)

Certificate Program
- Special Certificate

Program for Accelerated College Education

Students who have completed their lower-division general education requirements may elect to earn a Bachelor of Arts degree (B.A.) in Liberal Studies or Human Development via the Program for Accelerated College Education (PACE), an upper-division program of instruction in formats convenient for working individuals. The scheduling of classes on one or two nights per week, Saturdays, and online enables students to combine their studies with the demands of full-time employment or other daytime responsibilities. Human Development offers many courses in an online format. For more information, see "PACE" in the Undergraduate section of this catalog. Also, call the PACE office at (510) 885-PACE (7223) or visit the PACE website at www.csueastbay.edu/pace.
1. The upper division portions of these majors can be completed via the Program for Accelerated College Education (PACE).
2. Implementation pending. Please check with the Department.
Course Number and Description Key

Course Numbering Key

The numbering of courses is intended to describe the level at which they are offered. Any student, however, may enroll for any course if he or she has completed the listed prerequisites, except for certain graduate courses.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Description</th>
</tr>
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<tbody>
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<td>0800-0999</td>
<td>Remedial courses (not for baccalaureate degree credit)</td>
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<tr>
<td>1000-1999</td>
<td>Freshman level</td>
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<tr>
<td>2000-2999</td>
<td>Sophomore level</td>
</tr>
<tr>
<td>3000-3999</td>
<td>Junior level</td>
</tr>
<tr>
<td>4000-4999</td>
<td>Senior level</td>
</tr>
<tr>
<td>5000-5999</td>
<td>Post baccalaureate and professional level</td>
</tr>
<tr>
<td>6000-6999</td>
<td>Graduate level</td>
</tr>
<tr>
<td>7000-7699</td>
<td>Upper division level continuing education$\dagger$</td>
</tr>
<tr>
<td>7700-7999</td>
<td>Graduate level continuing education$\dagger$</td>
</tr>
<tr>
<td>8000-8999</td>
<td>Doctoral level</td>
</tr>
</tbody>
</table>

Course Units

() - Unit credits appear in parentheses following title of course.

Class Hours per Week

The number of class hours a course meets per week equals the number of units listed for the course, unless otherwise indicated in the course description. (A “class hour” is 50 minutes.) Supervision courses (e.g., independent study, project, thesis) have no prescribed correspondence between class hours per week and units.

Footnote

1. See quarterly schedule or website (www.ce.csueastbay.edu) of Continuing and International Education for classes offered each quarter.
Undergraduate Chapters

- Advertising
- Anthropology
- Art
- Asian Studies
- Biological Science
- Business Administration
- California Studies
- Chemistry and Biochemistry
- Communication (Mass Communication and Speech Communication)
- Computer Science
- Construction Management
- Creative Video
- Criminal Justice Administration
- Economics
- Educational Psychology
- Engineering
- English
- Environmental Science
- Environmental Studies
- Ethnic Studies
- Filipino and Filipino American Studies
- General Studies
- Geography
- Geology
- Health Care Administration
- Health Sciences
- History
- Hospitality and Tourism
- Human Development
- Humanities
- Interdisciplinary Studies Majors and Special Certificates
- International Business
- International Programs of the CSU
- International Studies
- Kinesiology
- Latin American Studies
- Liberal Studies
- Library
- Marine Science
- Mathematics
- Modern Languages and Literatures
- Music
- Nursing
- PACE
- Philosophy
- Physics
- Political Science
- Preprofessional Programs
- Psychology
- Public Administration
- Recreation
- Science
- Single Subject Matter Preparation Programs
- Sociology
- Speech Pathology and Audiology
- Statistics
- Teacher Education
- Theatre Arts
- Undeclared Major
- Urban Studies
- Women's Studies
- Youth Services Administration
Advertising

- Department Information
- Program Information
- Minor in Advertising
- Errata (Note: Please see Errata page for corrections to this content.)

Department Information

Department of Marketing and Entrepreneurship
College of Business and Economics
Office: Valley Business & Technology Bldg., Rm. 440
Phone: (510) 885-3326

Department of Communication
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall, Room 3011
Phone: (510) 885-3292

Advisors
Robert Terrell (Communication, CLASS), Ph.D. University of California, Berkeley
C. Joanna Lee (Marketing and Entrepreneurship, CBE), Ph.D. University of Texas at Austin

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Program Information

The advertising minor allows students to integrate an interdisciplinary set of advertising-related courses with their own major and their general education requirements. This may be an attractive specialization for students in such majors as business, communication, art, or psychology.

Careers in advertising include positions with advertising agencies in account supervision, copywriting, production, traffic, marketing and media research, and media buying.

Students with advertising skills are also in demand for the advertising and public relations departments of corporations and not-for-profit organizations, in radio, television, newspapers and magazines, and in specialty firms such as direct mail, outdoor and new media advertising, marketing research agencies, production shops, and syndicated data services.

Students in the Advertising Minor are urged to complete some of the listed elective courses and, in particular, to seek out co-op education or internship placements during their junior and senior years. Practical working experience is available through active participation in The Advertising Agency, which serves The Pioneer within the Department of Communication.

Advertising options are available under the Business Administration major (see the Business Administration chapter) and the Communication major (see Communication chapter in the undergraduate section).

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Minor in Advertising

Required Courses (47 units)
Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

(Communication majors may use all 47 units for their major and/or G.E. requirements; Business Administration majors may use 39 of the 47; Sociology majors, 31 of the 47; and English and Psychology majors, 27 of the 47 units.)

- COMM 3340 Graphic Communication (4)
- COMM 4520 Advertising Form and Function (4)
- COMM 4530 The Advertising-Public Relations Campaign (4)
- ENGL 2005 Grammar for Writers (4)
  or ENGL 3005 Study of Language (4)
- MKTG 3401 Marketing Principles (4)
- MKTG 3410 Advertising Management (4)
- MKTG 3445 Seminar in Marketing Research (4)
  or SOC 4111 Methods of Sociological Research I (4)
- MKTG 4412 Media Planning (4)
  or COMM 3100 Introduction to Professional Video Production (4)
- PSYC 1000 General Psychology (or 1001 or 1005) (5)
- STAT 1000 Elements of Probability and Statistics (5)
  or STAT 2010 Elements of Statistics for Business and Economics (5)
- An advisor-approved Art activity course (5)

Strongly Recommended

- PSYC 1100 Critical Thinking in Psychology (4)
- PSYC 3510 Attitudes and Opinions (4)
  or PSYC 4740 Psycholinguistics (4)
- Co-op Ed or internship experiences in advertising and/or public relations (4-8)

Additional Electives Relevant to the Minor

- ACCT 2251 Financial Reporting and Analysis (4)
- ART/COMM 3600 Intermediate Photography (4)
- ART/COMM 4600 Image and Idea (4)
- COMM 4510 Public Relations Theory and Practice (4)
- MKTG 3425 Promotion (4)
- MKTG 4415 Corporate Communications (4)
- SOC 1000 Introduction to Sociology (or 1001 or 1002 or 2001 or 2002) (4)

(Please see Errata page for corrections to this content.)

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Anthropology

Department Information

Department of Anthropology
College of Letters, Arts, and Social Sciences
Office: Melkilejohn Hall 3097
Phone: (510) 885-3168
Website: [http://class.csueastbay.edu/anthropology/](http://class.csueastbay.edu/anthropology/)

Professor Emeritus
George R. Miller, Ph.D. University of California, Berkeley

Professors
Laurie J. Price, Ph.D. University of North Carolina, Chapel Hill

Associate Professor
Laura C. Nelson (Chair), Ph.D. Stanford University

Assistant Professors
William Henry Gilbert, Ph.D. University of California, Berkeley
Andrew Wong, Ph.D. Stanford University

Program Description

Anthropology is the multifaceted study of humans and their ways of life from a global and evolutionary perspective. Students in anthropology learn about the self as well as other ethnic nationalities as they are shaped by biological evolution, ecological constraints, political history, and sociological conditioning. The Department of Anthropology offers theoretical and methodological courses in the five sub-disciplines: biological anthropology, prehistory and archaeology, anthropological linguistics, sociocultural anthropology, and applied anthropology. Regional courses on major populations of the world, especially the heritage cultures of North and South America, Asia, and the Middle East, form an important component of the curriculum.

At the undergraduate level, students in the B.A. degree program may choose to focus on special interests in two combined sub-disciplines:

- Archaeology and Biological Anthropology emphasize the study of human biology, variation, evolution, and the reconstruction of past ways of life and cultural systems from material remains.
- Socio-Cultural and Applied Anthropology emphasize the study of social and cultural systems of more recent historical and contemporary populations, and the application of anthropological insights into present-day problems.

Other combinations are possible upon consultation with, and approval by, the faculty.

Student Learning Outcomes

Students graduating with a B.A. in Anthropology from Cal State East Bay will: (1) be familiar with the origins of anthropological theory in all four sub-fields of the discipline; (2) be familiar with the basic schools of anthropological thought in the twentieth century; (3) be familiar with the evidence for human biological and cultural evolution; (4) gain experience with basic research methods in anthropology (either socio-cultural or archaeological research methods); (5) be familiar with the culture of a particular region of the world.

Career Opportunities

- Anthropologist
- Archaeologist
- Artifacts Conservator
- Curator
- Ethnologist
- Foreign Service Officer
- Immigration Service Official
- International Aid Agencies Official
- International Business Employee
- Multicultural Education Instructor
- Museum Curator
- Park Ranger
- Park Service Official
- Professor/Teacher
- Refugee Worker
- Researcher
- Social Science Teacher
Features

The Department administers the Clarence E. Smith Museum of Anthropology, located on the fourth floor of Meiklejohn Hall. The museum houses a sizable collection of archaeological artifacts recovered in Alameda and Contra Costa Counties, as well as ethnographic specimens from cultural groups throughout the world. The museum is an instructional facility for museum curating, research, design, and exhibits. Museum exhibits and special events are open to the public free of charge. For information, call (510) 885-7414 or (510) 885-3104.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation.

The major consists of 60-61 units; the B.A. requires a total of 180 units.

Required Courses in Anthropology (60-61 units)

I. Lower Division (12 units)
   ANTH 1100, 1200, 1300 (ANTH 3000 may be substituted for ANTH 1300 on approval of an advisor and the department chair)

II. Upper Division (48-49 units)
   A. ANTH 3100, 3200, 3400, 3710, 3785, and 3800 (24 units)
   B. One regional studies course from the following: ANTH 3500, 3540, 3545, 3550, 3580 (4 units)
   C. ANTH 4910 Pro-Seminar in Anthropology (4 units)
   D. Four additional courses from either one of the two options:
      1) Archaeology/Biological Anthropology option:
         - ANTH 4240 (4)
         - ANTH 4250 (5)
         - ANTH 4260 (3)
         - Any one of the following: ANTH 3101, 3110, 3250, 3260 (4 units)
      2) Socio-Cultural Anthropology option:
         - ANTH 4310 (5)
         - One additional regional course from the 3500 series (4 units)
         - Any two of the following: ANTH 3110, 3410, 3720, 3730, 3740, 3745, 3750, 3840 (8 units)

Highly Recommended Courses in Supporting Fields

It is highly recommended that majors refine their skills in one or more supporting disciplines depending on their academic interests and long-term career/educational goals. When possible, they should satisfy their G.E. requirements from the courses listed below. In addition, students intending to pursue graduate work and who cannot yet demonstrate competence in a foreign language through testing are urged to elect or add modern language courses. A faculty advisor will assist students in making choices from the following list:

- BIOL 1001 (or 1005), 1002
- GEOL 2101 and 3030
- HIST 3017
- SOC 3411
- STAT 1000 and STAT 3010
- Three consecutive quarters of a single modern language

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor requires twenty-eight (28) units in Anthropology to be taken in approximately the following order:

A. ANTH 1000 (4)
B. One of the following (4):
   - ANTH 1100, 1200, 1300 (3000 may be substituted)
C. Two of the following (8):
   - ANTH 3100 (or 3101), 3200, 3400, 3800
D. One course in the 3500 series (regional ethnography) (4)
E. Two additional 3000- and/or 4000-level courses (excluding 3500 series) (8)

Undergraduate Courses

Introductory Courses (Course prefix: ANTH)
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 1000          | Introduction to Anthropology (4)  
The holistic study of human beings for non-majors: concepts of human evolution, prehistory, culture; comparison in human variation; structure and function in social organization; synthesis of biological, cultural, and social factors. Four hrs. lect., or 3 hrs. lect., 1 hr. disc. |
| 1006          | The Human Adaptation (4)  
Introduction to the study of humans in the natural world, human origins, and adaptations both from a cultural and biological perspective. |
| 1100          | Introduction to Biological Anthropology (4)  
An introduction to human biology from an evolutionary perspective. Topics include evolutionary theory, evolution of the primates based on fossil remains, behavioral studies of living primates, and modern human variability and adaptations. Four hrs. lect.; or three hrs. lect., 1 hr. disc. |
| 1010          | Viewing Diversity (4)  
Basic social science approaches to the study of local, national, and global constructions and representations of cultural diversity. |
| 1200          | The Human Adaptation (4)  
Introduction to the techniques used in recovery and interpretation of archaeological materials. Examples of the processes of cultural reconstructions from sites in the old and new world. |
| 1300          | Cultural Anthropology (4)  
Functional approaches to the structure and dynamics of culture and society around the world; comparative study of human behavior and value systems in varied ecological settings. |
| 1010          | Introduction to Anthropology (4)  
The holistic study of human beings for non-majors: concepts of human evolution, prehistory, culture; comparison in human variation; structure and function in social organization; synthesis of biological, cultural, and social factors. Four hrs. lect., or 3 hrs. lect., 1 hr. disc. |
| 1006          | The Human Adaptation (4)  
Introduction to the study of humans in the natural world, human origins, and adaptations both from a cultural and biological perspective. |
| 1100          | Introduction to Biological Anthropology (4)  
An introduction to human biology from an evolutionary perspective. Topics include evolutionary theory, evolution of the primates based on fossil remains, behavioral studies of living primates, and modern human variability and adaptations. Four hrs. lect.; or three hrs. lect., 1 hr. disc. |
| 1200          | Introduction to Archaeology (4)  
Introduction to the techniques used in recovery and interpretation of archaeological materials. Examples of the processes of cultural reconstructions from sites in the old and new world. |
| 1300          | Cultural Anthropology (4)  
Functional approaches to the structure and dynamics of culture and society around the world; comparative study of human behavior and value systems in varied ecological settings. |
| 2755          | Conflict in Cross-Cultural Perspective (4)  
Introduction to the anthropological approach in studies of conflict, conflict resolution and legal systems. Comparative examination of the transition from indigenous to Westernized systems and alternatives to the modern American formal legal system. |
| 3000          | Anthropology in the Modern World (4)  
The relevance of anthropology to contemporary world problems and issues of mankind. A course for non-majors examining topics such as the social and cultural dimensions of health services, population problems, business, management, and public administration. |
| 3000          | Introduction to Anthropology (4)  
The holistic study of human beings for non-majors: concepts of human evolution, prehistory, culture; comparison in human variation; structure and function in social organization; synthesis of biological, cultural, and social factors. Four hrs. lect., or 3 hrs. lect., 1 hr. disc. |
| 3000          | The Human Adaptation (4)  
Introduction to the study of humans in the natural world, human origins, and adaptations both from a cultural and biological perspective. |
| 3100          | Introduction to Biological Anthropology (4)  
An introduction to human biology from an evolutionary perspective. Topics include evolutionary theory, evolution of the primates based on fossil remains, behavioral studies of living primates, and modern human variability and adaptations. Four hrs. lect.; or three hrs. lect., 1 hr. disc. |
| 3101          | Introduction to Archaeology (4)  
Introduction to the techniques used in recovery and interpretation of archaeological materials. Examples of the processes of cultural reconstructions from sites in the old and new world. |
| 3100          | Cultural Anthropology (4)  
Functional approaches to the structure and dynamics of culture and society around the world; comparative study of human behavior and value systems in varied ecological settings. |
| 3101          | Introduction to Archaeology (4)  
Introduction to the techniques used in recovery and interpretation of archaeological materials. Examples of the processes of cultural reconstructions from sites in the old and new world. |
| 3100          | Cultural Anthropology (4)  
Functional approaches to the structure and dynamics of culture and society around the world; comparative study of human behavior and value systems in varied ecological settings. |
| 3101          | Introduction to Archaeology (4)  
Introduction to the techniques used in recovery and interpretation of archaeological materials. Examples of the processes of cultural reconstructions from sites in the old and new world. |

### Biological Anthropology (Course prefix: ANTH)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
</table>
| 3100, 3101   | Human Evolution I, II (4,4)  
Human and non-human primate evolutionary history. Fossil evidence, comparative anatomy and molecular systematics; 3100 Primate evolutionary history based on fossil evidence and comparative anatomy (F); 3101 The fossil evidence for human evolution. One course is not prerequisite to the other. Prerequisite: ANTH 1100 or BIOL 3020 or equivalent, or consent of instructor. |
| 3110          | Primate Social Behavior (4)  
A survey course concerned with behavior of non-human primates. Discussions of the relationships between social structure and the environment. The relevance of the study of non-human primate behavior to an understanding of human behavior will be emphasized. |

### Sociology (Course prefix: ANTH)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
</table>
| 3200          | Science in Sociology (4)  
Introduction to the application of the physical sciences in the solutions of problems in prehistory. Emphasis on dating methods and paleoenvironmental reconstructions. Prerequisite: ANTH 1200 or consent of instructor. |
| 3250          | Pre-Columbian America: Aztec, Inca, Maya (4)  
The origins, growth and interaction of the Mesoamerican and South American civilizations, with particular emphasis on the Aztecs, Incas and Mayas. Archaeological, historical and ethnographic evidence. |
| 3260          | Historical Archaeology (4)  
Archaeology of the United States, historical period from 1500 to the present. Survey course emphasizing both native and immigrant peoples’ contributions to the historical/archaeological record. |

### Sociocultural Anthropology (Course prefix: ANTH)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
</table>
| 3400          | Social Anthropology (4)  
Structural-functional approach to the comparative study of human institutions, with emphasis on changing kinship, family, and social structure in various regions of the world. Critical analysis of major ethnographic works and substantial writing required. Prerequisite: ANTH 1300 or consent of instructor. |
| 3410          | Folklore (4)  

Introduction to and survey of oral literature, e.g., folktales, myths, legends, proverbs, riddles, etc., especially among non-literate peoples; methods and theories of folklore analysis and the use of folklore in studies of diffusion, social functions, world view, and religion.

### Regional Anthropology and Ethnography (Course prefix: ANTH)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>3500</td>
<td>North American Indians (4) Native peoples and cultures of present-day United States and Canada.</td>
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<tr>
<td>3505</td>
<td>Indians of California (4) Habitat, economy, society, arts, and beliefs of the native populations of California.</td>
</tr>
<tr>
<td>3545</td>
<td>China (4) Cultural patterns, religion, social structure, ecological setting and regional variations of China, Taiwan and Hong Kong; their traditional, present and future role in the world.</td>
</tr>
<tr>
<td>3550</td>
<td>Japan (4) Cultural patterns, religion, social structure and ecological settings of Japan. Topics will include family and kinship, gender roles, work groups, socialization, and education.</td>
</tr>
<tr>
<td>3555</td>
<td>Cultures of East Asia (4) Anthropological perspectives on East Asia, including China, Japan, and Korea. Cultural sharing (e.g., Confucianism, Buddhism) and cultural differences, with focus on religion, social structure, ecology, and contemporary issues.</td>
</tr>
<tr>
<td>3580</td>
<td>Middle East (4) An exploration of the regional diversity of people and social institutions of the Middle East in order to understand the complexities of current social issues.</td>
</tr>
</tbody>
</table>

### Applied Anthropology (Course prefix: ANTH)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>3710</td>
<td>Anthropology and Museums (4) The anthropologist in the museum profession; the curatorial role; acquisition, identification, recording, repair, preservation and display of anthropological materials. Minimum of two field trips required. Prerequisites: ANTH 1100, 1200, or 1300, or consent of instructor. May be repeated once for credit, for a maximum of 8 units. One hr. lect., 6 hrs. act.</td>
</tr>
<tr>
<td>3720</td>
<td>Medical Anthropology (4) The ecology of health, magical beliefs, and medicine; public health and medical problems as affected by cultural differences; the effects of acculturation upon mental and physical health. Prerequisite: Junior or senior standing or consent of instructor.</td>
</tr>
<tr>
<td>3730</td>
<td>Anthropology on the Internet (4) The Internet computer network contains many &quot;virtual communities&quot; representative of various international multicultural interest groups. Application of anthropological fieldwork techniques to study issues of transitional identity, communications, expressions, representation, and the concerns of geographically dispersed communities.</td>
</tr>
<tr>
<td>3740</td>
<td>Cross-Cultural Studies in Child-Rearing (4) Cross-cultural study of infancy, childhood and adolescence; the process of enculturation, socialization and methods of child rearing.</td>
</tr>
<tr>
<td>3745</td>
<td>Human Sexuality: Anthropological Perspectives (4) A cross-cultural and evolutionary study of human sexuality expanding the constricted perspectives of Western cultures, including a review of sexual practices and attitudes, gender roles in sensuality, and sexual orientation in both Western and non-Western societies.</td>
</tr>
<tr>
<td>3750</td>
<td>Women in Cross-Cultural Perspective (4) Similarities and differences in women's experiences in various societies around the world. Questions concerning gender identity, sexuality, marriage, the family, work, power, and intersections of gender with age, class and other inequalities.</td>
</tr>
<tr>
<td>3765</td>
<td>Business Anthropology (4) Study of culture, institutions, and globalization through a focus on the anthropology of doing business. Application of anthropological insights to commercial encounters using case studies and direct experience. Topics include cross-cultural negotiation, organizational culture, and economic anthropology.</td>
</tr>
<tr>
<td>3785</td>
<td>Anthropology in Action (4) Application of anthropological theory and methods to selected contemporary problems, including public health issues and policy, education, women and children, community development. Service learning activity at a local community organization. Prerequisite: upper division standing or consent of instructor.</td>
</tr>
<tr>
<td>3790</td>
<td>Genealogy and Your DNA (4) Anthropology from the perspective of genealogy and the individual student's family tree. Exploration of human biological and cultural diversity, through the methods of genealogical research including oral history, family folklore, DNA profiling, and Internet resources.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4) Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity. Only up to 4 units may be applied to the Anthropology major. Not for credit in the Anthropology minor. May be repeated for credit, for a maximum of 8 units. CR/NC grading only.</td>
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<tr>
<td>Course Number</td>
<td>Course Information</td>
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</tbody>
</table>
| 3800          | Language and Culture (4)  
The structured nature of language, linguistic classification, and the relationship of language, thought and reality viewed through the perspective of linguistic relativity. |
| 3801          | Language in the Modern World (4)  
Language in a global era viewed from a socio-historical perspective: the spread of a few major languages and increasing multilingualism; the extinction of many smaller languages; the rise of English as the first world language resulting in new varieties of English. |
| 3840          | Folk Religion and Magic (4)  
Cross-cultural comparison of the origins, development and social functions of magical, witchcraft and religious beliefs and behavior, including relevant aspects of symbolism, ritual, ceremony, spirit possession, exorcism, divination, pilgrimage, renunciation and revitalistic cult movements. |

**Advanced Archaeology - Biological Anthropology (Course prefix: ANTH)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</table>
| 4240          | Data Analysis in Archaeology (4)  
General field and laboratory techniques for retrieval and analysis of data recovered from prehistoric and/or historic sites.  
Prerequisite: ANTH 1200 or consent of instructor. May be repeated once for credit, for a maximum of 8 units. One hr. lect., 6 hrs. act. |
| 4250          | Field Course in Archaeology (5)  
Techniques of surface survey and scientific excavation; controlled data retrieval from a variety of archaeological field situations.  
Aspects emphasized will depend on available opportunities. Prerequisite: ANTH 1200 or 3200 or consent of instructor. One hr. lect., 8 hrs. act. |
| 4260          | Human Osteology Laboratory (3)  
A laboratory course on the human skeleton. Reconstruction of individual characteristics based on metric, non-metric and statistical analysis. Topics may include analysis of human populations from archaeological contexts, paleodemography, and paleopathology.  
Prerequisite: ANTH 1100 or consent of instructor. 6 hrs. lab. |
| 4280          | Forensic Osteology (4)  
Identification and interpretation of human skeletal remains. Includes significant anatomy content designed to build skills in identifying bone fragments. Analysis of identity, trauma, pathology, and bone modification emphasized, especially as relevant to reconstructing events in life and immediately surrounding death. Prerequisite: ANTH 1100, BIOL 2010, 2011, 2020 or consent of instructor. Co-requisite: ANTH 4260 recommended. Three hrs. lect., 2 hrs. act. |

**Advanced Sociocultural Anthropology (Course prefix: ANTH)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</table>
| 4310          | Field Course in Ethnography (5)  
Securing, recording, ordering, and analysis of cultural data; problems of participant observation and eliciting information from informants; methods of data collection. Field work all day Saturday or two afternoons per week. Prerequisite: one course in ANTH 1300 or 3400 or 3500 series. One hr. lect., 8 hrs. act. |
| 4900          | Independent Study (1-4)  
May be repeated for credit with consent of instructor, for a maximum of 12 units. |
| 4910          | Pro-Seminar in Anthropology (4)  
Seminar in history and philosophy of anthropological thought: its place among the sciences and the humanities, schools of thought and the respective contributions of eminent anthropologists. Prerequisites: senior standing, completion of three upper division anthropology courses or consent of instructor. |
Art

- Department Information
- Program Description
- Career Possibilities
- Features
- Preparation
- Major Requirements (B.A.)
- Major Requirements (B.F.A.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses

Department Information

Department of Art
College of Letters, Arts, and Social Sciences
Office: Art and Education Bldg. 1233
Phone: (510) 885-3111
Website: http://class.csueastbay.edu/art

Professor Emeritus
James F. Petrillo, M.I.D. Pratt Institute (New York)

Professors
Michael Henninger, M.F.A. California College of Arts and Crafts
Phillip A. Hofstetter (Chair), M.A. California State University, Hayward
Mark Levy, Ph.D. Indiana University
Grace Munakata, M.F.A. University of California, Davis
Amy Oakland, Ph.D. University of Texas at Austin

Associate Professors
Scott H. Hopkins, M.F.A. University of Arizona
Gwynn Rhabyt, M.F.A. California College of Arts and Crafts
Suzy Wear, M.A. California State University, Hayward

Assistant Professors
Janet Green, M.A. California State University, East Bay

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Program Description

Courses in the Department of Art develop our students’ perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists’ studios.

Seven options for the B.A. degree are offered: Art History, Art Studio (general), Graphic Design, Photography, Pictorial Arts (Drawing/Printmaking/Painting), Spatial Arts (Ceramics/Sculpture), and Multimedia. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Graphic Design, Multimedia, Photography and Traditional Arts. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see the Multimedia chapter in the graduate section of this catalog).

The Art Department offers minors in Art Studio, Art History, Photography and Multimedia. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes
Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will:

1. have the ability to develop ideas and create good art works;
2. have the ability to apply art fundamentals successfully;
3. have technical proficiency in areas appropriate to their degree option;
4. understand the use of an art medium for expression;
5. have an awareness of contemporary and historical art, and an awareness of contemporary issues and context for their work.

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Career Possibilities

- Animator
- Artist
- Art Critic
Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Features
- State of the Art Electronic Media Facilities
- 100,000 slides in the Department Visual Resource Library
- Three fully equipped Painting and Drawing studio spaces
- 3000 square foot machine shop which is fully equipped and professionally staffed
- Sculpture and Ceramic studios and a large outdoor working space
- Printmaking facility
- Excellent Photography facilities
- 2000 square foot University Art Gallery with a year round program of changing exhibits
- Video Art Collection of historical and contemporary art videos
- Student Art Gallery for solo or group Advanced Student Exhibitions

Preparation
For Advanced Placement course equivalents, see the Registration chapter.

Major Requirements (B.A.)
The major consists of 78-86 units when choosing an Art Studio Option and 64 units when choosing the Art History Option; the B.A. degree requires a total of 180 units.

Grade Requirement: Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Art Studio Options (78-86 units)
I. Art Studio Option (78 units)
This option allows students to focus on more than one area.
A. Required Courses (32 units)
   - ART 1020 The Creative Process (4)
   - ART 1112 Ceramics I (4)
   or ART 1116 Introduction to Sculpture (4)
   - ART 1113 Drawing I (4)
   - ART 3035 Modern Art (4)
   - ART 3411 Advanced Survey of World Art (4)
   - ART 3430 Junior/Senior Seminar (2)
   - ART 3440 Visual Literacy (2)
   - ART 4071 Contemporary Art (4)
   - One additional upper division art history course (4)
B. Elective Courses (40 units)
A minimum of 40 additional units taken from the Art Department listing of studio courses, no more than 20 units of which may be lower division. A minimum of 20 units must be taken in a specific option area (Pictorial Arts, Spatial Arts, Photography, Graphic Design or Multimedia) with advisement.
C. Capstone Requirements (6 units)
   - ART 4710 Senior Thesis (2)
   - ART 4720 Senior Seminar (2)
   - ART 4730 Senior Portfolio (2)

Total for Art Major, Art Studio Option: 78 units

II. Graphic Design Option (Electronic Art) (86 units)
Electronic artists employ the use of rapidly evolving new media tools to express the human imagination. Computers are used to create, control and integrate images, text, graphics, video, sound, and interactivity. Courses stress the development of strong aesthetic and humanistic sensibilities combined with sophisticated technical abilities.

The Electronic Art program has two option areas: Multimedia and Graphic Design. The Graphic Design Option focuses on art that assumes a printed form; the Multimedia Option focuses on art that assumes an electronic form.
A. Required Courses (78 units)
   - ART 1020 The Creative Process (4)
   - ART 1113 Drawing I (4)
   - ART 2025 Basics of New Media (4)
• ART 2630 Introduction to Digital Photography (4)
• ART 2805 Computers and Print (4)
• ART 2810 Principles of Design (4)
• ART 2830 Web Design (4)
• ART 3035 Modern Art (4)
• ART 3144 Drawing Lab (2 units taken 3 times) (6)
• ART 3400 History of Art and Technology (4)
• ART 3411 Advanced Survey of World Art (4)
• ART 3810 Graphic Design I (4)
• ART 3815 Typography (4)
• ART 3830 Digital Imaging (4)
• ART 3855 Graphic Design II (4)
• ART 3860 Production Design for Print and Screen (4)
• ART 3870 Web Authoring (4)
• ART 4060 History of Graphic Design (4)
• ART 4071 Contemporary Art (4)

B. Capstone Requirements (8 units)
• ART 4230 Graphic Design Senior Project (4)
• ART 4740 Professional Practices (4)

Total for Art Major, Graphic Design Option: 86 units

III. Photography Option (80 units)
The Photography Option provides well-grounded studies in the aesthetic and practical areas of contemporary camera-generated imagery with an emphasis on digital technologies. Students choose from a wide range of electives to develop skills in specialty areas culminating in capstone classes designed to prepare the students for a career in photography or to apply to graduate school.

A. Required Courses (56 units)
• ART 1020 The Creative Process (4)
• ART 1113 Drawing I (4)
• ART 2025 Basics of New Media (4)
• ART 2630 Introduction to Digital Photography (4)
• ART 2810 Principles of Design (4)
• ART 3035 Modern Art (4)
• ART 3400 History of Art and Technology (4)
• ART 3411 Advanced Survey of World Art (4)
• ART/COMM 3630 Advanced Digital Photography (4)
• ART/COMM 3670 Introduction to Studio Lighting(4)
• ART 4600 Image and Idea (4)
• COMM/ART 4620 History of Photography (4)
• ART 4645 Advanced Photography (4)
• One upper division art history course (4)

B. Elective courses (16 units)
Students to select from the following by advisement:

- Lower division Art Studio course (4 units), select one from the following:
  - ART 1112 Ceramics I
  - ART 1114 Painting I
  - ART 1115 Printmaking I
  - ART 1116 Introduction to Sculpture
  - ART 1121 Introduction to Bookmaking
  - ART 2701 Black and White Photography I, or other 4-unit art studio course by advisement
  - ART 2702 Black and White Photography II (2)
  - ART 2830 Web Design (4)
  - ART 3144 Drawing Lab (2)
  - ART 3620 Alternative Processes in Photography (4)
  - ART 3640 Special Topics in Photography (4)
  - ART 3654 Landscape Photography (4)
  - ART 3655 Advanced Landscape Photography (2)
  - ART 3661 Advanced Portrait Photography (4)
  - ART 3820 Digital Video (4)
  - ART 3830 Digital Imaging (4)
  - ART 3870 Web Authoring (4)
  - ART 4621 History of Photography Since 1960 (4)
  - ART 4900 Independent Study (1-4)
  - ART/COMM 3660 Portrait Photography (4)
  - ART/COMM 3671 Advanced Studio Lighting (4)
  - ART/COMM 4600 Image and Idea (4)

C. Capstone Requirements (8 units)
• ART/COMM 3680 Photography Career Preparation (4)
• ART 4745 Senior Project in Photography (4)

Total for Art Major, Photography Option: 80 units

IV. Pictorial Arts Option (Drawing/Painting/Printmaking) (78 units)
Beginning painting, printmaking and drawing courses offer traditional and nontraditional approaches to studies from life as well as more subjective approaches to imaginative work. Intermediate and advanced courses guide students toward a personal vision.

A. Required Courses (48 units)
- ART 1020 The Creative Process (4)
- ART 1112 Ceramics I (4) or ART 1116 Introduction to Sculpture (4)
- ART 1113 Drawing I (4)
- ART 1114 Painting I (4)
- ART 1115 Printmaking I (4)
- ART 3035 Modern Art (4)
- ART 3141 Drawing II (4)
- ART 3212 Painting II (4)
- ART 3411 Advanced Survey of World Art (4)
- ART 3430 Junior/Senior Seminar (2)
- ART 3440 Visual Literacy (2)
- ART 4071 Contemporary Art (4)
- One additional upper division art history course (4)

B. Elective Courses (24 units)
- ART 3141 Drawing II (4)
- ART 3142 Figure Drawing (4)
- ART 3212 Painting II (4)
- ART 3213 Painting III (4)
- ART 4143 Advanced Drawing (4)
- ART 4857 Advanced Printmaking (4)
- or other 4-unit Art Studio course by advisement.

C. Capstone Requirements (6 units)
- ART 4710 Senior Thesis (2)
- ART 4720 Senior Seminar (2)
- ART 4730 Senior Portfolio (2)

Total for Art Major, Pictorial Arts Option: 78 units

V. Spatial Arts Option (Ceramics/Sculpture) (78 units)
The Spatial Arts program familiarizes students with a broad range of sculptural processes. The department has one of the best studio facilities in the Bay Area.

A. Required Courses (40 units)
- ART 1020 The Creative Process (4)
- ART 1113 Drawing I (4)
- ART/COMM 2701 Black and White Photography I (4)
- ART 3035 Modern Art (4)
- ART 3144 Drawing Lab (2 units taken 3 times) or any six units of upper division drawing (6)
- ART 3411 Advanced Survey of World Art (4)
- ART 3440 Visual Literacy (2)
- ART 4071 Contemporary Art (4)
- Two additional upper division art history courses (8) (Note: for students on the Interactive Sculpture track, these courses must be ART 3400 History of Art and Technology, and ART 4070 Currents in New Media)

B. Elective Tracks Requirements (32 units)
Students must choose two of the following three elective tracks:

1. Interactive Sculpture (16 units)
   - ART 3330 Electronics for Sculpture (4)
   - ART 4370 Human and Machine Performance (4)
   - Select 4 units of coursework covering tangible digital environments, with consent of department (4)
   - Select 4 units of coursework covering interactive sculpture, with consent of department (4)

2. Traditional Sculpture (16 units)
   - ART 1116 Introduction to Sculpture (4)
   - ART 3316 Advanced Sculpture (4)
   - ART 3340 Mixed Media Assemblage (4)
   - Select 4 units of upper division coursework covering fabrication for sculpture, with consent of department (4)

3. Ceramics (16 units)
   - ART 1112 Ceramics I (4)
   - ART 3512 Ceramics II (4)
   - ART 3513 Ceramics III (4)
   - Select 4 units of upper division coursework covering figure modeling in clay, with consent of department (4)

C. Capstone Requirements (6 units)
- ART 4710 Senior Thesis (2)
- ART 4720 Senior Seminar (2)
- ART 4730 Senior Portfolio (2)

Total for Art Major, Spatial Arts Option: 78 units

VI. Multimedia Option (Electronic Art) (86 units)
A. Required Courses (78 units)
ART 1020 The Creative Process (4)
ART 1113 Drawing I (4)
ART 1114 Painting I or ART 1115 Printmaking I
or ART 1116 Introduction to Sculpture,
or ART/COMM 2701 Black and White Photography I,
or select a 4-unit studio class by advisement (4)
ART 2025 Basics of New Media (4)
ART 2630 Introduction to Digital Photography (4)
ART 2810 Principles of Design (4)
ART 2830 Web Design (4)
ART 3035 Modern Art (4)
ART 3144 Drawing Lab (2 units taken 3 times) (6)
ART 3400 History of Art and Technology (4)
ART 3411 Advanced Survey of World Art (4)
ART 3800 Animation (4)
ART 3820 Digital Video (4)
ART 3825 Motion Graphics (4)
ART 3830 Digital Imaging (4)
ART 3870 Web Authoring (4)
ART 4070 Currents in New Media (4)
ART 4071 Contemporary Art (4)
ART 4200 Interactive Authoring (4)

B. Capstone Requirements (8 units)
ART 4220 Multimedia Senior Project (4)
ART 4740 Professional Practices (4)

Total for Art Major, Multimedia Option: 86 units

Art History Option (64 units)
1. Required Courses (16 units)
   • ART 1020 The Creative Process (4)
   • ART 2630 Introduction to Digital Photography (4)
   • ART 3035 Modern Art (4)
   • ART 3411 Advanced Survey of World Art (4)

2. Modern Language Requirement (16 units)
   Sixteen units of one or more foreign languages selected with an advisor; or eight units of one foreign language and eight units selected
   with an advisor from history, literature, anthropology or ethnic studies.

3. Elective Courses (32 units)
   Eight upper division courses in art history selected with an advisor

Total for Art Major, Art History Option: 64 units

Major Requirements (B.F.A.)
The major consists of 100-102 units; the B.F.A. degree requires a total of 180-182 units.

Grade Requirement: Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Admission and Degree Requirements
Applicants must meet university requirements for admission and must first be admitted to the B.A. degree program. In addition, they must meet
the following requirements to apply for admission to the B.F.A. program:

1. Complete 30 units of Studio Art with a grade point average of 3.5 or better.
2. Submit a portfolio of work to the faculty B.F.A. committee along with a short statement summarizing their reasons for applying. Application
   reviews will be held once a year for admission the following year.
3. Maintain a minimum 3.5 GPA in all Art classes while in the program.
4. Prepare and install a final exhibition of their work in either the Art Department Galleries or outside exhibition spaces (or a portfolio for
   Electronic Art students) to be reviewed by the Art Department faculty to determine the candidate’s professional competence in his/her
   area of concentration.

Graphic Design Option (102 units)
I. Required Courses (78 units)
   • ART 1020 The Creative Process (4)
   • ART 1113 Drawing I (4)
   • ART 2025 Basics of New Media (4)
   • ART 2630 Introduction to Digital Photography (4)
   • ART 2805 Computers and Print (4)
   • ART 2810 Principles of Design (4)
   • ART 2830 Web Design (4)
   • ART 3035 Modern Art (4)
   • ART 3144 Drawing Lab (2 units taken 3 times) (6)
   • ART 3400 History of Art and Technology (4)
   • ART 3411 Advanced Survey of World Art (4)
   • ART 3810 Graphic Design I (4)
II. Electives (16 units)
Sixteen (16) units of upper division studio art electives by advisement.

III. Capstone Requirements (8 units)
- ART 4230 Graphic Design Senior Project (4)
- ART 4740 Professional Practices (4)

**Photography Option (100 units)**

I. Required Courses (80 units)
- ART 1020 The Creative Process (4)
- ART 1113 Drawing I (4)
- Lower division Art Studio course (4 units):
  - ART 1112 Ceramics I,
  - or ART 1114 Painting I,
  - or ART 1115 Printmaking I,
  - or ART 1116 Introduction to Sculpture,
  - or ART 1121 Introduction to Bookmaking (4)
- ART 2025 Basics of New Media (4)
- ART 2630 Introduction to Digital Photography (4)
- ART/COMM 2701 Black and White Photography I (4)
- ART 2810 Principles of Design (4)
- ART 3035 Modern Art (4)
- ART 3400 History of Art and Technology (4)
- ART 3411 Advanced Survey of World Art (4)
- ART/COMM 3630 Advanced Digital Photography (4)
- ART/COMM 3670 Introduction to Studio Lighting (4)
- ART 3680 Photography Career Preparation (4)
- ART 4071 Contemporary Art (4)
- or ART 4621 History of Photography Since 1960 (4)
- ART/COMM 4600 Image and Idea (4)
- COMM/ART 4620 History of Photography (4)
- ART 4645 Advanced Photography (4)
- ART 4745 Senior Project in Photography (4)
- ART 4900 Independent Study (4)
- One additional upper division art history course (4)

II. Electives (20 units)
Students to select from the following by advisement.
- ART 2702 Black and White Photography II (2)
- ART 2830 Web Design (4)
- ART 3620 Alternative Processes in Photography (4)
- ART 3640 Special Topics in Photography (4)
- ART 3654 Landscape Photography (4)
- ART 3655 Advanced Landscape Photography (2)
- ART 3661 Advanced Portrait Photography (4)
- ART 3671 Advanced Studio Lighting (4)
- ART 3810 Graphic Design I (4)
- ART 3820 Digital Video (4)
- ART 3830 Digital Imaging (4)
- ART 3870 Web Authoring (4)
- ART 4621 History of Photography Since 1960 (4) (if not used above)
- ART 4900 Independent Study (1-4)
- ART/COMM 3660 Portrait Photography (4)
- ART/COMM 4600 Image and Idea (4)
- Any studio art course (2-4)

**Traditional Arts Option (102 units)**

I. Required Courses (34 units)
- ART 1020 The Creative Process (4)
- ART 1113 Drawing I (4)
- ART 3035 Modern Art (4)
- ART 3411 Advanced Survey of World Art (4)
- ART 3430 Junior/Senior Seminar (2)
- ART 3440 Visual Literacy (2)
- ART 4710 Senior Thesis (2)
- ART 4720 Senior Seminar (2)
- ART 4730 Senior Portfolio (2)
- ART 4071 Contemporary Art (4)
• One additional upper division art history course (4)

II. Electives (68 units)
Courses selected from the following by advisement based upon student's choice of specialty area.

• ART 1112 Ceramics I (4)
• ART 1114 Painting I (4)
• ART 1115 Printmaking I (4)
• ART 1116 Introduction to Sculpture (4)
• ART 3141 Drawing II (4)
• ART 3142 Figure Drawing (4)
• ART 3212 Painting II (4)
• ART 3213 Painting III (4)
• ART 3316 Advanced Sculpture (4)
• ART 3317 Workshop in Spatial Arts (4)
• ART 3420 Selected Topics in Studio Art (2)
• ART 3430 Junior/Senior Seminar (2)
• ART 3440 Visual Literacy (2)
• ART 3512 Ceramics II (4)
• ART 3513 Ceramics III (4)
• ART 3600 Intermediate Photography (4)
• ART 4143 Advanced Drawing (4)
• ART 4302 Spatial Arts: Advanced Project (4)
• ART 4750 Traditional Art BFA Critique Seminar (2)
• ART 4857 Advanced Printmaking (4)
• ART 4900 Independent Study (1-4)
• ART/COMM 2701 Black and White Photography I (4)

Multimedia Option (102 units)

I. Required Courses (78 units)

• ART 1020 The Creative Process (4)
• ART 1113 Drawing I (4)
• ART 1114 Painting I
or ART 1115 Printmaking I
or ART 1116 Introduction to Sculpture,
or ART/COMM 2701 Black and White Photography I,
or other 4-unit studio class by advisement (4)
• ART 2025 Basics of New Media (4)
• ART 2630 Introduction to Digital Photography (4)
• ART 2810 Principles of Design (4)
• ART 2830 Web Design (4)
• ART 3035 Modern Art (4)
• ART 3144 Drawing Lab (2 units taken 3 times) (6)
• ART 3400 History of Art and Technology (4)
• ART 3411 Advanced Survey of World Art (4)
• ART 3800 Animation (4)
• ART 3820 Digital Video (4)
• ART 3825 Motion Graphics (4)
• ART 3830 Digital Imaging (4)
• ART 3870 Web Authoring (4)
• ART 4070 Currents in New Media (4)
• ART 4071 Contemporary Art (4)
• ART 4200 Interactive Authoring (4)

II. Electives (16 units)
Sixteen (16) units of upper division studio art electives by advisement.

III. Capstone Requirements (8 units)

• ART 4220 Multimedia Senior Project (4)
• ART 4740 Professional Practices (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

Art History Minor (36 units)

• ART 1020 The Creative Process (4)
• ART 2630 Introduction to Digital Photography (4)
• ART 3035 Modern Art (4)
• ART 3411 Advanced Survey of World Art (4)
Five 3000/4000-level art history courses (20 units total) selected with an academic advisor.

**Art Studio Minor (36 units)**
- ART 1020 The Creative Process (4)
- ART 1113 Drawing I (4)
- ART 3411 Advanced Survey of World Art (4)
- Two lower division art studio courses selected with an advisor (8)
- Twelve units of upper division art studio courses selected with an advisor (12)
- One upper division Art History course (4)

**Interactive Sculpture Minor (28 units)**
- ART 1116 Introduction to Sculpture (4)
- ART 3330 Electronics for Sculpture (4)
- ART 3400 History of Art and Technology (4)
- ART 4370 Human and Machine Performance (4)
- Select 4 units of coursework covering tangible digital environments, with consent of department (4)
- Select 4 units of coursework covering interactive sculpture, with consent of department (4)
- Select 4 units of upper division coursework covering fabrication for sculpture, with consent of department (4)

Note: Students who have taken PHYS 3280 Electronics and Semiconductor Manufacturing, or CS 3432 Digital Design Lab, may substitute ART 4070 Currents in New Media for ART 3330.

**Photography Minor (36 units)**
- ART 2025 Basics of New Media (4)
- ART 2630 Introduction Digital Photography (4)
- ART/COMM 3630 Advanced Digital Photography (4)
- ART/COMM 4600 Image and Idea (4)
- ART 4621 History of Photography Since 1960 or COMM/ART 4620 History of Photography (4)

**Electives (16 units)**
Selected with an advisor from the following list:
- ART 2702 Black and White Photography II (2)
- ART 2810 Principles of Design (4)
- ART 2830 Web Design (4)
- ART 3620 Alternative Processes in Photography (4)
- ART 3640 Special Topics in Photography (4)
- ART 3654 Landscape Photography (4)
- ART 3661 Advanced Portrait Photography (4)
- ART 4621 History of Photography Since 1960 (4) (if not used above)
- ART 4745 Senior Project in Photography (4)
- ART 4900 Independent Study (1-4)
- ART/COMM 2701 Black and White Photography I (4)
- ART/COMM 3660 Portrait Photography (4)
- ART/COMM 3670 Introduction to Studio Lighting (4)
- ART/COMM 3671 Advanced Studio Lighting (4)
- ART/COMM 3680 Photo Career Preparation (4)
- COMM 3100 Television Production/Direction (4)
- COMM 3220 Media Workshop: Print (2)
- COMM 3340 Graphic Communication (4)
- GEOG 3410 Air-Photo Interpretation (4)

**Multimedia Minor (36 units)**
- ART 2025 Basics of New Media (4)
- ART 2630 Introduction Digital Photography (4)
- ART 2810 Principles of Design (4)
- ART 2830 Web Design (4)
- ART 3400 History of Art and Technology (4)
- ART 3800 Animation (4)
- ART 3820 Digital Video (4)
- ART 3830 Digital Imaging (4)
- ART 3870 Web Authoring (4)

**Undergraduate Courses**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1010</td>
<td>Introduction to World Art History (4) An examination of style in the visual arts and factors which influence the nature of art in selected salient periods of art history. Not open to students with credit for ART 1011.</td>
</tr>
<tr>
<td>3010</td>
<td>Latin American Art (4)</td>
</tr>
</tbody>
</table>
Art and architecture of Latin America from the conquest and colonial period to the present, including art of Mexico, Central America and South America. Field trips may be required.

3035 Modern Art (4)
Main topics of European art of the Modern period from the nineteenth century to the middle of the twentieth century including Impressionism, Cubism, and Surrealism.

3040 Art in the United States (4)
The development of art in the United States from the colonial period to the present. Individual visits to museums required.

3055 Ancient American Art (4)
Art of Mexico, Central America and South America from the ancient periods to the Spanish Conquest. Field trips may be required.

3220 Art in the Ancient World (4)
The evolution of art from the prehistoric Near East through the later Roman Empire. Individual study visits to museums and/or field trips required.

3224 Renaissance Art (4)
Renaissance and Renascences in European Art from 1300 to 1700 concentrating on developments in Italy and Northern Europe. Individual museum and/or field trips may be required.

3277 Women in Art (4)
Women artists and images of women's art, including history from ancient periods to the present. Individual museum and/or field trips may be required.

3230 Art and Philosophy of the East (4)
(See PHIL 3230 for course description.)

3400 History of Art and Technology (4)
How the interaction of art and technology shaped human culture from cave paintings to computers. Priority given to Art majors and minors.

3411 Advanced Survey of World Art (4)
Survey of major theories of Western Art, Tribal Art, and Non-Western Art. Shamanism and Goddess worship and ending with postmodernism. Field trips may be required. Priority given to Art Majors and Minors.

4005 Histories of Film (4)
A thematic approach to film that analyzes the subject's history, innovative visual strategies, content and cultural context. Themes may vary and may include world cinema, past visions of the future, Hollywood/Bollywood, existentialism, spiritual representations, war, etc. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Cross-listed with COMM 4005.

4020 Shamanism and Art: A Cross-Cultural Perspective (4)
The relationship between the practice of shamanism and art from around the world. Artworks from North American Indian, Oceanic, Siberian, Aboriginal, Huichol and African cultures as well as those from Indonesia, China and Tibet. The practice of shamanic techniques by modern artists.

4060 History of Graphic Design (4)
The development and evolution of graphic design including its relationship to culture, influential artists, designers and studios. Field trips may be required. Priority given to Art majors and minors.

4070 Currents in New Media (4)
Contemporary artistic developments in new media including artists, aesthetic trends, materials, and methods. Field trips may be required. Priority given to Art Majors and Minors.

4071 Contemporary Art (4)
The most recent developments in art from WW II to the present with an emphasis on post-modernism. Individual study visits to museums and/or field trips required. (Y)

4620 History of Photography (4)
(See COMM 4620 for course description.)

4900 Independent Study (1-4)
May be repeated for credit with consent of instructor, for a maximum of 12 units.

Art Studio (Course prefix: ART)
Auditing of Art Studio courses is not permitted

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1020</td>
<td>The Creative Process (4)</td>
</tr>
<tr>
<td></td>
<td>Studio practice emphasizing creativity and imagination in the realization of works of visual art. Field trips may be required. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>1112</td>
<td>Ceramics I (4)</td>
</tr>
<tr>
<td></td>
<td>Introduction to the basic techniques of construction with clay, including basic throwing and glazing techniques. Field trips may be required. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>1113</td>
<td>Drawing I (4)</td>
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<tr>
<td></td>
<td>Introduces varied approaches to drawing and use of materials. Projects increase perceptual and imaginative abilities. Instruction in using line, shape, and illusion of form to translate/interpret what you see or how you respond. Field trips may be required. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>1114</td>
<td>Painting I (4)</td>
</tr>
<tr>
<td></td>
<td>Provides introductory experiences in making images and using painting materials. Slides, reproductions and demonstrations accompany lectures. Projects and discussions develop students' understanding of how painting can communicate our experience and imagination. Field trips may be required. Two hrs. lect., 4 hrs. act.</td>
</tr>
</tbody>
</table>
1116 Introduction to Sculpture (4)
An introduction to a major graphic process (such as Intaglio, Monoprint/Monotype, or Relief printing), and its history. Field trips may be required. May be repeated for credit with consent of instructor and when content varies, for a maximum of 12 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

1121 Introduction to Bookmaking (4)
Introduction to creating art in book form and to the history of artists' books. Basic binding and printing techniques. Field trips may be required. Two hrs. lect., 4 hrs. act.

2025 Basics of New Media (4)
Computer as a creative tool in design of digital imagery and artwork through bitmap and vector based software. Prerequisites: declared Art major/minor or department permission. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

2630 Introduction to Digital Photography (4)
Using digital cameras to explore fundamental principles of image making, composition, color theory, color management, lighting, and image processing with Photoshop and ink jet printing. Students are required to provide their own digital camera. Two hrs. lect., 4 hrs. act.

2701 Black and White Photography I (4)
Fundamental theory and practice of black and white photography with emphasis on darkroom printing and developing. 35 mm camera recommended. Cross-listed with COMM 2701. Not open to students with credit for COMM/ART 2700. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

2702 Black and White Photography II (2)
Advanced black and white darkroom techniques, including split filter and fiber paper printing, toning, and solarization; use of black and white film with medium format cameras. Prerequisite: ART/COMM 2701 or consent of instructor. May be repeated once for credit, for a maximum of 4 units. One hr. lect., 2 hrs. act.

2805 Computers and Print (4)
Printing as graphic impression - composition, inking, registration, paper surfaces; relation to contemporary digital graphic reproduction. Field trips may be required. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

2810 Principles of Design (4)
 Foundations of graphic design - composition, color, image, type; uses in the communication of meaning. Prerequisites: ART 2025 and 2630. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

2811 Figure Modeling in Clay (2)
Concepts and techniques of drawing. Three dimensional form, time-based narratives, and hand-generated visualization of ideas for the development of graphic concepts. Prerequisites: ART 1113 and 2025. May be repeated for credit, for a maximum of 8 units. One hr. lect., 2 hrs. act.

2812 Painting II (4)
Emphasis on individual expression and critical analysis. Field trips may be required. Prerequisite: ART 1114. May be repeated once for credit with consent of instructor, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

2813 Painting III (4)
Advanced study in painting. Individual project with selected media. Field trips may be required. Prerequisite: ART 3212. May be repeated for credit with consent of instructor and when content varies, for a maximum of 48 units. Two hrs. lect., 4 hrs. act.

2814 Drawing Lab (2)
Concepts and techniques of drawing. Three dimensional form, time-based narratives, and hand-generated visualization of ideas for the development of graphic concepts. Prerequisites: ART 1113 and 2025. May be repeated for credit, for a maximum of 6 units. One hr. lect., 2 hrs. act.

2830 Web Design (4)
Design principles, web standards, and interactive multimedia for visual content on the Web. Prerequisites: ART 2025 and 2630. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

3025 Basics of New Media (4)
Computer as a creative tool in design of digital imagery and artwork through bitmap and vector based software. Prerequisites: declared Art major/minor or department permission. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

3043 Introduction to Digital Photography (4)
Using digital cameras to explore fundamental principles of image making, composition, color theory, color management, lighting, and image processing with Photoshop and ink jet printing. Students are required to provide their own digital camera. Two hrs. lect., 4 hrs. act.

3121 Advanced Bookmaking (4)
Advanced techniques, including printing and binding techniques, for creating art in book form. Production of at least one finished book. Field trips may be required. Prerequisite: Art 1121 or permission of the instructor. May be repeated two times for credit, for a maximum of 12 units. Two hrs. lect., 4 hrs. act.

3141 Drawing II (4)
Concepts and techniques of drawing, including studies from life. Emphasis on individual expression in various drawing media. Field trips may be required. Prerequisite: ART 1113. May be repeated once for credit for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

3142 Figure Drawing (4)
Principles of figure drawing. Field trips may be required Prerequisite: ART 1113. May be repeated twice for credit with consent of instructor, for a maximum of 12 units. Two hrs. lect., 4 hrs. act.

3144 Drawing Lab (2)
Concepts and techniques of drawing. Three dimensional form, time-based narratives, and hand-generated visualization of ideas for the development of graphic concepts. Prerequisites: ART 1113 and 2025. May be repeated for credit, for a maximum of 6 units. One hr. lect., 2 hrs. act.

3212 Painting II (4)
Emphasis on individual expression and critical analysis. Field trips may be required. Prerequisite: ART 1114. May be repeated once for credit with consent of instructor, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

3213 Painting III (4)
Advanced study in painting. Individual project with selected media. Field trips may be required. Prerequisite: ART 3212. May be repeated for credit with consent of instructor and when content varies, for a maximum of 48 units. Two hrs. lect., 4 hrs. act.

3311 Figure Modelling in Clay (2)
Translating the act of seeing into sophisticated manipulation of clay. Understanding a variety of ways to represent human, animal, and natural forms. Field trips may be required. Prerequisites: ART 1112 and 1116. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

3316 Advanced Sculpture (4)
Developing and building on previously acquired skills in order to achieve mastery of the materials. Planning, designing, and creating sophisticated and complex sculptural work that address significant issues in the artistic arena. May be repeated six times for credit with consent of instructor and when content varies, for a maximum of 28 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

3317 Workshop in Spatial Arts (4)
Focus on a particular medium, e.g. bronze, clay, steel, stone, mixed media, etc. Prerequisite: ART 3311. May be repeated for credit when content varies, for a maximum of 48 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.

3330 Electronics for Sculpture (4)
Learning the fundamentals of light and sound as art forms in 3-dimensional space using electricity, analog and digital electronics,
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>3340</td>
<td>Mixed Media Assemblage (4)</td>
<td>Integrating found objects and media into artworks in 3-dimensional space. Advanced mold-making and experimental materials. Discussion of reproduction and simulation in contemporary art. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3420</td>
<td>Selected Topics in Studio Art (2)</td>
<td>Intensive study of a particular art practice, its concepts and techniques. Prerequisite: declared Art major/minor or consent of instructor. May be repeated for credit when content varies, for a maximum of 24 units. One hr. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>3430</td>
<td>Junior/Senior Seminar (2)</td>
<td>Develops students' personal sense of aesthetics through selected reading, writing and discussion. In-depth critiques of student artwork. Prerequisite: declared Art major/minor. May be repeated two times for credit with consent of instructor, for a maximum of 6 units.</td>
</tr>
<tr>
<td>3440</td>
<td>Visual Literacy (2)</td>
<td>Slide lectures, writing, and discussion for the purpose of understanding the tools of visual communication and responding clearly in oral and written formats. May be repeated three times for credit, when content differs, for a maximum of 8 units.</td>
</tr>
<tr>
<td>3512</td>
<td>Ceramics II (4)</td>
<td>Concentration on the techniques of throwing, glazing, kiln work, and related topics. Field trips may be required. Prerequisite: ART 1112. May be repeated two times for credit with consent of instructor, for a maximum of 12 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3470</td>
<td>Visual Literacy (2)</td>
<td>Slide lectures, writing, and discussion for the purpose of understanding the tools of visual communication and responding clearly in oral and written formats. May be repeated three times for credit, when content differs, for a maximum of 8 units.</td>
</tr>
<tr>
<td>3620</td>
<td>Alternative Processes in Photography (4)</td>
<td>Experimental and alternative photographic methods, including cyanotype, platinum-palladium, bromoil, gum bichromate, and other historical processes. Prerequisite: ART 2630 or consent of instructor. May be repeated once for credit, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3630</td>
<td>Advanced Digital Photography (4)</td>
<td>Advanced digital imaging techniques and the use of photography as a fine art and visual language. Field trips may be required. Prerequisite: ART 2630 or consent of instructor. Cross-listed with COMM 3630. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3654</td>
<td>Landscape Photography (4)</td>
<td>Introduction to landscape photography and its techniques using digital, 35mm, and large format cameras. Field trips may be required. Prerequisites: ART 2630 or ART/COMM 2701 or consent of instructor. Two hr. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3660</td>
<td>Intermediate Photography (4)</td>
<td>Use of photography as a fine art and visual language. Technical areas include: zone system, color toning and hand painting. Prerequisite: ART/COMM 2701. Cross-listed with COMM 3600. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3670</td>
<td>Advanced Landscape Photography (2)</td>
<td>Advanced practice in landscape photography through photographic field trips. Prerequisite: ART 3654. May be repeated two times for credit, for a maximum of 6 units. One hr. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>3800</td>
<td>Animation (4)</td>
<td>Imaginative, computer-based animation, theories of movement and methods of storytelling for time-based narratives. Prerequisites: ART 3400, 3830, and 3870. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3810</td>
<td>Graphic Design I (4)</td>
<td>Development of techniques that reflect real world needs for communicating graphical messages. Prerequisites: ART 2805, 3400, 3830, and 3870. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3815</td>
<td>Typography (4)</td>
<td>Fundamentals and history of letterforms in art and design. Field trips may be required. Prerequisites: ART 2805, 3400, 3830, and 3870. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>3820</td>
<td>Digital Video (4)</td>
<td>Video and audio for multimedia production. Projects using storyboards, cameras, lighting, audio technology, video digitizing, editing software. Prerequisites: ART 3400, 3830, and 3870. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3825</td>
<td>Motion Graphics (4)</td>
<td>Using motion and timing to create graphic and typographic animation for video, interactive media and Web distribution. Prerequisite: ART 3820 and 3800. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3828</td>
<td>Advanced Digital Video (4)</td>
<td>Advanced topics in digital video production for multimedia. Video technology including formats, compression, and specifications. Motion graphics and integrating animation from non-video sources, optimizing video for the distribution channel, and interactive video. Prerequisite: ART 3825. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3830</td>
<td>Digital Imaging (4)</td>
<td>Computers, scanners, digital cameras and drawing tablets to produce imaginative pictures for screen and print. Prerequisites: ART 2810 and 2830. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3840</td>
<td>3D Modeling and Animation (4)</td>
<td>Introduction to creating 3D models and animations. Prerequisites: ART 3400, 3800, 3820. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3855</td>
<td>Graphic Design II (4)</td>
<td>Advanced applied design skills using grids, color, images, typographic detail, aesthetics, and extended design systems. Field trips may be required. Prerequisites: ART 3810 and 3815. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3860</td>
<td>Production Design for Print and Screen (4)</td>
<td>Integration of software and hardware techniques and design production considerations, to create and deliver successful content for mass production. Prerequisites: ART 3810 and 3815. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3870</td>
<td>Web Authoring (4)</td>
<td>Advanced use of scripting techniques to create interactive Web sites. Prerequisites: ART 2810 and 2830. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units, which may be applied to the major or the minor in Art.</td>
</tr>
<tr>
<td>4143</td>
<td>Advanced Drawing (4)</td>
<td>Emphasis on individual expression using traditional two-dimensional drawing media integrated with new and mixed media. Field trips may be required. Prerequisite: ART 3141. May be repeated two times for credit with consent of instructor and when content varies, for a maximum of 12 units. Two hrs. lect., 4 hrs act.</td>
</tr>
<tr>
<td>4200</td>
<td>Interactive Authoring (4)</td>
<td>Scripting languages, audio, video, animation and graphics to build interactive environments. Prerequisites: ART 3800 and 3820. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4210</td>
<td>Advanced Computers and Print (4)</td>
<td>Combining digital and traditional fine art printmaking techniques to produce prints and artist's books. Field trips may be required. Prerequisites: ART 3830, 3860. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4220</td>
<td>Multimedia Senior Project (4)</td>
<td>Students produce a personal body of interactive media reflecting understanding of design skills and processes that parallel professional methods. Prerequisites: ART 3825 and 4200. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4230</td>
<td>Graphic Design Senior Project (4)</td>
<td>Students produce a personal body of graphics reflecting understanding of design skills and processes that parallel professional methods. Prerequisites: ART 3855 and 3860. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4302</td>
<td>Spatial Arts:Advanced Project (4)</td>
<td>Emphasis on individual expression in spatial arts. Weekly group discussion of students' work. Field trips may be required. Prerequisites: ART 3316 and 3317 or ART 3513 taken twice. May be repeated for credit with consent of instructor and when content varies, for a maximum of 48 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4600</td>
<td>Image and idea (4)</td>
<td>The development of each student's technical skill and personal vision. Documentary and fine art photography. Prerequisite: ART/COMM 3630. May be repeated two times for credit, for a maximum of 12 units. Cross-listed with COMM 4600. Miscellaneous course fee. See quarterly Class Schedule for current fee.</td>
</tr>
<tr>
<td>4621</td>
<td>History of Photography Since 1960 (4)</td>
<td>Survey of the cultural issues and aesthetic developments in photography since 1960, with emphasis on fine art photography. Field trips may be required.</td>
</tr>
<tr>
<td>4645</td>
<td>Advanced Photography (4)</td>
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</tbody>
</table>
Students work on individual photography projects with the goal of further developing their skills and personal direction. Prerequisite: ART/COMM 4600 or consent of instructor. May be repeated once for credit, for a maximum of 8 units.

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>4710</td>
<td>Senior Thesis (2) Senior exhibit of art works in appropriate department spaces. Part of a series of capstone senior courses.</td>
</tr>
<tr>
<td>4720</td>
<td>Senior Seminar (2) Development of students' written and verbal communication skills for the purpose of presenting themselves and their work.</td>
</tr>
<tr>
<td>4730</td>
<td>Senior Portfolio (2) Senior portfolio production and presentation for career oriented goals. Faculty participation in reviews of portfolios.</td>
</tr>
<tr>
<td>4740</td>
<td>Professional Practices (4) Contemporary professional practices in electronic arts. Students investigate venues for electronic artists, contexts for their own work, and produce a professional portfolio. Prerequisites: ART 3855 and 3860 or ART 3825 and 4200.</td>
</tr>
<tr>
<td>4745</td>
<td>Senior Project in Photography (4) Advanced seminar involving critique and discussion. Portfolio production and presentation for career-oriented goals. Prerequisite: ART/COMM 4600. Not open to students with credit for ART 4235.</td>
</tr>
<tr>
<td>4750</td>
<td>Traditional Art BFA Critique Seminar (2) In-depth critique of individual student artwork and development; student presentations of influential contemporary artists, including digital images and analysis; assigned readings and group dialog. Field trips may be required. Prerequisite: Traditional art BFA major or permission of the instructor. May be repeated three times, for credit for a maximum of 8 units.</td>
</tr>
<tr>
<td>4857</td>
<td>Advanced Printmaking (4) Studies in printmaking to clarify the student's direction as an artist. Field trips may be required. Prerequisite: upper division standing. May be repeated for credit with consent of instructor and when content varies, for a maximum of 48 units. Miscellaneous course fee. See quarterly Class Schedule for current fee. Two hrs. lect., 4 hrs. act.</td>
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</tbody>
</table>

**General (Course prefix: ART)**

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>3999</td>
<td>Issues in Art (4) Readings, discussion, and research on contemporary and/or significant issues in art. May be repeated for credit when content varies, for a maximum of 48 units.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4) May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
</tbody>
</table>

May be repeated for credit with consent of instructor, for a maximum of 12 units.
Asian Studies

Department Information

Department of History
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4036
Phone: (510) 885-3207

Associate Professors
Vahid Fozdar (History), Ph.D. University of California, Berkeley
Laura Nelson (Anthropology), Ph.D. Stanford University
David Woo (Geography and Environmental Studies), Ph.D. University of California, Santa Barbara
Melling Wu (Modern Languages and Literatures), Ph.D. State University of New York at Binghamton

Assistant Professors
Maria Consuelo C. Ortuoste (Political Science), Ph.D. Arizona State University
Christopher Moreman (Philosophy), Ph.D. University of Wales, Lampeter
Andrew Wong (Anthropology), Ph.D. Stanford University

Director: Vahid Fozdar

Program Description

All students are invited to include some courses on Asia in their programs in order to enhance their critical understanding of the West's interrelatedness with the regions where half of humanity lives. The Asian countries are steeped in traditions that have elaborated different possibilities than those with which many Americans are acquainted. The Asian peoples have liberated themselves from Western rule and they are trying to establish equal relations with the West, while they work to come to terms with science, technology, and democracy in their own countries.

The Asian Studies faculty, in cooperation with Asian American student groups and concerned community members, attempt to encourage mutual understanding of East and West through regular courses in various departments (see following list); through new courses listed in the Class Schedule and Independent Study; through occasional workshops, lectures, and cultural events; and through outreach work in the Bay Area schools. The program is supplemented with topics such as Yoga, Judo, and Karate (Kinesiology and Physical Education). Notice also that certain general courses in the curriculum include a major Asian component: for example, Mankind and Food, Folklore (Anthropology), International Finance and Trade (Economics), Nutrition and Diet Therapy (Health Sciences), Multinational Business (Management Sciences), International Marketing (Marketing), International Relations and Contemporary World Problems (Political Science), and World Development (Sociology), among others. The Asian Studies Program faculty publicizes these and related matters. Study abroad courses, as well as short educational tours, have been offered in several Asian countries.

Minor in Asian Studies

Students with broader interests in Asia can build into their curriculum a Minor in Asian Studies consisting of eight courses (32 units). The minor is designed to complement the student's major by grouping courses taken as part of the major, courses taken to fulfill General Education requirements, and free electives into a package emphasizing Asia. A minimum of 18 units must be taken outside the student’s major.

Although the Minor in Asian Studies does not include a foreign language requirement, one year of an Asian language may be counted toward fulfillment of the minor requirements. Students wishing to go on to graduate school in Asian Studies are strongly encouraged to begin their language study as part of their undergraduate training. Mandarin Chinese, Japanese, Vietnamese and Filipino are offered on campus.

It is also possible to include courses taken at the universities that are associated with the International Programs of the California State University system; these opportunities presently exist in China, Japan, Korea and Taiwan and others are being considered.

Thirty-two units (eight courses) may be chosen from the following list. No more than 12 units (three courses) in one department. At least 12 upper division units are required.

- ANTH 3545 China (4)
- ANTH 3550 Japan (4)
- GEOG 3540 Geography of East Asia (4)
- GEOG 3550 Geography of Southeast Asia (4)
- HIST 3301 Modern Asia (4)
- HIST 3311 Traditional China (4)
- HIST 3312 Modern China (4)
- HIST 3313 People’s Republic of China (4)
- HIST 3322 Early Japan (4)
- HIST 3325 Postwar Japan (4)
- MLL 1601-2-3 Elementary Mandarin Chinese I, II, III (4 each)
- MLL 1651-2-3 Elementary Filipino I, II, III (4 each)
- MLL 1751-2-3 Elementary Vietnamese I, II, III (4 each)
- MLL 1801-2-3 Elementary Japanese I, II, III (4 each)
- MLL 2831 Asian Thought (4)
- PHL 1401 Religions of the World (4)
- PHL 2605 Asian Thought (4)
- PHL 3403 Philosophies of the East (4)
Although not part of the courses that count in the minor, Asian courses in Kinesiology and Physical Education are a much appreciated supplement to the Asian Studies program. Yoga, Judo, and Karate combine the wisdom of the body with self-understanding, and enhance learning skills, general alertness, and fitness.

Minor in Filipino/Filipino American Studies
See Filipino/Filipino American Studies chapter.
Biology is concerned with living matter in all its forms, responses, and interactions. It deals with the study of anything which has been or is alive: microbes, all plants, and all animals, including humans. The Science of Biology includes a large number of sub-disciplines such as anatomy, reproduction, development, genetics, ecology, evolution, physiology, systematics, and behavior. A biologist must draw upon a wide variety of academic disciplines to make observations and draw conclusions. A well-trained biologist will have a background in chemistry, mathematics, computer science, statistics, and physics to meet the demands of the present professions.

The Department of Biological Sciences offers a diversified curriculum in the life sciences. Courses are designed for biology majors with specific degree objectives, for students seeking applied technical training, and for non-major students with general interest in biological subjects. Undergraduate programs will prepare students for both graduate work and for a diversity of careers. Biology majors may enter specialized or general careers in life science and find themselves working in laboratories, offices, the field, farms, administrative posts, academic institutions, industry, government agencies, private foundations, botanic gardens and zoos, wildlife preserves, and elsewhere.

Student Learning Outcomes

Students graduating with a B.S. or B.A. in Biological Science from Cal State East Bay will be able to:

1. describe living organisms according to the principles of form and function at the levels of: molecules, cells, tissues, organs, organisms, populations, communities and ecosystems;
2. integrate knowledge of the unifying biological principles that underlie the complexity of the many interactions that all organisms experience; at the cellular level this includes the genetic code that specifies a cell's complex biochemistry; at the organismal level this includes the communication between cells within organs, and among organs within an organ system; at the population level this includes the dynamic interactions among organisms and their environment;
3. apply methods of scientific inquiry—specifically, students will be able to formulate testable hypotheses; to effectively collect, analyze, and present data; and to evaluate scientific approaches in the context of current biological literature.

Career Possibilities

- Administrator
- Biotechnologist
• Botanist
• Cell Biologist
• Consultant
• Dentist
• Ecologist
• Entomologist
• Environmentalist
• Genetic Engineer
• Physiologist
• Geneticist
• Health Scientist
• Lab Assistant
• Marine Biologist
• Medical Doctor
• Medical Technologist
• Pharmacologist
• Physical Therapist
• Population Biologist
• Researcher
• Teacher
• Space Biologist
• Technical Sales
• Technical Writer
• Toxicologist
• Veterinarian
• Zoologist

Features

Classes are offered on the Hayward campus in well-equipped facilities, at the Moss Landing Marine Laboratories located on Monterey Bay, and at a number of field locations throughout the San Francisco Bay Area, including the South San Francisco Bay National Wildlife Refuge Field Station, and the Garin Reserve adjacent to campus.

A program in Biomedical Laboratory Sciences is offered to qualify students for California hospital traineeships which lead to state licensure as medical technologists.

Preparation

A student who has successfully completed an advanced placement course in biology in high school and has earned a score of "3," "4" or "5" on the Advanced Placement Examination will be granted 9 units of credit in place of BIOL 1001-2 and 2040 or, if student is a Biology Major, 10 units in place of BIOL 1401 and 1403. No Advanced Placement credit is given for BIOL 1402.

Prerequisite courses for all Biology courses must be passed with a grade of "C-" or better. All requests for Grade Forgiveness are subject to space availability, with priority given to newly enrolled students.

Major Requirements (B.S.)

The B.S. degree should be considered by students anticipating careers in biology or the health sciences that require graduate school, professional school, or specialized training programs such as biotechnology and medical technology. All students wishing to enter medicine, dentistry, veterinary medicine, or biomedical laboratory positions should obtain a Bachelor of Science degree. Students wishing to teach in secondary schools may want to consider the B.A. degree. The B.S. degree requires a minimum of 180 units; 187 units with the Forensic Science Option.

Note: Requirements are subject to change, so consult your advisor in the Department of Biological Sciences for clarification and interpretation of your major requirements. Because the upper division requirements of the B.S. degree are not large, students also need to carefully track their progress toward the 60 upper division units required for graduation.

For the B.S. degree, students must select one of the following options:

Biology (General) Option (101 units)

The General option in Biological Science provides a broad background in the basic sciences and in biology. It may be completed in as few as 101 units, allowing graduation with a total of 180 units minimum.

I. Physical Sciences and Mathematics (47 units)

• CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
• CHEM 2301, 2302 Survey of Organic Chemistry (4, 4) (CHEM 3301, 3302, 3303 may be substituted, but only 8 units apply to major.)
• CHEM 3400 Introductory Biochemistry (4) or CHEM 4411 General Biochemistry (4)
• MATH 1300 Trigonometry and Analytic Geometry (4)
• MATH 1304 Calculus I (4)
  (Students should take the most advanced course for which they are qualified. Biologists continuing on to graduate work should complete MATH 1305 as a minimum.)
• STAT 3031 Statistical Methods in Biology (4)
• PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)

II. Biological Sciences (37 units)
- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- BIOL 3110 Principles of Ecology (4)
- BIOL 3121 Principles of Genetics (5)
- BIOL 3122 Principles of Developmental Genetic Analysis (4)
- BIOL 3130 Principles of Evolutionary Biology (4)
- BIOL 3151 Principles of Animal Physiology (5)

### III. Advanced Biological Science Electives (17 units)
Upper division electives in biological science.
(May include up to 4 units of approved courses in sciences other than Biology and pertinent to the student's area of special interest. The approved courses are CHEM 4412 and GEOL 3400; other courses subject to approval by petitioning the department prior to registration.)

### Cell and Molecular Biology Option (106 units)

#### I. Physical Sciences and Mathematics (58 units)
- CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
- CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)
- CHEM 4411, 4412 General Biochemistry (4, 4)
- MATH 1300 Trigonometry and Analytic Geometry (4)
  or MATH 1304 Calculus I (4)
  (Students should take the most advanced course for which they are qualified. Biologists continuing on to graduate work should complete MATH 1305 as a minimum.)
- PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)
- STAT 3031 Statistical Methods in Biology (4)

#### II. Biological Sciences (29 units)
- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- BIOL 3121 Principles of Genetics (5)
- BIOL 3122 Principles of Developmental Genetic Analysis (4)
- BIOL 3151 Principles of Animal Physiology (5)

### III. Concentration Required Courses (7 units)
- BIOL 4455 Molecular Cell Biology (4)
- BIOL 4456 Molecular Techniques (3)

### IV. Concentration Electives (12 units)
A minimum of 12 units must be selected from the following:
- BIOL 3405 Microbiology (6)
- BIOL 4430 Immunology (4)
- BIOL 4431 Immunology Laboratory (2)
- BIOL 4450 Cell Culture Techniques (4)
- BIOL 4465 PCR, DNA Sequencing and Fragment Analysis (4)
- BIOL 4490 Bioinformatics (4)
- CHEM 4430 General Biochemistry Laboratory (4)

### Ecology and Conservation Biology Option (101-108 units)

#### I. Physical Sciences and Mathematics (40-47 units)
- CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
- CHEM 2301, 2302 Survey of Organic Chemistry (4, 4)
  or CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)
- CHEM 3400 Introductory Biochemistry (4)
  or CHEM 4411 General Biochemistry (4)
- MATH 1304 Calculus I (4)
- PHYS 1700 Elementary Physics (4) and PHYS 1780 Elementary Physics Laboratory (1) (PHYS 2701, 2702, and 2703 series {4, 4, 4,} may be substituted but only 5 of 12 units will apply to major.)
- STAT 3031 Statistical Methods in Biology (4)

#### II. Biological Sciences (37 units)
- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- BIOL 3110 Principles of Ecology (4)
- BIOL 3121 Principles of Genetics (5)
- BIOL 3130 Principles of Evolutionary Biology (4)
- BIOL 3151 Principles of Animal Physiology (5)
- BIOL 4351 Biological Conservation (4)

#### III. Concentration Courses (24 units)
**Ecology Courses**
Select at least one course (minimum 4 units) from the following:
- BIOL 4175 Population Biology (4)
- BIOL 4516 Environmental Animal Physiology (4)
- BIOL 4530 Ecological Methods (4)
Organismal/Systematics Courses
Select at least 20 units from the following (can include one course from the "Ecology Courses" listed above):

- BIOL 3215 Marine Biology (4)
- BIOL 3216 Freshwater Environments (4)
- BIOL 3122 Principles of Developmental Genetic Analysis (4)
- BIOL 3405 Microbiology (6)
- BIOL 3441 Biomedical Parasitology (4)
- BIOL 4200 Plant Taxonomy (4)
- BIOL 4340 Environmental Microbiology (4) (prerequisite BIOL 3405)
- BIOL 4565 Ornithology (4)
- 4BIOL 583 Vertebrate Biology (4)
- BIOL/GEOG 4130 Biogeography (4)
- ENVT 3400 Environmental Resource Analysis (4)
- ENVT 4100 Environmental Impact Analysis (4)
- M SC 4570 Ichthyology (4)

Forensic Science Option (119 units)
Completion of the Forensic Science Option also qualifies the student to receive a minor in Chemistry which consists of 38 units of coursework included in the option.

I. Physical Sciences and Mathematics (63 units)
- CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
- CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)
- CHEM 2200 Quantitative Analysis (5)
- CHEM 3200 Bioanalytical and Forensic Instrumentation (4)
- CHEM 3400 Introductory Biochemistry (4)
- MATH 1300 Trigonometry and Analytic Geometry (4)
  or MATH 1304 Calculus I (4)
- PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)
- STAT 3031 Statistical Methods in Biology (4)

II. Biological Sciences (33 units)
- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- BIOL 2010 Human Physiology and Anatomy I (5)
- BIOL 3121 Principles of Genetics (5)
- BIOL 3430 Hematology (4)
- BIOL 4485 PCR, DNA Sequencing and Fragment Analysis (4)

III. Criminal Justice (11 units)
- BIOL 4830 Seminar in Forensic Research (1)
- CHEM 4830 Seminar in Forensic Research (1)
- CRJA 4830 Seminar in Forensic Research (1)
- CRJA 2200 Basic Criminal Investigation (4)
- CRJA 3800 Comparative Evidence and Its Evaluation (4)

IV. Concentration Electives (12 units)
Select at least two courses (minimum 8 units) from the following:
- BIOL 2020 Human Physiology and Anatomy II (5)
- BIOL 3405 Microbiology (6)
- BIOL 4160 Medical Physiology (4)
- BIOL 4490 Bioinformatics (4)

Select at least one course (minimum 4 units) from the following:
- CRJA 3400 Advanced Criminal Investigation (4)
- CRJA 3500 Criminal Identification (4)
- CRJA 4124 Sex Crime Investigation (4)

Microbiology/Biomedical Laboratory Sciences Option (105 units)
The Microbiology/Biomedical Laboratory Sciences option leading to a B.S. degree in Biological Science prepares students for further training after graduation in State approved hospital laboratories as required for State licensure of Medical Technologists. Traineeships are available to qualified graduates in laboratories throughout California. Trainee positions are highly competitive. This option is recommended for students contemplating work in public health, industrial microbiology, quality control, research, and graduate work in related fields.

I. Physical Sciences and Mathematics Core (58 units)
- CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
- CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)
- CHEM 4411, 4412 General Biochemistry (4, 4)
- MATH 1304 Calculus I (4)
- STAT 3031 Statistical Methods in Biology (4)
- PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)

II. Biological Sciences Core (31 units)
BIOL 1401 Molecular and Cellular Biology (5)
BIOL 1402 Plant Biology (5)
BIOL 1403 Animal Biology (5)
BIOL 3121 Principles of Genetics (5)
BIOL 3151 Principles of Animal Physiology (5)
BIOL 3405 Microbiology (6)

III. Microbiology/Biomedical Laboratory Sciences Core (Minimum of 16 units from the list below)
- BIOL 3430 Hematology (4)
- BIOL 3441 Biomedical Parasitology (4)
- BIOL 4142 Microbial Symbioses (4)
- BIOL 4143 Molecular Microbiology (4)
- BIOL 4340 Environmental Microbiology (4)
- BIOL 4405 Microbial Physiology and Biochemistry (4)
- BIOL 4413 Medical Microbiology (6)
- BIOL 4430 Immunology (4)
- BIOL 4435 Water Quality and Human Health (4)
- BIOL 4441 Principles of Virology (4)

Physiology Option (99-107 units)
I. Physical Sciences and Mathematics (47-54 units)
- CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
- CHEM 2301, 2302 Survey of Organic Chemistry (4, 4)
  or CHEM 3301, 3302, 3303 Organic Chemistry (5, 5, 5)
- CHEM 3400 Introductory Biochemistry (4)
  or CHEM 4411 General Biochemistry (4)
- MATH 1304 Calculus I (4)
- PHYS 2701, 2702, 2703 Introductory Physics (4, 4, 4)
- STAT 3031 Statistical Methods in Biology (4)

II. Biological Sciences (29 units)
- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- BIOL 3110 Principles of Ecology (4)
  or BIOL 3130 Principles of Evolutionary Biology (4)
- BIOL 3121 Principles of Genetics (5)
- BIOL 3151 Principles of Animal Physiology (5)

III. Concentration Courses (16 units) Select a minimum of four courses (16 units) from the following:
- BIOL 4150 Mammalian Physiology (4)
- BIOL 4160 Medical Physiology (4)
- BIOL 4500 Quantitative Methods in Physiology (2)
- BIOL 4504 Comparative Physiology (4)
- BIOL 4505 General Endocrinology (4)
- BIOL 4506 Animal Physiology Laboratory (4)
- BIOL 4510 Neurobiology (4)
- BIOL 4516 Environmental Animal Physiology (4)
- CHEM 4460 Major Organ Biochemistry (prerequisite CHEM 4413) (3)

IV. Upper Division Electives (7-8 units)
Select at least two additional courses from the previous list or any other upper division biology course applicable to the B.S. degree, for a minimum of 99 units.

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Major Requirements (B.A.)

The Bachelor of Arts major program should be considered by students wishing broad experience in biology as well as specialized course work tailored to their special interests. Students planning careers in education, biological interpretative work, natural history programs, health-related vocations, or seeking generalized biological training may find this program most adaptable to their needs. However, the B.A. degree major in many cases will not provide the required courses for admission to graduate or professional schools. The major consists of a minimum of 98 units without an option; the B.A. degree requires a minimum of 180 units. With the Biology Education Option, the major consists of 90 units; the B.A. degree requires a minimum of 180 units.

I. Physical Sciences and Mathematics (21-39 units)
- CHEM 1601 (or 1605), 1602 Basic Chemistry for the Health Sciences
  or CHEM 1101-2-3 General Chemistry and CHEM 2301-2 Survey of Organic Chemistry (12-23)
- MATH 1130 College Algebra or MATH 1300 Trigonometry and Analytic Geometry
  or MATH 1304 Calculus I
  or STAT 3031 Statistical Methods in Biology (4)
- PHYS 1700 Elementary Physics and PHYS 1780 Elementary Physics Laboratory
  or PHYS 2701-2-3 Introductory Physics (5-12)

II. Biological Sciences (28-29 units)
- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- BIOL 3121 Principles of Genetics (5)

Two courses (8-9 units) selected from:
- BIOL 3110 Principles of Ecology
- BIOL 3122 Principles of Developmental Genetic Analysis
- BIOL 3130 Principles of Evolutionary Biology
- BIOL 3151 Principles of Animal Physiology

### III. Electives (30-49 units)
Any upper division biology course except BIOL 3032. BIOL 2010 (or 2011) and 2020 may also be used.

#### Biology Education Option (90 units)

I. Physical Sciences and Mathematics (41 units)
   A. Chemistry (23 units)
      - CHEM 1101 General Chemistry (5)
      - CHEM 1102 General Chemistry (5)
      - CHEM 1103 General Chemistry (5)
      - CHEM 2301 Organic Chemistry (4)
      - CHEM 2302 Organic Chemistry (4)
   B. Physics (5 units)
      - PHYS 1700 Elementary Physics (4)
      - PHYS 1780 Elementary Physics Lab (1)
   C. Mathematics (8 units)
      - MATH 1304 Calculus I (4)
      - STAT 3031 Statistical Methods in Biology (4)
   D. Earth Science (5 units)
      - GEOL 1000 Earth Systems Science (5)
      - or GEOL 1001 Introduction to the Earth Sciences (4) and GEOL 1002 Earth Sciences Laboratory (1)

II. Biological Sciences (42 units)
   A. Lower Division (20 units)
      - BIOL 1401 Molecular and Cellular Biology (5)
      - BIOL 1402 Plant Biology (5)
      - BIOL 1403 Animal Biology (5)
      - BIOL 2025 Introduction to Microbiology (5)
   B. Upper Division (22 units)
      - BIOL 3110 Principles of Ecology (4)
      - BIOL 3121 Principles of Genetics (5)
      - BIOL 3122 Principles of Developmental Genetic Analysis (4)
      - BIOL 3130 Principles of Evolutionary Biology (4)
      - BIOL 3151 Principles of Animal Physiology (5)

III. Teacher Education (7 units)
   - PHIL 3335 Science, Technology and Values (4)
   - TED 3001 Exploring Education (3)

### Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

### Minor Requirements
The minor program is designed to provide students in other majors the opportunity to broaden their experience and understanding of the biological sciences, and it may expand their educational and employment opportunities. The minor consists of 35-37 units.

- CHEM 1100 Introduction to College Chemistry (5)
  or CHEM 1601 Basic Chemistry for the Health Sciences (or 1605) (4)
- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- BIOL 3020 Genetics, Evolution and Humanity (4)
  or BIOL 3121 Principles of Genetics (5)
- Upper division Biology electives (12) [can include BIOL 2010 (or 2011) or BIOL 2020]

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A Certificate in Pre-Physical Therapy can be earned in conjunction with either degree in biological sciences. The requirements can be found in the section on Preprofessional Programs.

### Undergraduate Courses

The course prefix for the following courses is BIOL.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</table>
| 1000          | Basic Concepts in Biology (5)  
Plants, animals and microorganisms and the modern biological concepts that apply to their structure and function on cellular, organismal, population, and ecosystem levels. Special emphasis on humans and their relationships with other living things. Not for biology major or minor credit. Four hrs. lect., 3 hrs. lab. |
| 1001          | Introduction to Biology (4)  
Plants, animals and microorganisms and the modern biological concepts that apply to their structure and function on cellular, organismal, population, and ecosystem levels. Special emphasis on humans and their relationships with other living things. Recommended: concurrent enrollment in lab, BIOL 1002. Not open to students with credit for BIOL 1005 or 1007. Not for biology major or minor credit. |
| 1002          | Introduction to Biology Lab (1)  
Laboratory exposure to biological phenomena including microscope activities of cells, osmosis, diffusion, human nutrition, human genetics, plant growth, classification of plants and animals, fertilization and development, natural selection simulation, field ecology and ecosystems. Prerequisite/co-requisite: prior or concurrent enrollment in BIOL 1001 (or one of 1005, or 1007) or equivalent. Not open to students with credit for BIOL 1004, or 2005. Not for biology major or minor credit. Two hrs. lab activity. |
| 1005          | How Things Work: The Human Body (4)  
A conceptual look at how important systems work, what they mean in an everyday way, and how they all fit together in one working unit...the human body. Not open to students with credit for BIOL 1001 or 1007. Not for biology major or minor credit. |
| 1007          | Human Biology (4)  
Human organisms, with emphasis placed on human structure and function; examination of relationships with the environment, including plants, animals, and microorganisms. Not open to students with credit for BIOL 1001 or 1005. Not for biology major or minor credit. |
| 1020          | Ecology and the Environment (4)  
Introduction to ecology of individuals, populations, communities, and ecosystems; interactions of organisms with their environment. Case studies of environmental issues that impact the ecology of organisms. |
| 1401          | Molecular and Cellular Biology (5)  
Introduction to molecular and cellular biology with emphasis on the integration of structure and function in the living cell as a biological system; cellular aspects of inheritance. Four hrs. lect., 3 hrs. lab. |
| 1402          | Plant Biology (5)  
An introduction to plant biology with emphasis on relationship of structure and function in plants, principles of classification and ecology, and a brief survey of the plant kingdom, including evolutionary relationships. Prerequisite: BIOL 1401 or consent of instructor. Four hrs. lect., 3 hrs. lab. |
| 1403          | Animal Biology (5)  
An introduction to animal biology with emphasis on relationship of structure and function in animals, principles of classification and ecology, and a brief survey of the animal kingdom, including evolutionary relationships. Prerequisites: BIOL 1401 and 1402 or consent of instructor. Four hrs. lect., 3 hrs. lab. |
| 2010          | Human Physiology and Anatomy I (5)  
An integrated approach to essential concepts of human physiology and anatomy. Analysis of skeletal, muscular, sensorimotor, cardiovascular and respiratory systems. Recommended preparation: high school biology and chemistry, or BIOL 1001 (or 1005) and BIOL 1002; CHEM 1100 or 1601 (or 1605). Not open to students with credit for BIOL 2011. Not for Biology B.S. degree credit. Four hrs. lect., 3 hrs. lab. |
| 2011          | Anatomy and Physiology I (5)  
An integrated approach to health through the essential concepts of human physiology and anatomy. Analysis of skeletal, muscular, sensorimotor, cardiovascular and respiratory systems. Recommended preparation: high school biology and chemistry, or BIOL 1001 (or 1005) and BIOL 1002 (or 1005); CHEM 1100 or 1601 (or 1605). Not open to students with credit for BIOL 2011. Not for Biology B.S. degree credit. Four hrs. lect., 3 hrs. lab. |
| 2020          | Human Physiology and Anatomy II (5)  
An integrated analysis of physiology and anatomy of the integumentary, autonomic and central nervous, endocrine, urinary and reproductive systems and of the blood and special senses. Coverage of histology, metabolism, and thermoregulation. Prerequisites: BIOL 2010 (or 2011) or equivalent and CHEM 1100 (may be taken concurrently). Not open to students with credit for BIOL 2021. Not for Biology B.S. degree credit. Four hrs. lect., 3 hrs. lab. |
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Prerequisites</th>
<th>Notes</th>
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<tbody>
<tr>
<td>2021</td>
<td>Anatomy and Physiology II (5)</td>
<td>An integrated analysis of human physiology and anatomy of the integumentary, autonomic and central nervous, endocrine, urinary and reproductive systems and of the blood and special senses. Coverage of histology, metabolism, and thermoregulation. Co-requisites: BIOL 2010 (or 2011) or equivalent and CHEM 1100 (may be taken concurrently), or consent of instructor. Not open to students with credit for BIOL 2020. Not for Biology B.S. degree credit. Four hrs. lect., 3 hrs. lab.</td>
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<tr>
<td>2025</td>
<td>Introduction to Microbiology (5)</td>
<td>The nature and activities of beneficial and harmful microorganisms; their role in health, disease, and their natural environment. Laboratory practice in handling microorganisms, including identification and culture techniques. Designed for health sciences and nursing. Prerequisites: BIOL 1001 (1005) and BIOL 1002 or permission of instructor; CHEM 1601 (or 1605) or equivalent. Not open to students with credit for BIOL 3005, 3405 or 4010. Not for Biology B.S. degree credit. Three hrs. lect, 6 hrs. lab.</td>
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<tr>
<td>3001</td>
<td>Concepts in Molecular Biology (4)</td>
<td>Principles and practice of molecular biology with emphasis on the human genome, human genetic diseases, and human evolution. Prerequisite: BIOL 1001 (or 1005) or 1401 or equivalent. Not for Biology B.S. degree credit. Two hrs. lect., 6 hrs. lab.</td>
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<tr>
<td>3020</td>
<td>Genetics, Evolution, and Humanity (4)</td>
<td>Principles of genetics, their application to human problems, and to theories of evolutionary change, including the evolution of humans. Prerequisites: BIOL 1001 (or 1005) and BIOL 1002 or equivalent. Not open to students with credit for BIOL 3121. Not for Biology B.S. degree credit.</td>
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<tr>
<td>3065</td>
<td>Humans and Sex (4)</td>
<td>The genetic, hormonal and behavioral basis of sexuality in humans from conception to adulthood; developmental and behavioral variation; enhancement and suppression of fertility; genetic screening. Not for Biology B.S. degree credit.</td>
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<tr>
<td>3070</td>
<td>Human Nutrition (4)</td>
<td>Key nutrients, including carbohydrates, lipids, proteins, vitamins, and minerals. Role each plays in human metabolism. Current controversies in nutritional information, including food supplements and claims for prevention of disease. Prerequisite: BIOL 1001 (or 1005) or equivalent. Not for Biology B.S. degree credit.</td>
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<tr>
<td>3100</td>
<td>Principles of Ecology (4)</td>
<td>Relationships within and among populations in various environments; introduction to population dynamics and species interactions in natural communities and ecosystems; applications to human welfare. Prerequisites: BIOL 1402, 1403, MATH 1130 and STAT 3031 or equivalent; BIOL 1401 recommended. Three hrs. lect., 3 hrs. lab, and/or field trips.</td>
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<tr>
<td>3121</td>
<td>Principles of Genetics (5)</td>
<td>Comprehensive analysis of gene structure, function, and inheritance incorporating classical and molecular-based approaches. Emphasis on the experimental evidence that has led to our current understanding of the nature of the gene, drawing on examples from bacteria to humans. Prerequisites: BIOL 1401, 1402, 1403 and CHEM 1101 or equivalents. Not open to students with credit for BIOL 3020. Four hrs. lect., 1 hr. disc.</td>
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<tr>
<td>3122</td>
<td>Principles of Developmental Genetic Analysis (4)</td>
<td>Continuation of BIOL 3121. Aspects of development from subcellular to organismal phenomena, emphasizing current theories, techniques, and applications of cell biology and molecular genetics. Prerequisites: BIOL 1401, 1402, 1403, 3121; CHEM 1101-2-3 or 1601 (or 1605), 1602 or equivalents.</td>
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<tr>
<td>3130</td>
<td>Principles of Evolutionary Biology (4)</td>
<td>A survey of the basic processes involved in the evolution of natural populations. The systematic and phylogenetic implications of evolutionary change will also be considered. Prerequisites: BIOL 1401, 1402, 1403 and 3121 or equivalents.</td>
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<tr>
<td>3151</td>
<td>Principles of Animal Physiology (5)</td>
<td>Integrative approach to the principles involved in animal physiology. Covers the nervous, sensory, osmoregulatory, muscular, respiratory, circulatory, digestive, and endocrine systems facilitated by an understanding of the cellular processes governing these systems. Strongly recommended prerequisite: STAT 3031 or equivalent. Prerequisites: BIOL 1401, 1402, 1403; CHEM 1101-2-3 or equivalent. Not open to students with credit or BIOL 3150. Four hrs. lect., 3 hrs. lab.</td>
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<tr>
<td>3215</td>
<td>Marine Biology (4)</td>
<td>The general biology of marine organisms with emphasis on the ecology of local marine communities. Prerequisites: BIOL 1402 and 1403 or equivalents. Not open to students with credit for BIOL 3115 or MSC 4103. Two hrs. lect., 6 hrs. lab.</td>
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<tr>
<td>3216</td>
<td>Freshwater Environments (4)</td>
<td>Comparisons of freshwater physical and biological environments with their major communities of plants and animals. Prerequisite: upper-division standing in biology, environmental science, environmental studies, or geology major, or consent of instructor. Not open to students with credit for BIOL 3116. Three hrs. lect., 3 hrs. lab.</td>
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<tr>
<td>3405</td>
<td>Microbiology (6)</td>
<td>The general biology of major groups of microorganisms, including their morphology, metabolism, reproduction, genetics and ecology. Prerequisites: BIOL 1401, 1402, 1403 or equivalents, organic chemistry. Not open to students with credit for BIOL 2025, 3005 or 4010. Four hrs. lect., 6 hrs. lab.</td>
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<tr>
<td>3410</td>
<td>Epidemiology (4)</td>
<td>Study of the distribution and determinants of disease and health-related aspects in populations. Application of results to the prevention and control of health problems. Prerequisites: BIOL 1000 and 2025 or permission of instructor.</td>
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<td>Course Code</td>
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<tr>
<td>3430</td>
<td>Hematology</td>
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<td></td>
<td>Morphology, function and composition of human blood fluids and cells, both normal and diseased. Prerequisites: BIOL 1401 and 1403 and organic chemistry. Two hrs. lect., 6 hrs. lab.</td>
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<tr>
<td>3441</td>
<td>Biomedical Parasitology</td>
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<td>Study of protozoa and metazoan important in the pathogenesis of human diseases, including pathology, immunology and epidemiology, identification and life cycles. Prerequisites: BIOL 1401 and 1403 or equivalent. Not open to those with credit for BIOL 3440.</td>
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<tr>
<td>3800</td>
<td>Achievements of Women in Science</td>
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<td>Historical and contemporary analysis of the achievements, lives, influences, experiences, attitudes, and status of women in science and mathematics with special emphasis on the role of education, mentoring, family, and the media. Cross-listed with CHEM, GEOL, and PHYS 3800. Not for major or minor credit in Biology, Chemistry, Geology, or Physics.</td>
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<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
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<td></td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity. No more than a total of four units of BIOL 3898, 4900, 6898, or 6900 or a combination thereof, may be applied to the Biology majors. May be repeated for credit, for a maximum of 8 units, but only up to four units are applicable to the biology major.</td>
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<tr>
<td>3999</td>
<td>Issues in Biological Science (2-4)</td>
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<td></td>
<td>Readings, discussion, and research on contemporary and/or significant issues in biological science. May be repeated for credit when content varies, for a maximum of 8 units.</td>
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<tr>
<td>4010</td>
<td>Microbes and Humanity</td>
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<td>Historical review of microbial organisms, their role in causing disease and beneficial contribution to humanity. Prerequisites: BIOL 1001 (or 1005), and BIOL 1002 or equivalents. Does not meet Nursing prerequisite requirements. For Liberal Studies, Biology majors (B.A. only), and General Education (Lifelong Understanding). Not open to students with credit for BIOL 2025, 3005 or 3405.</td>
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<tr>
<td>4130</td>
<td>Biogeography (4)</td>
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<td>Study of the distribution of organisms; the evolution and ecology of biomes, their biotas, dispersal, change in range, phylogenetic systematics and islands. Prerequisites: BIOL 1402 and 1403 or equivalents. Two hrs. lect., 6 hrs. lab., field trips.</td>
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<tr>
<td>4142</td>
<td>Microbial Symbioses</td>
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<td>Addresses symbiotic associations relevant to human medicine, veterinary sciences and agriculture, with emphasis on interactions that lead to the establishment of stable symbioses of plants, animals, and other microorganisms. Prerequisite: BIOL 3405 or consent of instructor. A-F grading only.</td>
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<tr>
<td>4143</td>
<td>Molecular Microbiology</td>
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<td>Provides a deeper understanding of the molecular principles underlying basic microbial processes, such as regulation of growth, molecular determination of virulence, and phylogenetic relationships between microorganisms. Prerequisite: BIOL 3121, 3405 or consent of instructor. A-F grading only.</td>
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<tr>
<td>4150</td>
<td>Mammalian Physiology</td>
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<td>Mammalian physiological systems with particular emphasis on homeostasis and mechanisms of muscle, cardiovascular, respiratory, renal, and acid-base physiology. Prerequisites: BIOL 2010 (or 2011) and 2020, or BIOL 3151; or equivalents.</td>
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<tr>
<td>4160</td>
<td>Medical Physiology</td>
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<td>Particular emphasis on human pathophysiology, its etiology, diagnosis, and the physiologic rationale for treatment of multiple system disease, entities, and/or failures. Prerequisites: BIOL 2010 (or 2011) and 2020, or BIOL 3151 or equivalent, or consent of instructor.</td>
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<tr>
<td>4175</td>
<td>Population Biology</td>
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<td>Study of the sizes and distributions of plant and animal populations. Processes affecting reproduction, age structure, density and population fluctuations. Recommended for students interested in ecology, conservation, or environmental biology. Prerequisites: BIOL 3110 or equivalent and statistics or consent of instructor. Three hrs. lect., 3 hrs. lab.</td>
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<tr>
<td>4200</td>
<td>Plant Taxonomy</td>
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<td></td>
<td>Principles of plant taxonomy. Field and laboratory studies of native seed plants. Prerequisites: BIOL 1401, 1402, 1403 or equivalents. Two hrs. lect., 6 hrs. lab., field trips.</td>
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<tr>
<td>4340</td>
<td>Environmental Microbiology</td>
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<td>Key positions that microorganisms occupy in nature and their effects on global ecosystems; includes bioremediation, disease transmission/public health, biogeochemical cycling, plant-animal-insect-microbe interactions. Prerequisite: BIOL 3405.</td>
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<tr>
<td>4351</td>
<td>Biological Conservation</td>
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<td>Principles and theories of conservation biology, including biodiversity, extinction, habitat fragmentation, captive-breeding programs, restoration ecology, and the role of humans in western U.S. Prerequisite: BIOL 1401, 1402, 1403, 3110 or equivalent. Not open to students with credit for BIOL 4350, 6350 or 6351.</td>
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<tr>
<td>4405</td>
<td>Microbial Physiology and Biochemistry</td>
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<td>Emphasis on the study of microbial function and biology required to fully understand microbial growth relevant to medical and economic importance, including the exploitation of microbial processes for biotechnological advancement. Prerequisites: BIOL 3405 and CHEM 3400, or equivalent.</td>
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<td>Course Number</td>
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<td>Description</td>
<td>Prerequisites/Requisites</td>
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<tr>
<td>4413</td>
<td>Medical Microbiology (6)</td>
<td>Introduction to medical microbiology using a system-based approach. Microbial basis of infection, host response, antibiotic resistance, prevention and public health measures. Prerequisite: BIOL 3405 or consent of instructor. Not open to students with credit for BIOL 4411 or 4412. A-F grading only. Four hrs. lect., 6 hrs. lab.</td>
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<tr>
<td>4420</td>
<td>Genetics Laboratory (4)</td>
<td>Introduction to genetic analysis including classical experiments with viruses, bacteria and fruit flies. Implementation of genetic variants in DNA technology. Prerequisites: BIOL 3121 or equivalent. Two hrs. lect, 6 hours lab.</td>
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<td>4430</td>
<td>Neurobiology (4)</td>
<td>The structure and function of the vertebrate and invertebrate nervous system with emphasis on the principles of communication, control, and sensorimotor responses. Survey of concepts of neurochemistry, feedback, bionic models, and higher brain processes.</td>
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<tr>
<td>4431</td>
<td>Immunology Laboratory (2)</td>
<td>Antibody/antigen interactions, T and B cell functions, and the variability in the immune response. Biochemical and recombinant DNA techniques as well as standard immunodiagnostic tests. Prerequisites: BIOL 1401, 1402, 1403, 3121; CHEM 2301-2 or CHEM 3301-2-3.</td>
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<tr>
<td>4435</td>
<td>Water Quality and Human Health (4)</td>
<td>Exploration of the connections between water quality and human health. Topics include the influence of waterborne pathogens on human health, detection of microbes in the environment, transmission and fate of health-related microbes, and water quality regulation. Prerequisite: BIOL 3405 or consent of instructor. A-F grading only.</td>
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<tr>
<td>4441</td>
<td>Principles of Virology (4)</td>
<td>Survey of the DNA and RNA viruses of bacteria, plants and animals. Focus on the molecular mechanisms of infection and replication, including viruses of biomedical importance such as HIV, subviral particles, prions and viroids. Prerequisite: BIOL 3121.</td>
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<td>4450</td>
<td>Cell Culture Techniques (4)</td>
<td>Techniques of in vitro culture of primary and established cell lines of multi-cellular origin. Topics include nutrition, growth, cloning, cell fusion, transformation, preservation, karyotyping, autoradiography, metabolic labeling, quality control applications. Prerequisite: permission of instructor. Two hrs. lect., 6 hrs. lab.</td>
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<tr>
<td>4455</td>
<td>Molecular Cell Biology (4)</td>
<td>In-depth look at molecular aspects of cellular processes; emphasis on experimental evidence of molecular mechanisms responsible for implementation and regulation of gene expression, protein synthesis, membrane transport, intracellular transport, cell signaling, and cell division. Prerequisites: BIOL 3121, 3122; CHEM 3400 or equivalents.</td>
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<tr>
<td>4456</td>
<td>Molecular Techniques (3)</td>
<td>Techniques utilized in contemporary experimental cell biology; laboratory studies designed to mimic, in practical fashion, the usual course a researcher takes in examining an experimental question relevant to cell biology. Study will include a broad range of experimental techniques including: polymerase chain reaction (PCR), recombinant DNA construction, advanced genetic analysis, protein detection, isolation and analysis, and microscopy. Prerequisite/co-requisite: completion of, or concurrent enrollment in BIOL 4455. One hr. lect., 6 hrs. lab.</td>
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<tr>
<td>4485</td>
<td>PCR, DNA Sequencing and Fragment Analysis (4)</td>
<td>Laboratory course covering the theory and applications of PCR, DNA sequencing and Fragment Analysis. Topics include DNA sequencing and sequence analysis, genomic PCR, quantitative PCR, RT-PCR, DNA fingerprinting and an individual project. Prerequisites: BIOL 1401 and 3121 or equivalent. One hr. lect., 9 hours lab.</td>
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<tr>
<td>4490</td>
<td>Bioinformatics (4)</td>
<td>Introduction to Molecular Bioinformatics. Survey of concepts and methods for assembly, comparison, and annotation of DNA sequence data. Analysis of protein structure and function. Phylogenetic analysis, database techniques, and selected molecular biology applications. Prerequisite: BIOL 3121 or equivalent, and consent of instructor. Two hrs. lect., 6 hrs. lab.</td>
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<td>4500</td>
<td>Quantitative Methods in Physiology (2)</td>
<td>Quantitative treatment and analysis of physiological data using modern methods including applied statistics, spread sheets, graphical methods and data presentation. Prerequisites: BIOL 3151, STAT 3031, or consent of instructor. Not open to students with credit for BIOL 6500.</td>
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<tr>
<td>4504</td>
<td>Comparative Physiology (4)</td>
<td>Physiology of metabolic, respiratory, circulatory, excretory, muscle, and nervous systems of vertebrate and invertebrate animals with an emphasis on physiological diversity and adaptation. Prerequisite: BIOL 3151 or consent of instructor. Not open to students with credit for BIOL 6504.</td>
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<tr>
<td>4506</td>
<td>Animal Physiology Laboratory (3)</td>
<td>The examination of regulatory mechanisms of animal organ systems using controlled laboratory experiments, with an emphasis on experimental design and data analysis. May be taken concurrently or following BIOL 4504 (Comparative Physiology) or BIOL 4516 (Environmental Animal Physiology). Prerequisite: BIOL 3151 or equivalent, or consent of instructor. Not open to students with credit for BIOL 6506. One hr. lect., 6 hrs. lab.</td>
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<tr>
<td>4510</td>
<td>Neurobiology (4)</td>
<td>The structure and function of the vertebrate and invertebrate nervous system with emphasis on the principles of communication, control, and sensorimotor responses. Survey of concepts of neurochemistry, feedback, bionic models, and higher brain processes.</td>
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<tr>
<td>4513</td>
<td>Animal Senses (4)</td>
<td>Survey of how animals use remarkable sensory abilities to communicate, navigate, and detect prey, predators and mates. We will focus on extreme and unusual sensory systems such as echolocation, electroreception, and magnetoreception, as well as vision, smell, touch, and hearing. Prerequisite: BIOL 3151 or permission of instructor.</td>
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<tr>
<td>4516</td>
<td>Environmental Animal Physiology (4)</td>
<td>An examination of the physiological adaptations that animals use to cope with their environments, emphasizing the physiological responses of species to extreme environments. Prerequisite: BIOL 3151 or equivalent, or consent of instructor. Not open to students with credit for BIOL 6515.</td>
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<tr>
<td>4517</td>
<td>Environmental Toxicology (4)</td>
<td>Exploration of the physiological effects of exposure to environmental toxicants in animals, from the subcellular to organismal levels. Concepts covered include routes of exposure, modes of action, and metabolism, as well as how toxicants are monitored and regulated. Prerequisite: BIOL 3151, CHEM 4411, or equivalents, or consent of instructor. A-F grading only.</td>
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<tr>
<td>4518</td>
<td>Animal Behavior (4)</td>
<td>Behavior patterns of animals; sensory adaptations, perception, orientation, imprinting instinct and learning, social and reproductive behavior; communication; emphasis on evolutionary relations. Prerequisites: BIOL 1401, 1402, 1403 or equivalents. Three hrs. lect., 3 hrs. lab./field.</td>
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<tr>
<td>4525</td>
<td>Neural Development (4)</td>
<td>Survey of various aspects of vertebrate and invertebrate neural development including neurogenesis, neuron polarity, axon/dendrite guidance, target selection and synapse formation. Prerequisite: BIOL 3121 or consent of instructor. A-F grading only.</td>
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<tr>
<td>4530</td>
<td>Ecological Methods (4)</td>
<td>Methods of design and analysis of ecological studies, including sampling techniques, field and laboratory measurements, and computer-aided data analysis including introductory modeling. Recommended for students interested in advanced study in ecology or conservation or environmental biology. Prerequisites: BIOL 1401, 1402, 1403 or equivalents, and BIOL 3110. Recommended prerequisite: statistics course. Three hrs. lect., 3 hrs. lab/field.</td>
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<tr>
<td>4565</td>
<td>Ornithology (4)</td>
<td>The major adaptations and habits of birds, including sensory and behavioral limitations, flight, migration, nesting, and distributional ecology. Identification and taxonomy with field lab work emphasizing western U.S. forms. Prerequisites: BIOL 1401, 1402, 1403 or equivalents. Two hrs. lect., 6 hrs. lab/field.</td>
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<tr>
<td>4583</td>
<td>Vertebrate Biology (4)</td>
<td>Overview of vertebrate origins, phylogeny, structural and functional adaptations, behavior, and ecology. Prerequisites: BIOL 1401, 1402, 1403. Two hrs. lect., 6 hrs. lab.</td>
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<tr>
<td>4820</td>
<td>Biology Seminar (1)</td>
<td>Guest speakers describe their biological research and develop a dialogue between faculty and students. Prerequisite: one course in biology. Not for credit toward G.E.-Breadth Requirements. May be repeated once for credit, for a maximum of 2 units.</td>
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<td>4830</td>
<td>Seminar in Forensic Research (1)</td>
<td>Seminar on biological aspects of forensic research. Current issues in forensic science based on biological concerns.</td>
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<td>4900</td>
<td>Independent Study (1-4)</td>
<td>Individual projects or limited reading for students competent to assume individual work. Admission requires approval of professor and department chair. May be repeated for credit with consent of instructor, for a maximum of 12 units. No more than a total of 4 units of BIOL 3998, 4900, 6898, or 6900 or a combination thereof, may be applied to the Biology majors.</td>
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**Marine Science Courses**

Offered at Hayward Campus

- BIOL 3215 Marine Biology (4)

Offered at the Moss Landing Marine Laboratories

(See the undergraduate Marine Science chapter for descriptions of the following courses.)

Courses listed under Marine Science at Moss Landing Laboratories are offered on a semester basis in the Fall and Spring. Semester units have been converted to quarter units.

- M SC 4103 Marine Ecology
- M SC 4104 Quantitative Marine Science (6)
- M SC 4105 Marine Science Diving (4.5)
- M SC 4112 Marine Birds and Mammals (6)
- M SC 4113 Marine Ichthyology (6)
- M SC 4124 Marine Invertebrate Zoology I (6)
- M SC 4125 Intertidal Invertebrates of California (4.5)
- M SC 4131 Marine Botany (6)
- M SC 4135 Physiological Ecology of Marine Algae (6)
- M SC 4144 Biological Oceanography (6)
- **M SC 4900** Independent Study (1.5-6)

**Footnotes**

1. Students electing these courses should be aware that they may not be acceptable for admission to graduate and professional schools.
2. Students anticipating careers in quantitative biology should include units in both mathematics and statistics as biology Core electives.
3. In addition to the minimum units required in the Microbiology/Biomedical Laboratory Sciences Core, students who intend to apply for Clinical Laboratory Scientists licensing programs are required to take CHEM 2200 Quantitative Analysis.
4. Required electives for Microbiology/Biomedical Laboratory Sciences Option students who intend to apply for Clinical Laboratory Scientists licensing programs.
Department Information

Departments of Accounting and Finance, Economics, Management, Marketing and Entrepreneurship

College of Business and Economics

Student Service Center: (VBT 129, 510-885-3323)
Email: cbe_ssc@csueastbay.edu
Website: http://www.cbe.csueastbay.edu

Dean: Terri Swartz
Deans Office: Valley Business and Technology Bldg., Rm 447
Phone: (510) 885-3291

Department of Accounting and Finance (VBT 442, 510-885-3397)

Professors Emeriti
Doris G. Duncan, Ph.D. Golden Gate University
Franklin Lowenthal, Ph.D. Stanford University

Professors
Micah Frankel (Chair), Ph.D. University of Arizona
Ching-Lih Jan, Ph.D. University of California, Berkeley
Christopher W. K. Lubwana, Ph.D. Simon Fraser University (Canada)
Nancy R. Mangold, Ph.D. University of California, Berkeley
Gary R. McBride, LL.M. Georgetown University Law Center
Diane Satin, Ph.D. University of California, Berkeley

Associate Professors
Siu-Kuen Scott Fung, D.B.A. Boston University
Y. Robert Lin, Ph.D. University of California, Los Angeles
Fung-Shine Pan, Ph.D. University of California, Berkeley
Tammie X. Simmons-Mosley, Ph.D. University of Wisconsin-Madison

Assistant Professors
Eric Fricke, Ph.D. Pennsylvania State University
M. Sinan Goktan, Ph.D. The University of Texas at Dallas
Szu-Yin (Kathy) Hung, Ph.D. The George Washington University
Wenjiu (Jerry) Liu, Ph.D. University of Wisconsin
Kim Shima, Ph.D. University of Hawai‘i at Manoa
John K. Tan, Ph.D. University of South Florida
Jing-wen Yang, Ph.D. University of Maryland

Department of Economics (VBT 442, 510-885-3265)

See the graduate Economics chapter for a listing of Economics faculty and a description of the Economics major.

Department of Management (VBT 440, 510-885-3307)

Professors Emeriti
Stephen H. Miller, Ph.D. Purdue University

Professors
Xinjian Lu (Chair), Ph.D. University of Waterloo, Canada
Bijan Mashaw, Ph.D. Clemson University
Kenneth Pelkaros, Ph.D. University of Delaware
Zinovy Radovilsky, Ph.D. Scientific Research Institute of Labor (Moscow)
Asha Rao, Ph.D. Temple University
Harry Waters, Jr., Ph.D. University of Oregon

Associate Professors
Jed DeVaro, Ph.D. Stanford University
Hongwei Du, Ph.D. Florida Institute of Technology
Alan P. Goldberg, Ph.D. University of Massachusetts
Sharon Green, Ph.D. University of California, Berkeley
Vishwanath Hegde, Ph.D. University of Pittsburgh
Daniel E. Martin, Ph.D. Howard University
H. Steven Peng, Ph.D. York University (Canada)
Glen Taylor, Ph.D. York University (Canada)
Gregory Theyel, Ph.D. Clark University
Assistant Professors
Ekin Alakent, Ph.D. University of Texas at Dallas
Sandip Basu, Ph.D. University of Washington
Yi. Jiang, Ph.D. Ohio State University
Chongqi Wu, Ph.D. University of Illinois at Urbana-Champaign
Jiming Wu, Ph.D. University of Kentucky

Department of Marketing and Entrepreneurship (VBT 440, 510-885-3326)

Professors
Jagdish Agrawal, Ph.D. State University of New York at Buffalo
C. Joanna Lee (Chair), Ph.D. University of Texas at Austin
Cesar Maloles, Ph.D. City University of New York
Norman Smothers, Ph.D. University of California, Berkeley
Terri Swartz, Ph.D. The Ohio State University
Steve Ugbah, Ph.D. Ohio University

Associate Professors
Stevina Evuleocha, Ph.D. Ohio University
Sweety Law, Ph.D. Ohio State University
Brian McKenzie, Ph.D. University of Victoria (British Columbia)

Assistant Professors
Yi He, Ph.D. University of Hawaii
Lan Wu, Ph.D. Georgia Institute of Technology

Institutes and Centers
Center for Economic Education
Director: Jane E. Lopus

Center for Entrepreneurship
Director: Brian McKenzie

Human Investment Research and Education (HIRE) Center
Director:

Smith Center for Private Enterprise Studies
Director: Stephen Shmanske;
Associate Director: Micah Frankel

Program Description
The College of Business and Economics is committed to providing a broad and flexible professional education. The program offers students the knowledge and skills necessary to understand the changing global business environment and to prepare students for success in their professional careers. Recognizing the importance of ethics in the business community, business ethics is an important component in three of our required core classes.

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. In addition, the program allows students flexibility to customize their program by choosing business elective courses. These electives may be chosen to further strengthen their preparation in their chosen option or to explore other subjects. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

The undergraduate and the graduate programs in Business Administration are accredited by the Association to Advance Collegiate Schools of Business International (AACSB).

Students are encouraged to meet with their faculty advisor to discuss selection of electives. For more information and advising, contact the Business and Economics Student Service Center, VBT 129, (510) 885-3323.

Student Learning Outcomes
Students graduating with a B.S. in Business Administration from Cal State East Bay will have achieved the following:

1. International/Global Perspective. Each student can identify and communicate the variety of risks and opportunities of doing business in a global environment.
2. Ethical Responsibilities in Organizations and Society. Each student can identify and evaluate ethical issues and articulate defensible resolutions for practical situations involving financial issues, human resource management and marketing.
3. Knowledge of Technological and Analytical Tools Necessary for Solving Complex Business Problems. Students have learned how information technology and analytical tools are used to aid decision-making in organizations. They can identify, analyze and solve complex business problems using appropriate technological and analytical tools.
4. Communication Skills and Teamwork. Each student can communicate in a variety of domains that include writing, speaking, listening, reading and the impact of technology in a variety of communication situations.
5. General Management Knowledge. Each student will demonstrate knowledge in the following management areas including computer information systems, accounting, marketing, economics, finance, management, and management science.

Major Requirements (B.S.)
Expiration of Courses
Major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses
Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 101-109 units; the B.S. degree requires a total of 180-181 units. The Business Administration major consists of (1) lower division core requirements, (2) upper division core requirements, and (3) requirements in one option or in an approved minor from outside the College of Business and Economics.

I. Lower Division (29-33 units)
- ACCT 2251 Introduction to Financial Accounting (4)
- ACCT 2253 Introduction to Managerial Accounting (4)
- ACCT 2701 Legal Environment of Business (4)
- ECON 2301 Principles of Microeconomics (4)
- ECON 2302 Principles of Macroeconomics (4)
- MATH 1810 Mathematics for Business and Social Science (4)
- STAT 2010 Elements of Statistics for Business and Economics (5)
- 1000 Elements of Probability and Statistics (5)
- PIC Software Proficiency (students lacking this proficiency may take ITM 1270) (0-4)

Notes on Mathematics Courses: Students who plan to pursue one of the more quantitative business options (e.g., Operations and Enterprise Resource Management) or graduate programs are encouraged to enroll in MATH 1304, Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (52-56 units)
All lower division core requirements must be completed prior to enrollment in upper division courses.
- ITM 3060 Information Technology Management (4)
- ECON 3107 Global Economic Analysis (4)
- or MGMT 4670 Multinational Business (4)
- ECON 3551 Managerial Economics and Business Strategy (4)
- FIN 3300 Financial Management (4)
- MGMT 3100 Decision Science (4)
- MGMT 3614 Organizational Behavior (4)
- MGMT 3620 Introduction to Production and Operations Management (4)
- MGMT 4500 Business, Government and Society (4)
- or ACCT 4911 Ethics, Regulation and Financial Statement Fraud (accounting students only) (4)
- MGMT 4650 Seminar in Strategic Business Management (4)
- MKTG 3401 Marketing Principles (4)
- Twelve (12) units of any upper division ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG course that is not counted toward the student's primary option if that primary option is ACCT (excluding 3898, 4900; ACCT 3228, 4227, 4915; ECON 3000);
- or Sixteen (16) units of any upper division ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG course that is not counted toward the student's primary option if that primary option is any other than ACCT (excluding 3898, 4900; ACCT 3228, 4227, 4915; ECON 3000)

III. Option Requirements (16-28 units)
If you wish to have more than one option recorded on your permanent record, the pattern of courses taken to fulfill each additional option must differ by at least 3 courses and 12 units from any other option or combination of options certified for you. You cannot count business electives towards classes required in your primary option, but you can count such classes towards a secondary option or minor. For example, if your primary option is accounting, then your business electives cannot be used to satisfy the 28 units in the Accounting option. The business electives for an accounting student can count towards another option. For example, a student whose primary option is Accounting, could take three marketing classes as business electives (the maximum number of business electives for Accounting option students), and would be able to count those classes towards a Marketing option.

As with a secondary option, business electives can be used to satisfy a minor. Courses within a minor must differ from the courses within the student’s primary option by 18 units, except the Economics minor. Students can use ECON 3006 to fulfill their core and Economics minor requirements and use business electives and/or required option courses to complete the minor. See the Economics chapter in the undergraduate section of this catalog for further details.

Business Administration majors may substitute an approved minor from outside the College of Business and Economics for the option requirement. Interdisciplinary minors (Advertising, Communication Skills, and International Business) are acceptable. Students choosing to do an approved minor in place of an option must complete all of the lower division and upper division Business Administration core courses plus the additional units necessary for their minor. The program content of their minor must be approved by the CBE minor advisor and an advisor from the area of the minor. The degree for students taking this route will be a B.S. degree, Major in Business Administration, Minor in ____. Note again that, where otherwise appropriate, units used to satisfy the requirements of a minor can also meet general education and/or major requirements. Courses taken for a minor that are to be used in place of an option must be taken for a letter grade.

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Options
A student cannot have both an option and a minor in the same area.

Accounting (28 units)
All business operations are involved with decision-making, and accounting is an integral part of this process. The task of accounting is to
identify, measure, and communicate relevant information for decision-making purposes. The demand for well-trained accountants remains high. The program is rigorous, challenging, interesting, and rewarding. The program will prepare students for employment in private, public, and non-profit accounting, and will aid in the preparation for all professional examinations.

Required courses:
- ACCT 3170 or 4704
- ACCT 3211, 3212
- 3213; ACCT 3220 or 4220
- two ACCT 3000-4000 level courses beyond those listed as required (excluding ACCT 3228, 3898, 4227, 4900, 4915)

Notes:
- If ACCT 3170 is selected as a required course, ACCT 4704 may be selected as an elective. If ACCT 4704 is selected as a required course, ACCT 3170 may be selected as an elective.
- If ACCT 3220 is selected as a required course, ACCT 4220 may be selected as an elective. If ACCT 4220 is selected as a required course, ACCT 3220 may be selected as an elective.
- ACCT 4223 may be used as a substitute for one of the following: ACCT 2701 or 4500. If substituted, select three electives from the remaining accounting electives available.

Advertising and Public Relations (16 units)
Students completing this option acquire the knowledge and skills necessary for effective management of an organization's advertising and public relations program. Advertising and Public Relations is recognized as an important element of a firm's integrated marketing communication. This option leads to a variety of careers in advertising, such as account management, advertising creation, media planning, advertising research, and corporate advertising and promotion management.

Required courses: MKTG 3410, 3425, and choice of two from MKTG 3445, 3485, 4400, 4412, 4415, 4417, 4450, 4470, 4485. Strongly recommended: PSYC 1000 (or one of 1001 or 1005). PSYC courses may also satisfy lower division G.E. requirements. A student cannot receive both an Advertising and Public Relations option and an Advertising minor.

Business Economics (16 units)
The Business Economics option concentrates on the economic aspects of business decision-making. The coursework emphasizes forecasting product demand, setting product prices, estimating production costs, calculating firm profitability, evaluating investment alternatives, and assessing the effects of government regulations and industry competition on firm performance and strategy. Students selecting this option will be prepared for careers in banking, finance, economic forecasting, and business economics. The option also provides an excellent background for graduate training in economics and business. Students in this option are encouraged to take ECON 3107 instead of MGMT 4670, and STAT 2010 instead of STAT 1000 as part of their required core coursework.

Required courses: ECON 3310 and 3005 or 3006 and two additional upper division economics courses (excluding ECON 3000). A student may not apply both 3005 and 3006 to this option. A student cannot receive credit for both an Economics major or minor and the Business Economics option.

Corporate Management (16 units)
In a dynamic, changing, and uncertain environment, a broad managerial education can provide career advantages in terms of flexibility and breadth of knowledge. This option enables students to customize, within guidelines, their managerial education based upon their interests, strengths, and perceived career opportunities.

Required courses: MGMT/ENGR 3600. Select three additional courses from the following seven academic categories with no more than one course per category. Note that some of these courses may require additional prerequisites; if these prerequisites are from the same academic discipline, they may not be counted as electives in this option.

1. Accounting
   - ACCT 3170
   - ACCT 3230

2. Economics
   - ECON 3000
   - ECON 3006
   - ECON 3170
   - ECON 3190
   - ECON 3200
   - ECON 3310
   - ECON 3370
   - ECON 3375
   - ECON 3500
   - ECON 3680
   - ENGR/ECON 3140

3. Entrepreneurship
   - ENTR 4485
   - ENTR 4490

4. Finance
   - FIN 3360
   - FIN 3400
   - FIN 4300
   - FIN 4310
   - FIN 4320
   - FIN 4370
   - FIN 4375
5. Information Technology Management
   Any ITM prefix course, except ITM 1270 or 3060;

6. Management
   - MGMT 3110
   - MGMT 3610
   - MGMT 3612
   - MGMT 3616
   - MGMT 3624
   - MGMT 3626
   - MGMT 3645
   - MGMT 4640
   - PHIL/MGMT 3560

7. Marketing
   - MKTG 3410
   - MKTG 3415
   - MKTG 3425
   - MKTG 3440
   - MKTG 3445
   - MKTG 4412
   - MKTG 4415
   - MKTG 4417
   - MKTG 4450
   - MKTG 4470
   - MKTG 4585

Entrepreneurship (16 units)
This option concentrates on the management of existing small and medium size businesses, the procedures for establishing new ventures either as new firms or as subdivisions of existing firms, and the problems confronting new venture managers during the critical start-up period. The option provides an excellent preparation to those who plan to have their own firm, to be employed by small or medium size business firms with high growth potential, or to work in positions within financial institutions, government agencies, management consulting firms, and marketing agencies that deal primarily with the needs and problems of small to medium sized firms.

Required courses:
- ENTR 4485
- ENTR 4490

Choice of two from:
- ACCT 3230
- FIN 4415
- ITM 4278
- MGMT 3610
- MKTG 3415
- MKTG 3425
- MKTG 3440
- MKTG 3445
- MKTG 4415
- MKTG 4417
- MKTG 4450
- MKTG 4470
- MKTG 4585

or one course selected in consultation, and with the approval of an Entrepreneurship option advisor

Students wishing to take ITM 4278 must fulfill the ITM 3060 prerequisite. Students wishing to take FIN 4415 must fulfill the FIN 4410 prerequisite. Note that FIN 4410 requires FIN 3400 as a prerequisite. Strongly recommended: PSYC 1000 (or one of 1001 or 1005). PSYC courses may also satisfy lower division G.E. requirements.

Finance (16 units)
The Finance option is designed to prepare students for careers in the financial management of business firms, banks, related financial institutions, and in investment banking, investment management, and securities brokerage. In addition to the development of a theoretical basis of decision-making, coursework emphasizes experience in solving the problems that face the financial manager.

Required courses:
- FIN 4300

choice of three from:
- ECON 3310
- FIN 3360
- FIN 3400
- FIN 4310
- FIN 4320
- FIN 4370
- FIN 4375
- FIN 4410
- FIN 4415
- FIN 4470

Students wishing to take FIN 4370 must fulfill the MATH 1305 prerequisite.

Human Resources Management (16 units)
The Human Resources Management option concentrates on the management of people in the workplace. It prepares students for careers in human resources management and labor relations in business, government, and labor organizations. Those with a strong interest in human behavior will find this to be an appropriate area of study. Coursework is concerned with management of human resources, including selection, training, evaluation, and compensation of employees.

**Required courses:**
- MGMT 3610
- choice of three from:
  - MGMT 3612
  - MGMT 3616
  - MGMT 3680
  - MGMT 4615
  - MGMT 4618
  - MGMT 4675
  - PHIL/MGMT 3560

**Recommended courses:** MGMT/ENGR 3600, STAT 3100. Students considering this option are strongly advised to take PSYC 1000, which may also satisfy lower division GE requirements.

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**Information Technology Management (ITM) (16 units)**

This option prepares the graduate for management positions in the IT (information technology) industry. With the emergence of technology such as the internet, ERP systems and wireless communication, IT applications are now a fundamental and organic component of every business discipline. This option gives you a comprehensive overview of these applications in different functional areas of an organization such as accounting/finance, marketing, manufacturing, distribution and human resource management. As a graduate of this option you would have a solid understanding of IT applications in different areas of business, how they embed within their respective business processes and add value to them.

**Required courses:**
- ITM 4271
- ITM 4272
- choice of two from:
  - ITM 4273
  - ITM 4277
  - ITM 4278

(May include up to 4 units from ACCT 3170, ACCT 4704, MGMT 3110, MGMT 3612 (Information Systems in HRM Topics only), MGMT 3645, MGMT 4640, MKTG 3485, MKTG 4585).

A student cannot receive credit for both an ITM option and minor.

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**Marketing Management (16 units)**

The task of marketing is to help an organization create and maintain satisfying relationships with its important customers. Students completing the Marketing Management option acquire the knowledge and skills necessary to understand the needs of customers and the market, to design effective marketing strategies, and to successfully implement and monitor the chosen marketing program. Global competition coupled with technological advances forces both for-profit and nonprofit organizations to revitalize the marketing function for their success. The growing awareness of the importance of marketing has led to an increase in the number of marketing positions available. The option prepares students for careers in advertising and promotion, brand and product management, sales and sales management, retailing, non-profit, international marketing, marketing research, new product planning, marketing logistics and public relations.

**Required courses:**
- MKTG 3445
- MKTG 4400
- choice of two from:
  - MKTG 3410
  - MKTG 3425
  - MKTG 3440
  - MKTG 4417
  - MKTG 4450
  - MKTG 4470
  - MKTG 4585

**Strongly recommended:** PSYC 1000 (or one of 1001 or 1005). PSYC courses may also satisfy lower division G.E. requirements. A student cannot receive credit for both a Marketing Management option and a Marketing minor.

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**Operations and Enterprise Resource Management (16 units)**

This option is designed to prepare students to manage the operational activities of a firm in an integrated manner with other functional areas. Subjects covered include project management, service operations, enterprise resource planning and control, logistics and quality management. Throughout, an emphasis is placed on the role of information technology, especially enterprise software, in managing the resources of an organization.

**Required courses:**
- MGMT 4640
- choice of three from:
  - MGMT 3110
  - MGMT 3624
  - MGMT 3626
  - MGMT 3645
  - MGMT 4625
(May include up to 4 units from ACCT 3170, 3230; FIN 4300; any ITM prefix course, except ITM 1270 and 3060; MKTG 4400; MGMT 3610.)

Any student wishing to take MKTG 4400, must fulfill the prerequisite of "any one course from MKTG 3410, 3425, 3440, 3445, and 4417."

**Real Estate Management (16 units)**

This option prepares students for careers in environmental and urban planning, lending and title institutions, investment, site location, real estate management, and real estate brokerage. The program is available to students with no prior work in real estate and, in addition, enables students of real estate in the community colleges to finish a baccalaureate major in Business Administration while building on the real estate courses offered by the community college. This is an advanced, comprehensive program in real estate management combined with a solid core of related business administration courses.

**Required courses:**

- FIN 3400
- and choice of three from:
  - ECON 3500
  - FIN 4410
  - FIN 4415
  - FIN 4470

**Supply Chain Management (16 units)**

In recent years, the purchasing and materials function has undergone a complete re-evaluation by business management. It is now a function with the responsibility and the authority for making major contributions to profits. The option is designed to prepare students to purchase and manage the material resources of a firm effectively.

**Required courses:**

- MGMT 3624
- choice of 12 units from:
  - MGMT 3626
  - MGMT 3645
  - MGMT 4625
  - MGMT 4640
  - MGMT/ENGR 3110

(May include up to four units from ACCT 3170; FIN 4300; any ITM prefix course, except ITM 1270 and 3060; MKTG 4400; MGMT 4675.)

**Substitution of Minor for Option**

From Outside the College of Business and Economics

In place of the option requirement, a student may choose to complete a minor from outside the College of Business and Economics. A second major from outside the College and interdisciplinary minors such as Advertising, Communication Skills, and International Business may also be substituted for the option requirement. The Minor program must be approved by both the Minor Advisor of the College of Business and Economics and an advisor from the area of the minor. Note that courses taken for a minor that is to be used in lieu of an option must be taken for letter grades rather than CR/NC.

The number of units required for the Business Administration major under this alternative is the combined 103 units of the lower division and upper division Business Administration cores for the non-ITM Option student plus the additional units necessary for the chosen, approved minor. Note that, where otherwise appropriate, units used to satisfy the requirements of a minor can also meet general education and/or major requirements.

The degree conferred under this alternative will be "Bachelor of Science, Major in Business Administration, Minor in . . . ."

**Sample Programs**

In order to ensure that prerequisite courses are taken in the proper sequence, contact the CBE Student Service Center at [http://www.cbe.csueastbay.edu/ssc/index.html](http://www.cbe.csueastbay.edu/ssc/index.html). This site provides information on sample programs and curriculum planning flow charts for each option in the business administration major.

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**Minors**

**Subject Area Business Administration**

At least 12 units of the coursework must be completed at Cal State East Bay in order for the student to receive recognition of the minor on the Cal State East Bay transcript or diploma. A student cannot have both an option and a minor in the same area.

**Minor in Advertising**

See the undergraduate Advertising chapter for a description of this minor.

**Minor in Business Administration (36-44 units)**

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

**Complete Alternative A or B**

**Alternative A**

1. **Lower Division (16 units)**
   - ACCT 2251 Introduction to Financial Accounting (4)
   - ACCT 2701 Legal Environment of Business (4)
   - ECON 2301 Principles of Microeconomics (4)
   - ECON 2302 Principles of Macroeconomics (4)
II. Upper Division (20 units)

Students must have completed the prerequisites listed in the course description for any course they select to satisfy the following requirements.

- MGMT 3600 Theories of Management (4)
- MKTG 3401 Marketing Management (4)
- ITM 3060 Information Technology Management (4)
- Any two additional upper division Business Administration courses in the core (8)

Note: Business Administration courses are those with Accounting, Entrepreneurship, Finance, Information Technology Management, Management and Marketing prefixes. Courses in Economics cannot be included in these 8 units.

Alternative B

I. Lower Division (16 units)

- ACCT 2251 Introduction to Financial Accounting (4)
- ACCT 2701 Legal Environment of Business (4)
- CS 1160 Introduction to Computer Science I or any other introductory course in computer programming (4)
- ECON 2301 Principles of Macroeconomics (4)

II. Upper Division (28 units)

Students must have completed the prerequisites listed in the course description for any course they select to satisfy the following requirements.

- ACCT 2253 Introduction to Managerial Accounting or ENGR 3090 Industrial Costs and Controls (4)
- Four (4) units of ITM upper division coursework, with consent of department
- ENGR 3140 Engineering Economics or ECON 2302 Principles of Macroeconomics (4)
- MGMT 3614 Organizational Behavior (4)
- MKTG 3401 Marketing Principles (4)
- Any two additional upper division Business Administration courses in the core as listed below (8):
  - ECON 3107 Global Economic Analysis (4) or MGMT 4670 Multinational Business (4)
  - ECON 3551 Managerial Economics and Business Strategy (4)
  - FIN 3300 Financial Management (4)
  - MGMT 4500 Business, Government, and Society (4)
  - or ACCT 4911 Ethics, Regulation and Financial Statement Fraud (4)
  - MKTG 3495 Business Communication (4)

Students completing the Business Administration Minor with the intention of possibly changing to the Business Administration Major, completing a second bachelor's degree in Business Administration, or entering a master's program in Business Administration are urged to discuss their selection of courses for the Business Administration Minor with an advisor in the College of Business and Economics. Such students, for example, should choose Alternative A to satisfy their lower division requirements. Engineering students completing this minor with the intention of entering the M.B.A. program should consult an advisor in the Department of Engineering.

Minor in Information Technology Management (20-24 units)

The minor in Information Technology Management is offered through the Department of Management. Business Administration majors who want to have this minor listed on their transcripts must have at least 18 units in the minor that are not counted in the major requirements.

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

I. Lower Division (0-4 units)

- P/C Software Proficiency (students lacking this proficiency must take ITM 1270)

II. Upper Division (20 units)

- ITM 3060 Information Technology Management (4)
- 16 units from courses permitted in the BS/BA Option in Information Technology Management

Minor in International Business

See the undergraduate International Business chapter for a description of this minor.

Minor in Marketing (32 units)

The minor in Marketing is offered through the Department of Marketing and Entrepreneurship. Business Administration majors who want to have this minor listed on their transcripts must have at least 18 units in the minor that are not counted in the major requirements.

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

I. Lower Division (12 units)

- ACCT 2251 Introduction to Financial Accounting (4)
- ECON 2301 Principles of Macroeconomics (4)
- ENTR 2485 Establishing and Managing a Small Business (4)

II. Upper Division (20 units)

- MGMT 3614 Organizational Behavior (4)
- MKTG 3401 Marketing Principles (4)
- Three additional Marketing courses excluding ENTR 4485, 4490 and MKTG 3495 (12)
Students interested in secondary teaching should recognize that the College does not offer a subject matter preparation program in Business Education. Furthermore, although students can complete the undergraduate Business Administration major on this campus and then enroll in the fifth year credential program elsewhere, the College does not offer all of the coursework considered prerequisite to some credential programs.

### Undergraduate Courses

**Note:** To be eligible for credit for any 3898 Cooperative Education course, registration for the course must be completed in advance of the activity (past work experience does not apply, and the activity must be a substantive expansion of the student's exposure to date.)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</table>
| 2251          | Introduction to Financial Accounting (4)  
Introduction to financial accounting concepts and procedures; interpretation and analysis of financial statements for operating, investing, and financing decision-making. Prerequisites: Satisfactory completion of Entry-level Mathematics (ELM) requirement, and either credit for intermediate algebra or a satisfactory score on the Mathematics Diagnostic Test (MDT). Not open to students with credit for ACCT 2210. |
| 2253          | Introduction to Managerial Accounting (4)  
Use of accounting information for managerial decision-making in planning and control including cost classification; estimation and analysis; job-order, variable, and activity-based costing; cost-volume-profit and relevant cost analysis; profit planning; capital budgeting. Prerequisite: ACCT 2251. |
| 2701          | Legal Environment of Business (4)  
Legal and institutional setting in which business operates; the nature, sources, functions, and processes of law and legal reasoning relating to contracts, agency, torts, partnerships, and corporations; government regulations and administrative law as they apply to the legal environment. |
| 3170          | Accounting Information Systems I (4)  
The roles and responsibilities of business information systems within the IT function. Concepts covered: hardware, software, operating systems, database management systems, systems operation, disaster recovery, business continuity, electronic commerce and information systems controls. Prerequisite: satisfying PC proficiency. |
| 3210          | Cash Management (4)  
Principles of cash management in a corporate finance setting. Focus on how financial accounting, the collection cycle, electronic commerce, information technology, investment strategies, debt, and international business affect cash management. Yield curve analysis. Prerequisites: ACCT 2251 and FIN 3300. |
| 3211          | Intermediate Financial Accounting I (4)  
First course in the intermediate financial accounting sequence. Topics include: conceptual framework for financial reporting and standard setting, accounting process, financial statements, and accounting for revenue recognition, cash, receivables and inventories. Prerequisite: ACCT 2251 or equivalent, with "C-" grade or better. |
| 3212          | Intermediate Financial Accounting II (4)  
Second course in the intermediate financial accounting sequence. Topics include: time value of money, operational assets, current liabilities and contingencies, bonds and long-term notes, investments, derivatives and leases. Prerequisite: ACCT 3211 or equivalent, with "C-" grade or better. |
| 3213          | Intermediate Financial Accounting III (4)  
Third course in the intermediate financial accounting sequence. Topics include: income taxes, pension, shareholders' equity, employee compensation, earnings per share, accounting changes and error corrections, and statement of cash flows. Prerequisite: ACCT 3212 or equivalent, with "C-" grade or better. |
| 3220          | Tax Accounting: Fundamentals and Individuals (4)  
Subject matter focuses on tax fundamentals such as gross income, losses, property transactions, tax accounting and individual taxation. Skills developed include tax research, analysis and technical writing in the context of the course subject matter. |
Classroom training in the preparation of federal and state income tax returns. Students are assigned individual state and federal tax returns to prepare and file for clients from the community. Prerequisite: permission of instructor. May be repeated once for credit. |
| 3230          | Cost Management (4)  
Fundamental concepts of cost accounting, new developments in cost management, and costing information for managerial decisions. Topics include various costing systems, activity-based costing, cost allocation, pricing decisions, transfer pricing, and performance measurements. Prerequisites: ACCT 2253 and MGMT 3100 or ECON 4000. |
| 3280          | Accounting for Governmental and Nonprofit Entities (4)  
Accounting standards for governmental and nonprofit entities. Emphasizes special characteristics of governmental accounting: modified accrual basis, fund-based accounting, budget-based reporting, and government reporting model. Unique issues for private-sector nonprofit organizations, particularly health care providers or colleges and universities. Prerequisite: ACCT 2251. |
| 3898          | Cooperative Education (1-4)  
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 4 units. Units not applicable to options or minor. CR/NC grading only. |
| 3999          | Issues in Accounting (4)  
Readings, discussion, and research on contemporary and/or significant issues in accounting. May be repeated for credit when content varies, for a maximum of 8 units. |
| 4170          | Accounting Information Systems II (4)  
Topics include concepts of REA data modeling in the design of an accounting information system, advanced Access queries for financial and managerial decision-making, introduction to the Oracle database for financial reporting, fundamentals of global financial reporting language XBRL. Prerequisite: ACCT 3170. A-F grading only. |
### Economics

See undergraduate Economics chapter for list of Economics courses.

#### Entrepreneurship (Course prefix: ENTR)

<table>
<thead>
<tr>
<th>Course Number</th>
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</table>
| 2485          | Establishing and Managing a Small Business (4)  
The fundamentals of establishing and operating a small business. Prerequisite: ACCT 2251 or consent of instructor. Not open for credit to majors in Business Administration or Economics. |
| 4485          | Establishing New Enterprises (4)  
In-depth coverage of procedures for setting up new businesses and of problems confronting managers during the critical start-up period; extensive use of cases, situational analyses, and projects. Recommended: ITM 3080. Prerequisites: ACCT 2253; FIN 3300; MKTG 3401. |
| 4490          | Practicum in Small Business Management (4)  
Student consultant teams assisting small businesses; responsibilities include reviewing performance; isolating problems; researching solutions; presenting oral analysis to class; preparing written reports for business. Recommended: ITM 3060. Prerequisites: ACCT 2253; ECON 3551; FIN 3300; MKTG 3401. Prerequisite/concurrent: MKTG 3495. |
### Finance (Course prefix: FIN)

<table>
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<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>3000</td>
<td>Personal Finance (4) Overview of financial literacy and personal financial planning for households. Topics include: financial plans, budgets and statements; managing basic assets, credit, insurance needs; managing personal investments; international effects and causes of personal financial planning on the United States investment patterns.</td>
</tr>
<tr>
<td>3300</td>
<td>Financial Management (4) Theory and practices that underlie the financial manager’s decision-making process. Capital investment analysis, capital structure, dividend policy, risk and return, and market valuation of the firm. Prerequisites: ACCT 2251; ECON 2301 and 2302; STAT 2010 or 1000.</td>
</tr>
<tr>
<td>3360</td>
<td>Management of Risk and Insurance (4) Techniques of risk management and uses of insurance contracts for individual and business insurance planning. The operation and regulation of the insurance industry and contract provisions for property, liability, life, annuity, health, and disability insurance. Prerequisite: junior standing.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4) Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units. Units not applicable to options or minor. CR/NC grading only.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Finance (4) Readings, discussion, and research on contemporary and/or significant issues in finance. Prerequisite: consent of instructor. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4300</td>
<td>Corporate Finance (4) In-depth study of theories and practices of corporate financial management. Emphasis on corporate financial decision-making, including capital budgeting, capital structure, dividend policy, risk management, and international financial management. Prerequisite: FIN 3300.</td>
</tr>
<tr>
<td>4310</td>
<td>Investment Analysis (4) Introduction to security analysis and portfolio management. Prerequisite: FIN 3300.</td>
</tr>
<tr>
<td>4315</td>
<td>Derivatives Markets (4) Financial derivatives markets. Option markets, valuation, and strategies; futures markets and strategies; risk management and hedging; swaps and financial engineering. Prerequisites: FIN 3300, MATH 1810; senior or graduate standing, and consent of instructor. A-F grading only.</td>
</tr>
<tr>
<td>4320</td>
<td>Problems in Corporate Finance (4) Studies of specific problems in corporate financial policy formulation and decision-making using financial data bases and models. Prerequisite: FIN 3300.</td>
</tr>
<tr>
<td>4370</td>
<td>Seminar in Financial Theory (4) Selected topics dealing with recent developments in financial theory and management practice. Prerequisites: FIN 3300; senior or graduate standing, and consent of instructor. May be repeated once for credit with the approval of the department, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4375</td>
<td>International Business Finance (4) Financial aspects of international business including international financial markets, foreign exchange management, foreign investment, multinational capital budgeting, working capital management, financing of international business including import-export financing and international banking. Prerequisite: FIN 3300. Not open to those with credit for FIN 6375.</td>
</tr>
<tr>
<td>4410</td>
<td>Financing Real Estate Operations (4) Study of equity, mortgage, lease, sale and lease-back, and innovative methods of financing, including related tax effects. Prerequisites: FIN 3300 and either FIN 3400 or graduate standing.</td>
</tr>
<tr>
<td>4415</td>
<td>Real Estate Investment Analysis and Advanced Appraisal (4) Applications of investment analysis and appraisal theory to real estate management. Prerequisite: FIN 4410.</td>
</tr>
<tr>
<td>4470</td>
<td>Seminar in Advanced Topics in Real Estate (4) Advanced topics in real estate, including contemporary environmental, sociological, financial, economic, and political issues. Prerequisites: two of ECON 3500 and FIN 4410 and 4415.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4) May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
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</table>

### Information Technology Management (Course prefix: ITM)

<table>
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<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>1270</td>
<td>Fundamentals of Information Systems and Applications (4) Fundamentals of Computer Information Systems and applications. Focus on the basics of hardware/software, and applications. Topics include computer components, management information systems, e-commerce, security, ethics, and the role of computers in society. Hands-on applications include using spreadsheet, database, wordprocessing, and web applications. Satisfies PC software proficiency requirement. Not open to students with credit for CS 1020.</td>
</tr>
</tbody>
</table>
| 3060          | Information Technology Management (4) Effective and efficient uses of computers in business as a problem solving tool. Topics include computer systems components,
<table>
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<tr>
<th>Course Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Information Technology Management (4)</td>
</tr>
<tr>
<td>4271</td>
<td>Database Management and Applications (4)</td>
</tr>
<tr>
<td>4272</td>
<td>Information Technology and Telecommunication Systems (4)</td>
</tr>
<tr>
<td>4273</td>
<td>Business Intelligence Systems (4)</td>
</tr>
<tr>
<td>4277</td>
<td>Information Systems Development and Management (4)</td>
</tr>
<tr>
<td>4278</td>
<td>E-Business Systems Development (4)</td>
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<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>

**Management (Course prefix: MGMT)**

<table>
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<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>3100</td>
<td>Decision Science (4)</td>
</tr>
<tr>
<td>3110</td>
<td>Project Management (4)</td>
</tr>
<tr>
<td>3560</td>
<td>Business and Professional Ethics (4)</td>
</tr>
<tr>
<td>3600</td>
<td>Theories of Management (4)</td>
</tr>
<tr>
<td>3610</td>
<td>Human Resources Management (4)</td>
</tr>
<tr>
<td>3612</td>
<td>Topics in Human Resources Management and/or Industrial Relations (4)</td>
</tr>
<tr>
<td>3614</td>
<td>Organizational Behavior (4)</td>
</tr>
<tr>
<td>3616</td>
<td>Human Resources Evaluation (4)</td>
</tr>
</tbody>
</table>
| 3620          | Introduction to Production and Operations Management (4) | Production and operations management in manufacturing and service enterprises; topics include: MRP II, inventory control, quality control, production planning/forecasting, productivity studies, international operations, equipment replacement, and quantitative
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3624</td>
<td>Supply Management and E-Procurement (4)</td>
</tr>
<tr>
<td></td>
<td>Current advances in managing supply of goods and services, including strategic sourcing, computerized purchasing, online auction, contract design, enterprise software application, quality control, cost analysis, price negotiation, inventory management, and capital equipment procurement.</td>
</tr>
<tr>
<td>3626</td>
<td>Management for Quality Improvement (4)</td>
</tr>
<tr>
<td></td>
<td>Elements of total quality management, methods of and techniques in quality assurance, statistical process control and acceptance sampling. Emphasis on decision making and applications in quality improvement. Prerequisite: STAT 2010 or 1000.</td>
</tr>
<tr>
<td>3645</td>
<td>Global Supply Chain Management (4)</td>
</tr>
<tr>
<td></td>
<td>An integrative perspective of managing supply chain in a global environment. Topics include designing supply chain network, strategic planning, supply chain coordination, resource allocation, capacity design, transportation management, material handling, and information technology in supply chain. Prerequisite: MKTG 3620.</td>
</tr>
<tr>
<td>3680</td>
<td>Employee and Labor Relations (4)</td>
</tr>
<tr>
<td></td>
<td>The study of employee-management relations in non-union and union environments, including: the labor force; employment law, regulation and compliance; employee rights; performance management, discipline, and termination; alternative dispute resolution and grievance procedures; collective bargaining and preventative employee relations. Prerequisites: FIN 3300; senior or graduate standing; and consent of instructor.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
</tr>
<tr>
<td></td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity. May be repeated for credit, for up to a maximum of 8 units. Units not applicable to options or minor. CR/NC grading only.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Management (4)</td>
</tr>
<tr>
<td></td>
<td>Readings, discussion, and research on contemporary and/or significant issues in management. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4500</td>
<td>Business, Government, and Society (4)</td>
</tr>
<tr>
<td></td>
<td>The relationships between business managers and the social, economic, and political environment within which they operate; business ethics, antitrust policy, social responsibility, and consumer protection. Prerequisite: senior standing or permission of instructor.</td>
</tr>
<tr>
<td>4615</td>
<td>Compensation and Benefits (4)</td>
</tr>
<tr>
<td></td>
<td>Wage and salary administration, wage and hour law, and employee benefits. Prerequisite: MGMT 3610.</td>
</tr>
<tr>
<td>4618</td>
<td>Human Resources Training and Development (4)</td>
</tr>
<tr>
<td></td>
<td>Systems approach to human resources training and development. Topics include needs assessments, learning theories, instructional design, training methodologies, presentation techniques, and program evaluation. Students will design and present sample training and development programs. Prerequisites: MGMT 3610 and 3614.</td>
</tr>
<tr>
<td>4625</td>
<td>Service Operations Management (4)</td>
</tr>
<tr>
<td></td>
<td>Methods and practice for operating service business effectively and efficiently. Topics include new service development, analysis of service process, customer relationship management, waiting time reduction, yield management, enterprise resource planning, and information technology in service operations. Prerequisite: MGMT 3620.</td>
</tr>
<tr>
<td>4640</td>
<td>Enterprise Resource Management (4)</td>
</tr>
<tr>
<td></td>
<td>Concepts and applications of managing available resources, such as material, labor, capacity, and financial capital, in both service and manufacturing organizations. Emphasis on developing practical skills in internet era and utilizing modern business software in enterprise resource planning and e-commerce. Prerequisite: MGMT 3620.</td>
</tr>
<tr>
<td>4650</td>
<td>Seminar in Strategic Business Management (4)</td>
</tr>
<tr>
<td></td>
<td>Capstone course that takes a top management perspective and integrates the functional disciplines into decision-making, Emphasis on evaluating complex business situations, integrating theory with practice, and presenting comprehensive strategic business plans. Prerequisites: FIN 3300; MGMT 3100; MGMT 4500 or ACCT 4911; MKTG 3401.</td>
</tr>
<tr>
<td>4670</td>
<td>Multinational Business (4)</td>
</tr>
<tr>
<td></td>
<td>A study of the leading technical, environmental, and management features peculiar to the operation of the U.S. firms in foreign countries. Prerequisite: senior standing or permission of instructor.</td>
</tr>
<tr>
<td>4675</td>
<td>International Human Resources Management (4)</td>
</tr>
<tr>
<td></td>
<td>Seminar on how multinational firms use human resource functions, such as recruitment and selection, training and development, performance appraisal, compensation and benefits, to compete internationally. Focus on international and comparative labor-management relations and management of multicultural teams. Prerequisites: MGMT 3610 and 3614.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
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<tr>
<td></td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
</tbody>
</table>

**Marketing (Course prefix: MKTG)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>3401</td>
<td>Marketing Principles (4)</td>
</tr>
<tr>
<td></td>
<td>Introduction to marketing principles, functions, and methods in creating and delivering value; evolution of the modern marketing system; market structure; internal and external variables in the design of marketing program including product, price, promotion, and distribution; social, legal, and ethical responsibilities of marketing. Recommended prerequisite or co-requisite: ECON 2301.</td>
</tr>
<tr>
<td>3410</td>
<td>Advertising Management (4)</td>
</tr>
<tr>
<td></td>
<td>Managing the firm's advertising function: defining the market; integrating advertising into the marketing mix; setting goals and budgets; selecting media; planning, scheduling, and controlling advertising campaigns; research applications; societal evaluation and regulation. Prerequisite or concurrent: MKTG 3401.</td>
</tr>
<tr>
<td>3415</td>
<td>Personal Selling (4)</td>
</tr>
<tr>
<td></td>
<td>Methods and computer software applications. Prerequisites: ECON 3551 and MGMT 3100.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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</tr>
<tr>
<td>3425</td>
<td>Promotion (4)</td>
</tr>
<tr>
<td>3440</td>
<td>Products and Pricing (4)</td>
</tr>
<tr>
<td>3445</td>
<td>Marketing Research (4)</td>
</tr>
<tr>
<td>3485</td>
<td>Database Marketing (4)</td>
</tr>
<tr>
<td>3495</td>
<td>Business Communication (4)</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Marketing and Entrepreneurship (4)</td>
</tr>
<tr>
<td>4400</td>
<td>Integrated Marketing Management (4)</td>
</tr>
<tr>
<td>4412</td>
<td>Media Planning (4)</td>
</tr>
<tr>
<td>4415</td>
<td>Corporate Communications (4)</td>
</tr>
<tr>
<td>4417</td>
<td>Consumer Behavior (4)</td>
</tr>
<tr>
<td>4450</td>
<td>Marketing Seminar (4)</td>
</tr>
<tr>
<td>4470</td>
<td>International Marketing (4)</td>
</tr>
<tr>
<td>4585</td>
<td>E-Commerce Marketing (4)</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>

**Footnote**

1. Not more than 12 units of VITA coursework can be counted toward undergraduate degree requirements.
California Studies

Department Information

Department of Geography and Environmental Studies
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3193

Professors
Karina Garbesi (Geography and Environmental Studies), Ph.D. University of California, Berkeley
David Larson (Geography and Environmental Studies), Ph.D. University of California, Berkeley
Scott Stine (Geography and Environmental Studies), Ph.D. University of California, Berkeley

Associate Professors
Robert A. Phelps (History), Ph.D. University of California, Riverside

Assistant Professors
Linda Ivey (History), Ph.D. Georgetown University
Khal Schneider (History), Ph.D. University of California, Berkeley

Director: David Larson

Program Description

The minor in California Studies offers coursework on California with emphasis on the state's history, government, geography, ethnic diversity, and environment. Such a focus on California's diverse and sizable population, economic development, and geo-social regions will better prepare graduates to address the ongoing economic, demographic, and social evolution challenging California and its political institutions.

Minor in California Studies

The minor consists of 28-29 units. At least 18 of these units must be taken outside the student's major.

I. Core Requirements (20-21 units)
   1. HIST 3500 History of California (4)
   2. POSE 3120 State and Local Politics and Government (4)
      or POSE 3150 Politics of California (4)
   3. GEOG 3505 Geography of California (4)
   4. One course (4 units) on the California ethnic experience, selected from:
      - ANTH 3505 Indians of California (4)
      - COMM 3400 The Ethnic Media in America (4)
      - ES 3210 Latinas in the United States (4)
      - ES 3805 Latin American Immigration (4)
      - ES 4290 Latino Politics and Public Policy (4)
      - HIST 3515 The Mexican American and the American Southwest (4)
      - SOC 3416 Sociology of the Mexican-American Family (4)
   5. One course (4-5 units) on California environmental and scientific perspectives, selected from:
      - ANTH 4240 Data Analysis in Archeology (4)
      - ANTH 4250 Field Course in Archeology (5)
      - BIOL 3210 Woody Plants of California (4)
      - BIOL 4200 Plant Taxonomy (4)
      - GEOG 4350 Water Resources and Management (4)
      - HIST 3505 California Environmental History (4)
      - POSE 4171 Public Policy and the Environment (4)

II. Electives (8 units)
   Any course listed above which was not taken in the core, or any course from the following list:
   - ECON 3500 Regional and Urban Economics: Survey (4)
   - GEOG 3400 Field Geography of the San Francisco Bay Region (4)
   - GEOL 3100 Geology of the Western National Parks (4)
   - HIST 3503 History of the San Francisco Bay Area (4)
   - HIST 4032 Introduction to Public History (4)
   - POSE 3113 Political Internship (4)
   - POSE 3130 Urban Politics (4)
POSC 3310 Political Parties and Campaigning (4)

Any Cooperative Education course with substantial content unique to California and approved in advance by a California Studies advisor.

Footnote

1. Has a prerequisite which is not applicable to the program.
Chemistry

- Department Information
- Program Description
- Career Opportunities
- Features
- Preparation and Prerequisites
- Major Requirements (B.S.)
- Major Requirements (B.A.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses
- Errata (Note: Please see Errata page for corrections to this content.)

Department Information

Department of Chemistry and Biochemistry
College of Science
Office: North Science 431 Phone: (510) 885-3452
Website: http://www.sci.csueastbay.edu/chemistry/

Professors
Michael K. K. Leung, Ph.D. University of Southern California

Associate Professors
Michael Grozich, Ph.D. Northwestern University
Chul-Hyun Kim, Ph.D. University of California, Berkeley
Anne T. Kotchevar, Ph.D. University of Minnesota, Minneapolis
Ann A. McPartland (Chair), Ph.D. Purdue University

Assistant Professors
Danika LeDuc, Ph.D. University of California, Berkeley
Anthony Masiello, Ph.D. Oregon State University
Monika Sommerhalter, Ph.D. Technische Universität Berlin

Mission Statement

It is imperative that CSUEB chemistry students possess sufficient theoretical and practical training in chemistry and biochemistry so that they will be able to assume the significant technical responsibilities required by the chemical and biotechnology industries that will employ them. It is important that our students are not only trained in chemistry (and biochemistry), but will become respected scientists and research technicians. In addition, it is important that students planning for entrance into Ph.D. programs or pre-professional programs are more than adequately prepared for entrance into these programs.

Student Learning Outcomes

Students graduating with a B.S. or B.A. in Chemistry from Cal State East Bay will have: 1) a strong background in lower-division advanced mathematics (calculus), physics, and computers; 2) a solid background in the various areas of chemistry: general chemistry, analytical (quantitative) chemistry, organic chemistry, and physical chemistry; they should have a mastery of these subjects; 3) a solid background in modern chemistry laboratory methods and procedures; they should have a mastery of this subject.

Students graduating with a B.S. or B.A. in Biochemistry from Cal State East Bay will have 1) a solid background in the various areas of chemistry: general chemistry, analytical (quantitative) chemistry, organic chemistry, and physical chemistry; they should have a mastery of these subjects; 2) a solid background in biochemistry; they should have a mastery of this subject, the primary focus of the major; 3) a solid background in modern biochemistry laboratory methods and procedures; they should have mastery of this subject.
Career Opportunities

- Analytical Chemist
- Biotechnologist
- Biochemist
- Biophysicist
- Chemical Engineer
- Chemist
- Dietitian
- Environmental Chemist
- Food and Drug Inspector
- Forensic Chemist
- Geochemist
- Geophysicist
- Health Professional
- Materials Scientist
- Organic Chemist
- Perfumer
- Petrologist
- Pharmacist
- Pharmaceutical Chemist
- Physical Chemist
- Pollution Control
- Professor
- Public Health Educator
- Quality Control Technician
- Teacher
- Water Purification Chemist

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Features

The Department of Chemistry and Biochemistry employs highly qualified and experienced technical staff to assist faculty and students in their course and research experiences.

The Department of Chemistry and Biochemistry maintains laboratory equipment and instruments typical of comparable institutions. These include a 500 MHz nuclear magnetic resonance (NMR) spectrometer; UV-Visible (diode array), infrared and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); an FTIR spectrometer; and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, and environmental field sampling equipment. There are PC-controlled and various desktop versions of the HPLC and visible spectrometers. A molecular modeling facility is also available for instruction and research.

The university offers Cooperative Education coursework which provides chemically related employment opportunities and students may, with department approval, obtain credit for this work.

The Alchemist Club, a student affiliate of the American Chemical Society, is available to students majoring in Chemistry. They are active in many aspects of the department and provide free peer tutoring, participate in fund-raising for special projects, and take interesting field trips to local industries.

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Preparation and Prerequisites

For Advanced Placement course equivalencies, see Registration chapter. Prerequisite courses for all chemistry courses must be passed with a grade of "C-" or better. Requests for Grade Forgiveness will be allowed only on a space-available basis.

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Major Requirements (B.S.)

B.S. Chemistry

The Bachelor of Science degree, major in Chemistry, is designed to prepare students for graduate school in Chemistry and related fields and for industrial employment which involves research or a high degree of technical proficiency. It is intended for students desiring the highest degree of specialization. Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 110-111 units; the B.S. degree requires a total of 182 units.

Sample Program

A Sample Program for this degree can be found at the department website: http://www.sci.csueastbay.edu/chemistry/

I. Lower Division (55 units)

- CHEM 1101 General Chemistry (5)
- CHEM 1102 General Chemistry (5)
- CHEM 1103 General Chemistry (5)
- CHEM 2200 Quantitative Analysis (5)
- CS 1020 Introduction to Computers
  or CS 1160 Introduction to Computer Science I (4)
- MATH 1304 Calculus I (4)
- MATH 1305 Calculus II (4)
- MATH 2304 Calculus III (4)
- MATH 2101 Elements of Linear Algebra (4)
II. Upper Division (44 units)

- CHEM 3200 Bioanalytical and Forensic Instrumentation (4)
- CHEM 3301 Organic Chemistry (5)
- CHEM 3302 Organic Chemistry (5)
- CHEM 3303 Organic Chemistry (5)
- CHEM 3511 Physical Chemistry Lecture (3)
- CHEM 3512 Physical Chemistry Lecture (3)
- CHEM 3513 Physical Chemistry Lecture (3)
- CHEM 3531 Physical Chemistry Laboratory (2)
- CHEM 3532 Physical Chemistry Laboratory (2)
- CHEM 4161 Advanced Inorganic Chemistry (3)
- CHEM 4162 Advanced Inorganic Chemistry (3)
- CHEM 4180 Inorganic Chemistry Laboratory (2)
- CHEM 4240 Instrumental Methods of Analysis (4)
- CHEM 4411 General Biochemistry (4)
  or CHEM 3400 Introductory Biochemistry (4)

III. Electives (11-12 units)

A. At least three courses chosen from the following:
   - CHEM 4311 (4)
   - CHEM 4412 (4)
   - CHEM 4430 (4)
   - CHEM 4521 (4)
   - CHEM 4601 (4)
   - CHEM 4602 (4)
   - CHEM 4810 (2-4)

B. Additional courses chosen from the above list of electives or from the following:
   - CHEM 4413 (4)
   - CHEM 4700 (2)
   - CHEM 4811 (2)
   - CHEM 4900 (1-4)

(No more than four units of CHEM 4810 and 4811 and 4900 combined may be applied to the Advanced Chemistry Electives for the B.S. degree major.) Graduate courses (numbered 6000 or above) may be taken to satisfy this requirement.

IV. Recommended Electives

At least one year’s study of a foreign language is strongly recommended, although it is no longer required. Students contemplating graduate study later, particularly leading to the Ph.D. degree, are advised that chemistry departments at many universities require a reading knowledge of scientific German or Russian. Further, the ability to translate German chemical literature is particularly useful in some areas of specialization within chemistry. Courses in the Modern Languages and Literatures department may be applied to the G.E. requirements in Area C.

B.S. Chemistry, Option in Forensic Science

The Bachelor of Science degree, major in Chemistry with an option in Forensic Science, is designed to prepare students for careers as forensic chemists. This program also provides students with the necessary background to pursue graduate study in forensic science. The major in Chemistry with a Forensic Science option consists of 116 units; the B.S. degree requires a total of 184 units.

Sample Program

A Sample Program for this degree can be found at the department website: http://www.sci.csueastbay.edu/chemistry/

I. Lower Division (63 units)

- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- CHEM 1101 General Chemistry (5)
- CHEM 1102 General Chemistry (5)
- CHEM 1103 General Chemistry (5)
- CHEM 2200 Quantitative Analysis (5)
- CRJA 2200 Basic Criminal Investigation (4)
- MATH 1304 Calculus I (4)
- MATH 1305 Calculus II (4)
- MATH 2304 Calculus III (4)
- PHYS 2701 Introductory Physics (4)
- PHYS 2702 Introductory Physics (4)
- PHYS 2703 Introductory Physics (4)

II. Upper Division (53 units)

- BIOL 3121 Principles of Genetics (5)
- BIOL 4485 PCR, DNA sequencing and Fragment Analysis (4)
- BIOL 4830 Seminar in Forensic Research (1)
- CHEM 3200 Bioanalytical and Forensic Instrumentation (4)
- CHEM 3301 Organic Chemistry (5)
B.S. Biochemistry

The Bachelor of Science degree, major in Biochemistry, is designed to prepare students for entrance into graduate programs of biochemistry and medical schools. In addition, students completing this program are prepared to secure employment in the areas of biochemistry, biotechnology and related fields. This program is intended for students desiring the highest degree of technical proficiency in this specialized area at the undergraduate level. Since requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 115-122 units, the B.S. degree requires a total of 183 units.

Sample Program

A Sample Program for this degree can be found at the department website: http://www.sci.csueastbay.edu/chemistry/

I. Lower Division (63-66 units)

- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- CHEM 1101 General Chemistry (5)
- CHEM 1102 General Chemistry (5)
- CHEM 1200 Quantitative Analysis (5)
- CS 1020 Introduction to Computers
  or CS 1160 Introduction to Computer Science I (4)
- MATH 1304 Calculus I (4)
- MATH 1305 Calculus II (4)
- MATH 2304 Calculus III (4)
- PHYS 2701, 2702, 2703 Introductory Physics
  or PHYS 1001, 1002, 1003 General Physics (12-15)

II. Upper Division (52-56 units)

- STAT 3031 Statistical Methods in Biology
  or STAT 3502 Statistical Inference I (4)
- CHEM 3301 Organic Chemistry (5)
- CHEM 3302 Organic Chemistry (5)
- CHEM 3303 Organic Chemistry (5)
- CHEM 3511 Physical Chemistry (3)
- CHEM 3512 Physical Chemistry (3)
- CHEM 3513 Physical Chemistry (3)
- CHEM 4411 General Biochemistry (4)
- CHEM 4412 General Biochemistry (4)
- CHEM 4413 General Biochemistry (4)
- CHEM 4430 General Biochemistry Laboratory (4)
- CHEM 4431 Advanced Biochemistry Laboratory (2)
- Two courses (6-10 units) chosen from the following: BIOL 3121 (5) or 4455 (4); CHEM 4240 (4), 4440 (3), 4450 (3), 4460 (3)

Major Requirements (B.A.)

B.A. Chemistry

The Bachelor Arts degree, major in Chemistry, is intended for students who would like to use their knowledge of chemistry as a starting point for a career in medicine, molecular biology, dentistry, teaching, environmental remediation, law, or business. Graduate degrees in these fields follow naturally from the undergraduate training required of the chemistry student. The major consists of 84 units; the B.A. degree requires a total of 180 units.

Sample Program

A Sample Program for this degree can be found at the department website: http://www.sci.csueastbay.edu/chemistry/

I. Lower Division (44 units)

- CHEM 1101 General Chemistry (5)
- CHEM 1102 General Chemistry (5)
- CHEM 1103 General Chemistry (5)
- CHEM 2200 Quantitative Analysis (5)
- MATH 1304 Calculus I (4)
- MATH 1305 Calculus II (4)
- CS 1020 Introduction to Computers
  or CS 1160 Introduction to Computer Science I (4)
- PHYS 2701 Introductory Physics (4)
- PHYS 2702 Introductory Physics (4)
II. Upper Division (40 units)

- CHEM 3200 Bioanalytical and Forensic Instrumentation (4)
- CHEM 3301 Organic Chemistry (5)
- CHEM 3302 Organic Chemistry (5)
- CHEM 3303 Organic Chemistry (5)
- CHEM 3400 Introductory Biochemistry (4)
- CHEM 3501 Biophysical Chemistry (4)
- CHEM 4700 Survey of Chemical Literature (2)

Chemistry Electives (11 units)

Chosen from the following list of upper division chemistry courses:

- CHEM 4161 Advanced Inorganic Chemistry (3)
- CHEM 4240 Instrumental Methods of Analysis (4)
- CHEM 4311 Advanced Organic Chemistry (4)
- CHEM 4601 Environmental Chemistry I (4)
- CHEM 4602 Environmental Chemistry II (4)
- CHEM 4810 Undergraduate Research (2)*
- CHEM 4900 Independent Study (1-4)*

*Note: No more than two units of CHEM 4810 or CHEM 4900 or combined can be applied to the upper division chemistry electives.

B.A. Chemistry, Option in Chemistry Education

The Bachelor of Arts degree, major in Chemistry with an option in Chemistry Education, is designed for students interested in a career teaching chemistry at the high school level, but also prepares students to work in the chemical industry. This program prepares graduates to enter a single subject credential program. The major is also compatible with participation in the Bachelor’s Plus Early Pathway program, which allows completion of both the Bachelor's degree and a teaching credential in four years. The major in Chemistry with a Chemistry Education option consists of 100 units; the B.A. degree requires a total of 180 units.

1. Lower Division (54 units)

   - BIOL 1000 Basic Concepts in Biology (5)
   - CHEM 1101 General Chemistry (5)
   - CHEM 1102 General Chemistry (5)
   - CHEM 1103 General Chemistry (5)
   - CHEM 2200 Quantitative Analysis (5)
   - GEOL 1000 Earth systems Science (5)
   - MATH 1304 Calculus I (4)
   - MATH 1305 Calculus II (4)
   - CS 1020 Introduction to Computers (4)
     or CS 1160 Introduction to Computer Science I (4)
   - PHYS 2701 Introductory Physics (4)
   - PHYS 2702 Introductory Physics (4)
   - PHYS 2703 Introductory Physics (4)

2. Upper Division (46 units)

   - CHEM 3200 Bioanalytical and Forensic Instrumentation (4)
   - CHEM 3301 Organic Chemistry (5)
   - CHEM 3302 Organic Chemistry (5)
   - CHEM 3303 Organic Chemistry (5)
   - CHEM 3400 Introductory Biochemistry (4)
   - CHEM 3501 Biophysical Chemistry (4)
   - CHEM 4400 Instructional Activities in Chemistry (2)
   - CHEM 4601 Environmental Chemistry I (4)
   - CHEM 4602 Environmental Chemistry II (4)
   - CHEM 4700 Survey of Chemical Literature (2)
   - PHIL 3335 Science, Technology and Values (4)
   - TED 3001 Exploring Education (3)

B.A. Biochemistry

The Bachelor of Arts degree, major in Biochemistry, is designed to prepare students for employment in biochemistry, biotechnology, and related fields. It can also be utilized by students as a preparation for professional health-related programs, secondary school teaching, or non-traditional career paths (e.g., computer science, bioinformatics, business administration, and pharmaceutical sales). Students electing to pursue the B.A. in Biochemistry Degree could also earn a minor in another appropriate discipline such as biology. The major consists of 94-97 units; the B.A. degree requires a total of 180 units.

I. Lower Division (54 units)

   - BIOL 1401 Molecular and Cellular Biology (5)
   - BIOL 1402 Plant Biology (5)
   - BIOL 1403 Animal Biology (5)
   - CHEM 1101 General Chemistry (5)
   - CHEM 1102 General Chemistry (5)
   - CHEM 1103 General Chemistry (5)
   - CS 1020 Introduction to Computers
     or CS 1160 Introduction to Computer Science I (4)
   - MATH 1304 Calculus I (4)
II. Upper Division (37 units)
- CHEM 3301 Organic Chemistry (5)
- CHEM 3302 Organic Chemistry (5)
- CHEM 3303 Organic Chemistry (5)
- CHEM 3501 Biophysical Chemistry (4)
- CHEM 4411 General Biochemistry (4)
- CHEM 4412 General Biochemistry (4)
- CHEM 4413 General Biochemistry (4)
- CHEM 4430 General Biochemistry Laboratory (4)
- CHEM 4431 Advanced Biochemistry Laboratory (2)

III. Electives (3-6 units)
Select 3-6 units from the following list of upper division chemistry and biology courses:
- BIOL 3121 Principles of Genetics (5)
- BIOL 3151 Principles of Animal Physiology (5)
- BIOL 3405 Microbiology (6)
- CHEM 3200 Bioanalytical and Forensic Instrumentation (4)
- CHEM 4440 Protein Structure (3)
- CHEM 4450 Nucleic Acid Chemistry (3)
- CHEM 4460 Major Organ Biochemistry (3)
- CHEM 4700 Survey of Chemical Literature (2)
- CHEM 4810 Undergraduate Research (2)*
- CHEM 4900 Independent Study (1-4)*

*No more than two units of CHEM 4810 or CHEM 4900 or combined can be applied to the upper division chemistry electives.

B.A. Biochemistry, Option in Chemistry Education
The Bachelor of Arts degree, major in Biochemistry with an option in Chemistry Education, is designed for students interested in a career teaching chemistry at the high school level, but also prepares students to work as biochemists in an industrial setting. This program will prepare graduates to enter a single subject credential program. The major is also compatible with participation in the Bachelor's Plus Early Pathway program, which allows completion of both the Bachelor's degree and a teaching credential in four years. The major in Biochemistry with a Chemistry Education option consists of 111 units, the B.A. degree requires a total of 180 units. (Please see Errata page for corrections to this content.)

1. Lower Division (59 units)
- BIOL 1401 Molecular and Cellular Biology (5)
- BIOL 1402 Plant Biology (5)
- BIOL 1403 Animal Biology (5)
- CHEM 1101 General Chemistry (5)
- CHEM 1102 General Chemistry (5)
- CHEM 1103 General Chemistry (5)
- CS 1020 Introduction to Computers or CS 1160 Introduction to Computer Science I (4)
- GEOL 1000 Earth Systems Science (5)
- MATH 1304 Calculus I (4)
- MATH 1305 Calculus II (4)
- PHYS 2701 Introductory Physics (4)
- PHYS 2702 Introductory Physics (4)
- PHYS 2703 Introductory Physics (4)

2. Upper Division (52 units)
- CHEM 3301 Organic Chemistry (5)
- CHEM 3302 Organic Chemistry (5)
- CHEM 3303 Organic Chemistry (5)
- CHEM 3501 Biophysical Chemistry (4)
- CHEM 4400 Instructional Activities in Chemistry (2)
- CHEM 4411 General Biochemistry (4)
- CHEM 4412 General Biochemistry (4)
- CHEM 4413 General Biochemistry (4)
- CHEM 4430 General Biochemistry Laboratory (4)
- CHEM 4431 Advanced Biochemistry Laboratory (2)
- CHEM 4601 Environmental Chemistry I (4)
- CHEM 4700 Survey of Chemical Literature (2)
- PHIL 3335 Science, Technology and Values (4)
- TED 3001 Exploring Education (3)
Minor Requirements

Students majoring in other fields may wish to complete a coherent pattern of work in chemistry for the purpose of expanding their employment and educational opportunities. Students successfully completing this program will have the fact entered on their university records. The minor consists of 38–39 units.

- CHEM 1101 General Chemistry (5)
- CHEM 1102 General Chemistry (5)
- CHEM 1103 General Chemistry (5)
- CHEM 2200 Quantitative Analysis (5)
- CHEM 3301 Organic Chemistry (5)
- CHEM 3302 Organic Chemistry (5)
- CHEM 3303 Organic Chemistry (5)

One of the following courses:

- CHEM 3400 Introductory Biochemistry (4)
- CHEM 3501 Biophysical Chemistry (4)
- CHEM 3511 Physical Chemistry Lecture (3)
- CHEM 4411 General Biochemistry (4)
- CHEM 4601 Environmental Chemistry I (4)

Undergraduate Courses

Courses for Non-Science Majors (Course prefix: CHEM)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>Popular Topics in Chemistry (4) Nonmathematical discussions of subjects as: energy in the universe and the cell, evolution, nutrition, chemical senses, drugs, hormones, synthetics, and pollution. Designed as a general education course for non-science majors. Not open to students with credit for CHEM 2001.</td>
</tr>
<tr>
<td>1100</td>
<td>Introduction to College Chemistry (5) Elementary principles of chemistry: measurement, properties of matter, chemical symbols and formulas, chemical equations, stoichiometry, atomic structure, gas laws, solutions. Prerequisite: Satisfaction of the ELM exam requirement. Three hrs. lect., 6 hrs. lab., disc.</td>
</tr>
<tr>
<td>1605</td>
<td>Basic Chemistry for Healthier Living (4) A chemical perspective for healthier living. Basic inorganic chemistry: an introduction to atomic and molecular structure. Prerequisite: A score of 42 or above on the Entry Level Math Test or a college level math score on the SAT, ACT or AP exam or the equivalent. Not open to students with credit for CHEM 1601. A-F grading only. Three hrs. lect., 3 hrs. lab.</td>
</tr>
<tr>
<td>2001</td>
<td>Chemistry for Human Nutrition (4) Essential chemical and biochemical information for understanding human nutrition. The structure of atoms and matter, chemical reactions and the structure, function, and metabolism of important biomolecules such as proteins, enzymes, carbohydrates, and lipids. Not open to students with credit for CHEM 1000. A-F grading only.</td>
</tr>
<tr>
<td>3010</td>
<td>The Making of Wine (4) The history, chemistry and technology of wine making. Production of standard types of wine from grape varieties. Laboratory illustrates chemical principles as applied to wine making. Not an elective for the chemistry major. Three hrs. lect., 3 hrs. lab.</td>
</tr>
<tr>
<td>3011</td>
<td>Foundational Chemistry (4) Focus on the California State Science Standards and is designed to prepare pre-service and in-service teachers for the CSET General Science Subtest in Chemistry with the goal of obtaining a Foundational Science Credential. CHEM 1100 strongly recommended. Prerequisites: High school chemistry, or equivalent; satisfaction of the ELM. Not open to either Chemistry or Biochemistry majors.</td>
</tr>
<tr>
<td>3012</td>
<td>Foundational Chemistry Laboratory (1) This laboratory course supplements CHEM 3011. Designed to prepare pre-service and in-service teachers for the CSET General Science Subtest in Chemistry with the goal of obtaining a Foundational Science Credential. Prerequisite: CHEM 1100. Prerequisite or Co-requisite: CHEM 3011. Not open to either Chemistry or Biochemistry majors. (Three hrs. lab)</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Chemistry (4) Readings, discussion, and research on contemporary and/or significant issues in chemistry. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
</tbody>
</table>

Courses for Chemistry and Other Science Majors (Course prefix: CHEM)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1101, 1102, 1103</td>
<td>General Chemistry (5 each) Fundamental principles of chemistry, chemical structure, bonding, equilibrium, dynamics, and reactions. Laboratory includes study of chemical and physical behavior of elements and compounds, and qualitative and quantitative analysis. Prerequisites: CHEM 1100, one year high school chemistry, two years high school mathematics, and one year high school physics are recommended. CHEM 1101 is prerequisite to CHEM 1102; CHEM 1102 is prerequisite to CHEM 1103. Three hrs. lect., 6 hrs. lab. each.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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</tr>
<tr>
<td>1111</td>
<td>General Chemistry Supplemental Instruction (0.5)</td>
</tr>
<tr>
<td>1112</td>
<td>General Chemistry Supplemental Instruction (0.5)</td>
</tr>
<tr>
<td>1113</td>
<td>General Chemistry Supplemental Instruction (0.5)</td>
</tr>
<tr>
<td>1601, 1602</td>
<td>Basic Chemistry for the Health Sciences (4 each)</td>
</tr>
<tr>
<td>2200</td>
<td>Quantitative Analysis (5)</td>
</tr>
<tr>
<td>2301, 2302</td>
<td>Survey of Organic Chemistry (4 each)</td>
</tr>
<tr>
<td>3200</td>
<td>Bioanalytical and Forensic Instrumentation (4)</td>
</tr>
<tr>
<td>3301, 3302, 3303</td>
<td>Organic Chemistry (5 each)</td>
</tr>
<tr>
<td>3400</td>
<td>Introductory Biochemistry (4)</td>
</tr>
<tr>
<td>3405</td>
<td>Clinical Chemistry (5)</td>
</tr>
<tr>
<td>3501</td>
<td>Biophysical Chemistry (4)</td>
</tr>
<tr>
<td>3511, 3512, 3513</td>
<td>Physical Chemistry Lecture (3 each)</td>
</tr>
<tr>
<td>3531, 3532</td>
<td>Physical Chemistry Laboratory (2 each)</td>
</tr>
<tr>
<td>3800</td>
<td>Achievements of Women in Science (4)</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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</tr>
<tr>
<td>4161, 4162</td>
<td>Advanced Inorganic Chemistry (3 each)</td>
</tr>
<tr>
<td>4180</td>
<td>Inorganic Chemistry Laboratory (2)</td>
</tr>
<tr>
<td>4240</td>
<td>Instrumental Methods of Analysis (4)</td>
</tr>
<tr>
<td>4311</td>
<td>Advanced Organic Chemistry (4)</td>
</tr>
<tr>
<td>4400</td>
<td>Instructional Activities in Chemistry (2)</td>
</tr>
<tr>
<td>4411, 4412, 4413</td>
<td>General Biochemistry (4 each)</td>
</tr>
<tr>
<td>4430</td>
<td>General Biochemistry Laboratory (4)</td>
</tr>
<tr>
<td>4431</td>
<td>Advanced Biochemistry Laboratory (2)</td>
</tr>
<tr>
<td>4440</td>
<td>Protein Structure (3)</td>
</tr>
<tr>
<td>4450</td>
<td>Nucleic Acid Chemistry (3)</td>
</tr>
<tr>
<td>4460</td>
<td>Major Organ Biochemistry (3)</td>
</tr>
<tr>
<td>4521</td>
<td>Elements of Chemical Thermodynamics (4)</td>
</tr>
<tr>
<td>4601</td>
<td>Environmental Chemistry I (4)</td>
</tr>
<tr>
<td>4602</td>
<td>Environmental Chemistry II (4)</td>
</tr>
<tr>
<td>4700</td>
<td>Survey of Chemical Literature (2)</td>
</tr>
<tr>
<td>4810</td>
<td>Undergraduate Research (2)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>------------</td>
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</tr>
<tr>
<td>4811</td>
<td>Senior Thesis (2)</td>
</tr>
<tr>
<td>4830</td>
<td>Seminar in Forensic Research (1)</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>
Communication

- Department Information
- Program Description
- Career Opportunities
- Features
- Major Requirements (B.A.)
- Other Degree Requirements
- Minor Requirements
- Organizational Communication Certificate
- Single Subject Matter Preparation Program
- Undergraduate Courses
- Errata (Note: Please see Errata page for corrections to this content.)

Department Information

Department of Communication
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 3011
Phone: (510) 885-3292; FAX: (510) 885-4099
Website: http://class.csueastbay.edu/communication

Professors Emeriti
Thomas S. McCoy, Ph.D. Ohio University
Robert L. Terrell, Ph.D. University of California, Berkeley
Gale Young (Chair), Ph.D. University of California, Los Angeles

Professors
Sally K. Murphy, Ph.D. University of Minnesota, Minneapolis

Assistant Professors
Lonny J. Brooks, Ph.D. University of California, San Diego
Grant Kien, Ph.D. University of Illinois at Urbana-Champaign
Terry L. West, Ph.D. Southern Illinois University

Program Description

The Department of Communication features both the study of communication theory and criticism, and the development of practical skills. At a time when media (print, telephone, television, internet), modes of communication (oral, written, visual), and contexts (face-to-face, public, and organizational) converge in our careers and daily lives, the department offers the first state-university program in the Bay Area to cover this interrelated spectrum of today's communication in new and traditional forms. The Department of Communication's broad range of courses and programs (from public, interpersonal, and family communication to broadcasting, new media of electronic communication, and everything in between) provides exciting choices. Students acquire skills in critical analysis, speaking, writing, and electronic and digital communication. They learn about the changing world of today's mass media as well as the long history of the relationship between communication, self, and society; and they are prepared for a broad array of careers. All graduates must complete 13 core courses in communication and select one of two options. They may also take complementary coursework in other areas of study offered by the department.

Student Learning Outcomes

Students graduating with a B.A. in Communication from Cal State East Bay will be able to:

1. Create, analyze, edit, and respond to written, spoken, and visual messages in multiple formats and contexts.
2. Research and evaluate effective communication including design and production techniques and quantitative, qualitative, and critical inquiry.
3. Effectively communicate as leaders and participants in collaborative and individual contexts involving divergent ideas, conflicts, and relationships across cultural and gender differences.
4. Explain and illustrate the construction and maintenance of shared communities that influence and are influenced by communication using critical, cultural, racial, socio-political, gender and justice perspectives.
5. Explain and illustrate concepts of ethical and democratic leadership applying major communication perspectives, including rhetorical and discursive processes, purposes, and relevant media.
6. Explain and illustrate the role identity plays in communication within global and local contexts and in negotiating paradoxes of participation.

Career Opportunities

Communication skills are essential in both work and social settings. Recruiters and placement officers for all types of organizations and positions rank oral and written communication skills at the very top of the list. The department's graduates have entered the following careers:

- Advertising Executive
- Business Executive
- Communication Specialist
- Consultant
- Copy Editor
- Copywriter
- Corporate Communications Director
- Corporate Communicator
- Critic
Customer Service Representative
Debate Coach
Employee Relations Representative
Film Editor
Graphic Artist
Human Resource Administrator
Impression Management Specialist
Interviewer
Journalist
Media Consultant
Media Specialist
News Director
Newscaster
News Writer
Photojournalist
Professor
Public Information Specialist
Public Relations Representative
Publications
Radio Programmer
Sales Representative
Specification Writer
Talk Show Host
Teacher
Technical Writer
Television Producer
Trainer
Writer

Features

Related activities available through the Department of Communication include: the university paper (The Pioneer), forensics (debate and individual speaking activities), and a communication laboratory. Also housed within the department is a working advertising agency and an active internship program that functions in cooperation with Bay Area business.

Instructional facilities include a large and well-equipped television studio, computer labs for news writing reporting, desktop publishing, video and digital editing. Student productions are published on the Internet.

The department has affiliations with the National Communication Association, Association of Schools of Journalism and Mass Communication, the Association for Education in Journalism and Mass Communication, the California Newspaper Publishers Association, and the California Intercollegiate Press Association. The department also sponsors a campus chapter of the Society of Professional Journalists and the Public Relations Student Society of America.

In addition to classroom study of interpersonal, intercultural, organizational, and public communication, the department sponsors a Communication Laboratory open to the campus community that provides communication-related support services. Upper division Communication majors and graduate students serve as tutors who help students research, organize, outline, and deliver oral presentations. The department also offers campus internship programs for credit, and each year awards a number of scholarships to Communication majors.

Major Requirements (B.A.)

Because requirements are subject to change, consult an advisor in the Department of Communication for clarification and interpretation of your major requirements. The major in Communication consists of 52 units of core courses in communication, with an additional 44 units in one of two options for a total of 96 units; the B.A. degree requires a total of 180 units.

Prerequisites (8 units)
- COMM 1000 Public Speaking (4) (Note: Meets GE Oral Communication requirement)
- COMM 1004 Interpersonal Communication (4)

Required Core Courses (52 units)
- COMM 2201 Argumentation and Debate (4)
- COMM 2300 21st Century Communication (4)
- COMM 2320 Communication Writing and Design (4)
- COMM 3000 History and Criticism of Communication (4) (if not used to satisfy a requirement in the Professional, Public and Organizational Communication or Media Production Options) or COMM 3003 Philosophy and Theory of Communication (4) (if not used to satisfy a requirement in the Professional, Public and Organizational Communication Option)
- COMM 3002 Communication, Media and Culture (4)
- COMM 3004 Quantitative Communication Research Methods (4)
- COMM 3005 Qualitative Communication Research Methods (4)
- COMM 3107 Introduction to Organizational Communication (4)
- COMM 3510 Small Group Communication (4)
- COMM 3530 Interviewing Principles and Practices (4)
- COMM 4205 Ethics and Law in Communication (4)
- COMM 4300 Intercultural & International Communication (4), or COMM 4500 Gender Identity and Representation in Media (4)
- COMM 4510 Public Relations Theory and Practice (4)
Options (44 units)

Students must complete one of the two following options in addition to completing the prerequisites and required core courses listed above:

A. Media Production (44 units)

- COMM 2200 Introduction to Journalistic Writing (4)
- COMM 3000 History and Criticism of Communication (4) (if not used to satisfy a Required Core Course), or COMM 4150 Media and Government (4)
- COMM 3010 Intermediate News Writing and Editing (4)
- COMM 3100 Introduction to Professional Video Production (4)
- COMM 4006 Intermediate Video Production (4)
- COMM 4890 Senior Project: Media Production (4)

Workshop Lab (Practicum): Select four courses (8 units) from the following:

- COMM 3220 Media Workshop: Print (2)
- COMM 3221 Media Workshop: Magazine and Feature Writing (2)
- COMM 3222 Media Workshop: Editorial and Opinion Writing (2)
- COMM 3223 Media Workshop: Advertising and Public Relations (2)
- COMM 3224 Media Workshop: Internet (2)
- COMM 3232 Media Workshop: Video/Documentary (2)

Electives (12 units):
Courses may be taken within or outside the COMM department. Approval of advisor required.

B. Professional, Public and Organizational Communication (44 units)

- COMM 3000 History and Criticism of Communication (4) (if not used to satisfy a Required Core Course), or COMM 3003 Philosophy and Theory of Communication (4) (if not used to satisfy a Required Core Course)
- COMM 3204 Reason in Controversy (4)
- COMM 4107 Relational Communication in Organizations (4)
- COMM 4207 Organizational Transformation (4)
- COMM 4520 Advertising Form and Function (4)
- COMM 4880 Conflict Management (4)
- COMM 4885 Senior Project: Professional, Public and Organizational Communication (4)

Electives (12 units):
Courses may be taken within or outside the COMM department. Approval of advisor required.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

Communication Minor

The Communication minor offers the student majoring in another discipline the opportunity to study and practice an integrated approach to communications in the 21st century. Students considering careers in law, business, health-care, and criminal justice will benefit from this minor. The Communication Minor consists of 44 units.

A. Prerequisites to the Minor (8 units)

- COMM 1000 Public Speaking (4)
- COMM 1004 Interpersonal Communication (4)

B. Required Core Courses for the Minor (24 units)

- COMM 2300 21st Century Communication (4)
- COMM 2320 Communication Writing and Design (4)
- COMM 3002 Communication, Media and Culture (4)
- COMM 3004 Quantitative Communication Research Methods (4), or COMM 3005 Qualitative Communication Research Methods (4)
- COMM 4300 Intercultural International (4), or COMM 4500 Gender Identity and Representation in Media (4)
- COMM 4205 Ethics & Law in Communication (4)

C. Required Elective Courses (20 units)

20 units selected in consultation with advisor from either the Professional Public and Organizational Communication Option or the Media Production Option, including appropriate senior project: COMM 4885 or 4890.

Organizational Communication Certificate

The Certificate in Organizational Communication consists of 28 units and is for individuals who already have good basic communication skills and want to perfect and hone those skills. In addition it offers the student a set of courses that are strongly career oriented. The certificate is very relevant to individuals who are already in communication-related career positions and desire both a higher level of communication skills.
and the accompanying certificate as vehicles to advancement. It is also particularly appropriate for two other groups. The first includes those who are on the fringe of a communication-related career path and want better acceptance as specific career individuals. The second includes those who are not now employed and see the completion of a particular program of study from this set of courses as a certification to potential employers, not only of a higher level of communication skills achievement but also of their own seriousness of purpose and commitment to a specific career area.

I. Required Courses (20 units)

- COMM 3107 Introduction to Organizational Communication (4)
- COMM 3510 Small Group Communication (4)
- COMM 4107 Relational Communication in Organizations (4)
- COMM 4510 Public Relations Theory and Practice (4) (if not used to satisfy one of the required electives)
- MGMT/ENGR 3600 Theories of Management (4)
- MGMT/ENGR 4520 Advertising Form and Function (4)
- MGMT/ENGR 4520 Advertising Form and Function (4)
- MGMT 3600 Organizational Behavior (4)
- MGMT 3680 Employee and Labor Relations (4)
- MKTG 3401 Marketing Principles (4)
- MKTG 3410 Advertising Management (4)
- MKTG 4225 Sales Training (4).

II. Select two courses (8 units) from the following:

- COMM 3010 Intermediate News Writing and Editing (4)
- COMM 4300 Intercultural & International Communication (4)
- MGMT 3614 Organizational Behavior (4)
- MGMT 3680 Employee and Labor Relations (4)
- MKTG 3401 Marketing Principles (4)
- MKTG 3410 Advertising Management (4)
- MKTG 4225 Sales Training (4).

Note: Students who have completed at other schools the approved equivalent of any of the specifically required five courses should make additional selections from the electives grouping in order to offset those units already completed outside Cal State East Bay. Students who find themselves to be limited in their selection from the elective group due to the number of approved equivalent courses completed at other schools should consult with an advisor for this certificate in order to identify appropriate substitutions to meet the required 28 units in residence for the certificate.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3000</td>
<td>History and Criticism Communication (4)</td>
<td>Overview of history of communication and media emphasizing origins and significant developments through the ages. Critical study of media exploring its effects, roles and dramatic changes brought on by technology and synergy, and impact of globalization on field in recent years.</td>
</tr>
<tr>
<td>3001</td>
<td>Introduction to Communicology (4)</td>
<td>Introduction to study of communicative practices, including the problematic nature of communication. Issues, concepts, principles, and levels of inquiry; research protocol; representative scholarship.</td>
</tr>
<tr>
<td>3002</td>
<td>Communication, Media and Culture (4)</td>
<td>Exploration of culture as the expression of human agency, hinging on a reciprocal relationship between communication and culture covering embodied, symbolic, material, oral, visual, social, and ideological aspects of cultural studies. Investigates the relationship of technology with communication and culture.</td>
</tr>
<tr>
<td>3003</td>
<td>Philosophy and Theory of Communication (4)</td>
<td>Philosophical and theoretical approaches to communication. Comparisons of contemporary theoretical paradigms guiding current research. Research examples within theoretical traditions. Interrelationships between theory and practice.</td>
</tr>
<tr>
<td>3004</td>
<td>Quantitative Communication Research Methods (4)</td>
<td>Study of communication from the perspective of message production and effects. Fieldwork and experimental methodologies for developing, writing, understanding and presentation of descriptive and inferential statistics in communication research.</td>
</tr>
<tr>
<td>3005</td>
<td>Qualitative Communication Research Methods (4)</td>
<td>Surveys various methods of qualitative audience research, measures, analysis, and theoretical definitions of “audience”. Students become versed in the advantages and disadvantages of qualitative approaches and conduct primary qualitative research and analysis.</td>
</tr>
<tr>
<td>3010</td>
<td>Intermediate News Writing and Editing (4)</td>
<td>Basic principles of editing applied to more advanced newswriting. Developing information from various sources: public records, interviews, speeches, and meetings. Story structure and flow and current events examination. Prerequisite: COMM 2200. Three hrs. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>3020</td>
<td>Public Relations Writing (4)</td>
<td>News, industry, and PR perspectives on what constitutes newsworthiness; research, structuring, and writing public-relations materials; grammar and AP style; and basic desktop publishing/presentation software skills. Students produce portfolio-quality pieces. Prerequisite: COMM 3220. Three hrs. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>3100</td>
<td>Introduction to Professional Video Production (4)</td>
<td>Principles of producing and directing non-dramatic program materials for visual platforms, including online television and other popular digital formats. Theory, application, and practice to include equipment, studio operations and program formats. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3102</td>
<td>Television Post-production (4)</td>
<td>Production/direction of several dramatic programs, using multiple camera studio techniques. Online editing and preparing projects for cable television. Prerequisites: COMM 3100, or consent of instructor. May be repeated once for credit, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3130</td>
<td>Broadcast News I (4)</td>
<td>Reporting methods for broadcast news with emphasis on field reporting, producing field stories, organizing the field crew, operation of portable audio and visual equipment, and editing broadcast news tape. Prerequisites: COMM 2200, COMM 3100. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3200</td>
<td>Introduction to Research Methods in Communication (4)</td>
<td>Theories and methods of conducting research in communication. Basic assumptions that motivate research and differentiate research approaches. Quantitative, qualitative, and public-records research. Issues of basic research design, and data analysis.</td>
</tr>
<tr>
<td>3204</td>
<td>Reason in Controversy (4)</td>
<td>Theories of reasoned discourse from Aristotle through contemporary race, gender and argumentation scholarship. Emphasis on argument models, reasoning and fallacies, and criticism of argument in public and professional settings.</td>
</tr>
</tbody>
</table>
| 3220       | Media Workshop: Print (2)                       | Lab experience in the preparation of materials for print media, particularly university student publications such as the Pioneer newspaper. Prerequisite: COMM 2200, 3000, 3010. May be repeated three times for credit for a maximum of 8 units toward
<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title and Description</th>
</tr>
</thead>
</table>
| 3221 | Media Workshop: Magazine and Feature Writing (2)  
A laboratory experience in publishing for the Internet and the creation of an annual online magazine. Prerequisites: COMM 2200, 3000, 3010. May be repeated three times for credit for a maximum of 8 units toward graduation; only one enrollment (2 units) may be counted toward the B.A. Communication. Six hrs. act. |
| 3222 | Media Workshop: Editorial and Opinion Writing (2)  
A laboratory experience in editorial writing for the internet, including magazine, newspaper and portal uses. Prerequisites: COMM 2200, 3000, 3010. May be repeated three times for credit for a maximum of 8 units toward graduation; only one enrollment (2 units) may be counted toward the B.A. Communication. Six hrs. act. |
| 3223 | Media Workshop: Advertising and Public Relations (2)  
Lab experience in preparation of an advertising and public relations campaign, partnering with local companies. Prerequisite: COMM 2200, 3000, 3010. May be repeated three times for credit for a maximum of 8 units toward graduation; only one enrollment (2 units) may be counted toward the B.A. Communication. Six hrs. act. |
| 3224 | Media Workshop: Internet (2)  
A supervised laboratory experience in the exploration of story telling and narrative communication with multimedia and interactivity; development of new media skills; preparation of materials for online media, progression from linear into non-linear narrative. Prerequisite: COMM 2200. May be repeated three times for credit for a maximum of 8 units towards graduation; only one enrollment (2 units) may be counted toward the B.A. Communication. Six hrs. act. |
| 3231 | Media Workshop: Radio (2)  
A supervised laboratory experience in the preparation of materials for radio, particularly university productions. Maximum number in any workshop: six (6). Prerequisite: COMM 3160 or consent of instructor. May be repeated four times for credit, for a maximum of 10 workshop units towards graduation. Six hrs. minimum per week. |
| 3232 | Media Workshop: Video/Documentary (2)  
A laboratory experience in video and documentary production. Prerequisite: COMM 2200, 3000, 3010. May be repeated three times for credit for a maximum of 8 units toward graduation; only one enrollment (2 units) may be counted toward the B.A. Communication. Six hrs. act. |
| 3235 | Journalism Practicum (1-3)  
Students acquire hands-on newspaper experience by working five to fifteen hours per week for The Pioneer under the direction of the faculty advisor to The Pioneer. Positions include editors, reporters, photographers, production assistants and account executives. Prerequisites: COMM 2200, 3010; permission of Pioneer Advisor. May be repeated for credit, for up to a maximum of 6 units. Three to nine hrs. act. |
| 3240 | Public Opinion (4)  
Reading and discussion focusing on the relationship of public opinion and the mass media, including an examination of the literature on attitude change. Practice in conducting and interpreting opinion surveys. Prerequisites: An introductory course in sociology or psychology, or consent of instructor. |
| 3340 | Graphic Communication (4)  
A survey of the concepts and methods of non-verbal communication with an emphasis on computer-oriented media. Provides an introduction for desktop publishing which includes design, layout, and graphic production for electronic and print media publication. |
| 3360 | Electronic Publishing and the Internet (4)  
Introduction to the Internet computer network. Use of the Internet for student research and electronic publishing; placing student publications on the Internet. Three hrs. lect., 2 hrs. act. |
| 3400 | The Ethnic Media in America (4)  
Reading and discussion focusing on the development and impact of the ethnic media in American society, including an examination of purpose, role, audience and support. Instruction includes visits by prominent ethnic media representatives and field trips to ethnic media in the Bay Area. |
| 3485 | Voice and Speech Improvement (4)  
The acoustic features of the voice-resonance, pitch, rate, intensity, and articulation. Designed to improve the normal speaking voice through practice, and to understand the power of the voice in human communication. |
| 3510 | Small Group Communication (4)  
Principles and methods of public and group discussion in problem solving and learning situations. Development of individual skills in discussion preparation, participation, and leadership through practical application. Small group dynamics. |
| 3520 | Nonverbal Communication (4)  
Correlation between verbal and nonverbal communication systems. Principles, theories, and effects of physical appearance, space, body posture, facial displays and paralanguage on the process of human communication. |
| 3530 | Interviewing Principles and Practices (4)  
Combining communication theory and practice, students acquire skills in planning, managing, and interpreting various types of interviews. Skills acquired include how to conduct, respond to and analyze survey interviews, persuasive interviews, informational interviews, employment interviews, and counseling interviews. |
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Description</th>
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<tbody>
<tr>
<td>3540</td>
<td>Business and Professional Presentations</td>
<td>Principles, techniques, and presentational skills for professional and business speaking. Topics include oral reports, proposals, briefings, training modules, motivational speaking, and audio-visual presentations. Emphasis on presentation development, delivery skills, and preparation and use of audio-visual aids and multimedia.</td>
</tr>
<tr>
<td>3560</td>
<td>Persuasion Theory and Practice</td>
<td>Models of analyzing media designed to reinforce and/or shift attitudes, motivate action and gain compliance. Application through oral, written, and media-driven formats.</td>
</tr>
<tr>
<td>3600</td>
<td>Intermediate Photography</td>
<td>(See ART 3600 for course description.) (Please see Errata page for corrections to this content.)</td>
</tr>
<tr>
<td>3630</td>
<td>Advanced Digital Photography</td>
<td>(See ART 3630 for course description.)</td>
</tr>
<tr>
<td>3660</td>
<td>Portrait Photography</td>
<td>(See ART 3660 for course description.)</td>
</tr>
<tr>
<td>3670</td>
<td>Introduction to Studio Lighting</td>
<td>(See ART 3670 for course description.)</td>
</tr>
<tr>
<td>3671</td>
<td>Advanced Studio Lighting</td>
<td>(See ART 3671 for course description.)</td>
</tr>
<tr>
<td>3680</td>
<td>Photography Career Preparation</td>
<td>(See ART 3680 for course description.)</td>
</tr>
<tr>
<td>3699</td>
<td>Issues in Communication</td>
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</tr>
<tr>
<td>4005</td>
<td>Histories of Film</td>
<td>(See ART 4005 for course description.)</td>
</tr>
<tr>
<td>4006</td>
<td>Intermediate Video Production</td>
<td>Pre-production of creative video and digital projects intended for broadcast of the CSUEB Internet portal. Determining target audience, writing proposals, audio-visual shooting/edit plan, budgeting, scheduling. Prerequisite: COMM 3100. May be repeated once for credit for a maximum of 8 units. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4010</td>
<td>Public Affairs Reporting</td>
<td>Examination of sources of information for mass media. Study to include the analysis of public records and public access broadcast channels. Dynamics of and practice in investigative reporting, interviewing and writing for these modes. Prerequisites: COMM 2200, 3010. Three hrs. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>4100</td>
<td>Television Documentary Production</td>
<td>Fundamentals of producing television documentaries using such basic story development patterns as concept, treatment, research, story focus, story boarding, scripting, performing and narration. Prerequisite: COMM 3130 or consent of instructor. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4107</td>
<td>Relational Communication in Organizations</td>
<td>Personal, public and professional relationships in organizational life. From family communication to entering and departing work situations, superior-subordinate relations, evaluating performance, harassment, and conflict. Organizational pathologies and healthy communication.</td>
</tr>
<tr>
<td>4150</td>
<td>Media and Government</td>
<td>Interactions between the media and government. Reading on and discussion of current issues, including political elite uses of the media; reporter-official relationships; studies in power manipulation, co-optation and conflict.</td>
</tr>
<tr>
<td>4183</td>
<td>Speech and Debate Activities Workshop</td>
<td>An activity course for students participating in the co-curricular presentations of the department. Includes competition in debate and various speech events plus appearance before community groups. Field trips required. Prerequisite: Consent of instructor. May be repeated for speech communication credit, for a maximum of 24 units.</td>
</tr>
<tr>
<td>Course Code</td>
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<td>Description</td>
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<tr>
<td>4200</td>
<td>Radio Programming and Promotion (4)</td>
<td>Theory and practice of radio programming and promotion, including audience and music research, music rotations, news and public affairs programming, on- and off-air promotions, bartering, broadcast formats, working with clients, record companies. Prerequisite: COMM 3160 or consent of instructor. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4201</td>
<td>Comparative Traditions of Rhetoric (4)</td>
<td>A study of Greek, Roman, and non-European traditions of rhetoric and oratory with an emphasis on theories of discourse, rhetorical practices, and the influence of particular cultures on rhetorical theory and practice.</td>
</tr>
<tr>
<td>4205</td>
<td>Ethics and Law in Communication (4)</td>
<td>Ethical issues in communication. Includes principles and practices in contexts of public, interpersonal, organizational, mediated, and cross-cultural communication. Case studies of current laws and regulations relating to freedom of speech; defamation; contempt; invasion of privacy; obscenity; copyright and related issues.</td>
</tr>
<tr>
<td>4207</td>
<td>Organizational Transformation (4)</td>
<td>Addresses theory of interactions between communication practice and culture in public and private communication situations. Analysis of organizational communication from perspective of theory, communication, and culture to foster and inhibit organizational change.</td>
</tr>
<tr>
<td>4300</td>
<td>Intercultural &amp; International Communication (4)</td>
<td>Socio-political/cultural analysis of communication and the role of media with attention to relationships between and among cultural and racial groups within the US and other nations. Includes analyzing bias and stereotypes.</td>
</tr>
<tr>
<td>4411</td>
<td>Principles of Argumentation (4)</td>
<td>The elements of argumentation emphasizing presumption and burden of proof; propositions; issues; reasoning and fallacies; models of argumentation; and criticism of argumentation from the courtroom, legislature, and other settings.</td>
</tr>
<tr>
<td>4500</td>
<td>Gender Identity and Representation in Media (4)</td>
<td>Study of gender in media, including both gendered images in media content and an examination of impacts of gender and identity in the media industries. Reading and discussion, including content analysis of contemporary and historical gendered media portrayals.</td>
</tr>
<tr>
<td>4510</td>
<td>Public Relations Theory and Practice (4)</td>
<td>Principles of public relations as applied to the creation and production of messages for institutions and industry. Analysis of moving public opinion. Analysis of their “publics” including investigation of the psychological, sociological, economic, political and ethical foundations. Prerequisite: COMM 2300.</td>
</tr>
<tr>
<td>4515</td>
<td>Critical Discourse in Multicultural America (4)</td>
<td>Study of ancient and modern theories of rhetorical criticism. Extensive practice in applying principles of criticism to public communication in the diverse and multicultural American society. Emphasis on development of competence in analysis and refinement of judgment.</td>
</tr>
<tr>
<td>4520</td>
<td>Advertising Form and Function (4)</td>
<td>Principles of advertising applied to the creation and production of advertising messages in their many forms including the investigation of the psychological, sociological, economic, and legal aspects.</td>
</tr>
<tr>
<td>4530</td>
<td>The Advertising/Public Relations Campaign (4)</td>
<td>Current issues in advertising and public relations. Term project applying advertising or public relations principles to research, creation and production of all aspects of an actual campaign. Prerequisites: COMM 2200, 3200 or consent of instructor.</td>
</tr>
<tr>
<td>4540</td>
<td>Selected Topics in Mass Communication and Public Policy (4)</td>
<td>Subjects selected from such areas as: law, ethics, regulation, legislation and access to information. Content may vary and will be announced before registration. Prerequisite: Senior Standing. May be repeated once for credit with consent of instructor, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4600</td>
<td>Image and Idea (4)</td>
<td>(See ART 4600 for course description.)</td>
</tr>
<tr>
<td>4610</td>
<td>Rhetoric of Popular Culture (4)</td>
<td>Critical analysis of how popular culture (including clothing, sports events, television, rock concerts, ethnic festivals, advertisements, shopping malls, etc.) works rhetorically as messages and how it works discursively in our interactions with self and others. Students conduct field projects.</td>
</tr>
<tr>
<td>4650</td>
<td>Internship in Communication and Media (2, 4)</td>
<td>On-the-job experience with media agencies and offices in the Bay Area. Ten to twenty hours weekly. Prerequisites: senior standing, consent of instructor. May be repeated for credit, for a maximum of 8 units, with only 4 units applicable to the Mass Communication major. CR/NC grading only.</td>
</tr>
<tr>
<td>4750</td>
<td>Mass Communication Research (4)</td>
<td></td>
</tr>
</tbody>
</table>
Applied research practices for journalists, public relations and advertising practitioners, and communication researchers. Traditional and innovative methods of gathering information: library research, interviewing, interpretation of public opinion polls, interpreting research literature. Computer database searches and analysis of data. **Prerequisite:** COMM 3200. Not open to students with credit for COMM 3800.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>4850</td>
<td>Gender and Communication (4)</td>
<td>The communication styles of females and males in a variety of interpersonal and public settings. Emphasis on gender-related communication behavior as it influences effective personal and professional interaction.</td>
</tr>
<tr>
<td>4858</td>
<td>Communication in Personal Relationships (4)</td>
<td>The influence of culture, gender, and sexual orientation on the community of intimacy in romantic, friendship, and family relationships.</td>
</tr>
<tr>
<td>4860</td>
<td>Ethnic Public Address (4)</td>
<td>The rhetorical principles and public address of ethnic speakers in the United States, including Native American, Asian American, Latino, and African American rhetoric.</td>
</tr>
<tr>
<td>4875</td>
<td>Senior Seminar (4)</td>
<td>Integration of elements through discussion of current issues in the field. Learning portfolios demonstrating acquisition of intellectual and skill-based competencies are presented, refined, and reviewed by peers and faculty. <strong>Prerequisites:</strong> COMM 1000, 2200, 3200, and 3810.</td>
</tr>
<tr>
<td>4880</td>
<td>Conflict Management (4)</td>
<td>Theory and application of communication methods for managing expressed disagreements in personal, professional, and public communication spheres.</td>
</tr>
<tr>
<td>4885</td>
<td>Senior Project: Professional, Public and Organizational Communication (4)</td>
<td>Creation of a comprehensive project that synthesizes learning in the Professional, Public and Organizational Communication option involving an integrated communication plan or a Public Relations/Advertising campaign completed in conjunction with a local company. To be taken as late in the student's senior year as possible as determined by its availability.</td>
</tr>
<tr>
<td>4890</td>
<td>Senior Project: Media Production (4)</td>
<td>Creation of a comprehensive project that synthesizes learning in the Media Production option involving visual/new media, e.g. documentary, feature or investigative report. To be taken as late in the student's senior year as possible as determined by its availability.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td><strong>May be repeated for credit with consent of instructor, for a maximum of 12 units.</strong></td>
</tr>
</tbody>
</table>

Footnotes

1. Has prerequisite(s) not included in the program or G.E.
Computer Science

Program Description

Programs in Computer Science at Cal State East Bay are designed to prepare students for employment or for advanced study in computer science. The student’s course of study will provide a solid foundation of theoretical knowledge as well as experience with practical applications in hardware and software.

Computer Science is the study of computation and of methods for addressing, processing, storing, and transmitting information. It encompasses a broad perspective that includes what a computer is, its uses and applications, and theoretical approaches to what can be computed. The core curriculum in Computer Science, involving a blend of theory and practice, offers opportunities for problem solving in many areas and provides experience with a variety of computers, computer languages, and software packages. A typical student’s experience can include scientific programming, language design and implementation, file handling and database design, data communication and networking, artificial intelligence, hardware design, and graphic implementations ranging from interface design to artistic presentations.

A strong mathematical background is important in Computer Science. High school students who are interested in computer science should take as much mathematics as possible, particularly algebra, trigonometry, and precalculus. Community college students who are planning to transfer to Cal State East Bay should take a two-course calculus sequence, linear algebra, discrete structures, a sequence of courses in some programming language (such as C, C++, Java), and a course in computer organization and assembly language.
Student Learning Outcomes

Students graduating with a B.S. in Computer Science from Cal State East Bay possess technical competence to:

1. design and implement computer programs;
2. use data structures in program design;
3. know and use modern programming techniques; and
4. use software engineering design principles.

Students possess a fundamental understanding of Computer Science theory including:

1. mathematical problem solving skills;
2. design and analysis of algorithms;
3. understanding of computer architecture and operating system concepts;
4. analysis of programming languages.

Students:

1. are able to work effectively as team members;
2. have an understanding of their professional and ethical responsibilities and appreciate the impact of computer science solutions in the societal context; and
3. can communicate effectively, both in written and oral form.

Career Possibilities

- Computer Network Support Employee
- Computer Operations Manager
- Computer Sales Representative
- Customer Support Employee
- Database Applications Program Analyst or Designer
- Graphics Specialist
- Programmer or Administrator
- Programming Team Member, Specializing in Design, Testing, or Documentation
- Scientific Applications Programmer
- Software Engineer Systems Analyst
- Systems Manager or Programmer
- Technical Writer
- Teacher/Professor

Features

The University supports Computer Science with a variety of resources. Smart classrooms are equipped with at least one computer and projector. Several instructional classrooms also have student computers. Students may use computers in open-access labs; there is wireless access. Lab and classroom computers may be equipped with a variety of operating systems. Student dorm rooms are equipped high-speed Internet access.

The College of Science sponsors CompCore, a small scale parallel processing facility with facilities for immersive 3-D graphics, scientific modeling, remote access to scientific instruments, and other facilities for experimentation and research. In addition, some computer science faculty have small labs dedicated to research and to use by students in their classes.

Each year the department offers a number of scholarships covering a portion of fees for the subsequent year. Applications may be obtained from the department during Winter quarter.

A booklet containing sample schedules, as well as further information about the computer science major, is available in the Mathematics/Computer Science Student Service Center (North Science 337). This information may be obtained electronically at http://www.mcs.csueastbay.edu.

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.S.)

Many students pursue a double major in Mathematics and Computer Science, since a number of courses are common to both majors and can be double-counted. Another popular combination is a major in computer science and a minor in mathematics.

Please consult an advisor in your major department for clarification and interpretation of your major requirements. Computer Science majors may complete the following 84-unit program or may elect to complete a 92-unit option in Computer Engineering, Networking and Data Communications, or Software Engineering (see "Options" section). The B.S. degree requires a total of 180 units.

All Computer Science majors must complete each of the following courses in sections I, II, and III with a grade of "C" or better.

1. Mathematics (20 units)
   Five courses are required:
   - MATH 1304, 1305 Calculus I, II (8)
   - MATH 2101 Elements of Linear Algebra (4)
   - MATH 2150 Discrete Structures (4)
Choice of:
- STAT 3401 Introduction to Probability Theory I (4)
- STAT 3502 Statistical Inference I (4)

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to take should call the department office for advice.

It should be noted that students may not enroll in any baccalaureate level mathematics or computer science class unless they have met the Entry Level Mathematics (ELM) requirement or are exempt from it. Information about the ELM is available from the Testing Office at (510) 885-3661.

II. Lower Division Computer Science (16 units)

Required courses:
- CS 1160 Introduction to Computer Science I (4)
- CS 2360 Introduction to Computer Science II (4)
- CS 2370 Introduction to Computer Science III (4)
- CS 2430 Computer Organization and Assembly Language Programming (4)

Although CS 1160 is the required introductory course for Computer Science majors, it may be difficult for students with no experience using computers. Students who do not know how to use a word processor or who have no knowledge of computer files and operating systems should consider taking CS 1020 (Introduction to Computers) before taking CS 1160.

Students who have completed a multi-quarter course in C, C++, Java, or Pascal at another college should consult the Mathematics/Computer Science Department; they may be able to substitute their previous coursework for CS 1160 and possibly CS 2360 and 2370.

III. Upper Division Computer Science: Required Courses (20 units)

- CS 3120 Programming Language Concepts (4)
- CS 3240 Data Structures and Algorithms (4)
- CS 3340 Introduction to Object Oriented Programming and Design (4)
- CS 3430 Computer Architecture (4)
- CS 4560 Operating Systems (4)

IV. Upper Division Computer Science: Concentration (16 units)

The selection of all elective Computer Science courses is important in giving the major a coherence, with depth in key areas. These electives must be chosen with the assistance and approval of a faculty advisor.

A student must take four of the following eight courses:
- CS 3560 Introduction to Systems Programming (4)
- CS 3590 Data Communications and Networking (4)
- CS 4660 Database Architecture (4)
- CS 4110 Compiler Design (4)
- CS 4170 Theory of Automata (4)
- CS 4245 Analysis of Algorithms (4)
- CS 4310 Software Engineering I (4)
- MATH/CS 3750 Numerical Analysis I (4)

V. Electives (12 units)

Any of the following courses may be used in meeting this requirement. However, at least 4 units (other than units from CS 3898) must be from courses with the CS prefix.

A. Any course(s) from IV not used in meeting the requirements in that category.
B. Any upper division course in Computer Science except those used in meeting requirements III or IV. No more than 4 units of CS 4900, Independent Study, and no more than 4 units of CS 3898, Cooperative Education, may be applied to the Computer Science major requirements.
C. Any graduate course in Computer Science (except CS 6000 and CS 6909).
D. Any upper division course in the Department of Mathematics and Computer Science or the Department of Statistics that is applicable to the BS degree major in Mathematics.
E. Any courses from the following list:
   - ITM 4272 Advanced Topics in Business Computer Systems (4)
   - ITM 4273 Decision Support and Expert Systems (4)
   - PHIL 3002 Modern Logic (4)
   - PHYS/ENGR 3280 Electronics (4)

The student is responsible for meeting all prerequisites for any of these courses. Many of the courses in (E) have prerequisites that are not included among major requirements.

Note: Students contemplating graduate study in Computer Science should consult with a faculty advisor early in their programs. They should be sure to include an adequate number of theory courses in their major and should have an extensive background in Mathematics.

Options

The major with one of the following three options consists of 92 units. In addition to the 20 units of mathematics courses (Section I), the 16 units of lower division computer science courses (Section II), and the 20 units of upper division computer science courses (Section III) required for a B.S. degree major in computer science, students choosing an option in Computer Engineering, Networking and Data Communications, or Software Engineering must complete an additional 36 units. See below.
1. Computer Engineering (36 units)
   The Option in Computer Engineering emphasizes the design of computer hardware and software and the close interaction between the two. It is an area of study with many issues, ranging from the design and development of large scale systems requiring an integration of hardware and software, to the design and deployment of special purpose devices used for control of physical processes. The option provides a foundation of knowledge for immediate application, but also provides a background for further study in the field.
   a. Computer Engineering Concentration (24 units)
      - CS 3432 Digital Design Lab (4)
      - CS 3434 Microprocessor Lab (4)
      - CS 3590 Data Communications and Networking (4)
      - CS 4435 Computer Architecture II (4)
      - CS 4432 VLSI Circuit Design (4)
      - PHYS 2702 Heat, Sound, Electricity and Magnetism (4)
   b. Computer Engineering Electives (12 units)
      Choice of three courses from the following:
      - CS 3560 Introduction to Systems Programming (4)
      - CS 4310 Software Engineering I (4)
      - CS 4590 Computer Networks (4)
      - CS 4594 Broadband Networks and Communications (4)
      - CS 4596 Wireless and Mobile Networking (4)
      - CS 4840 Computer Graphics (4)

2. Networking and Data Communications (36 units)
   Data communication and networking comprise an important, broad subfield of computer science. The Networking and Data Communications Option provides a concentration in the study of electronic networks. It emphasizes the analysis, design, and management of software that controls electronic networks. This option will enhance students' chances for immediate employment in the area while also preparing them for a flexible long-term career.
   a. Upper Division Computer Science: Concentration (16 units)
      - CS 3560 Introduction to Systems Programming (4)
      Choice of three courses from the following:
      - CS 4660 Database Architecture (4)
      - CS 4110 Compiler Design (4)
      - CS 4170 Theory of Automata (4)
      - CS 4245 Analysis of Algorithms (4)
      - CS 4310 Software Engineering I (4)
      - MATH/CS 3750 Numerical Analysis I (4)
   b. Networking Concentration (8 units)
      - CS 3590 Data Communications and Networking (4)
      - CS 4590 Computer Networks (4)
   c. Networking and Data Communication Electives (12 units)
      Three courses chosen from:
      - CS 3520 Web Site Development (4)
      - CS 4525 Principles of Network Security (4)
      - CS 4592 Network Operations and Administration (4)
      - CS 4594 Broadband Networks and Communications (4)
      - CS 4596 Wireless and Mobile Networking (4)

3. Software Engineering (36 units)
   Software engineering is an important subfield of computer science and is an area of intense activity, both in research and in applications. The Software Engineering Option emphasizes code development as an engineering science and gives students the understanding and skills necessary to participate in the systematic analysis and development of large, real-world software projects.
   a. Upper Division Computer Science: Concentration (16 units)
      Choice of four courses from the following:
      - CS 3560 Introduction to Systems Programming (4) (if not used in category (c))
      - CS 3590 Data Communications and Networking (4)
      - CS 4110 Compiler Design (4)
      - CS 4170 Theory of Automata (4)
      - CS 4245 Analysis of Algorithms (4)
      - MATH/CS 3750 Numerical Analysis I (4)
   b. Software Engineering Concentration (12 units)
      - CS 4310 Software Engineering I (4)
      - CS 4311 Software Engineering II (4)
      - CS 4320 Software Testing and Quality Assurance (4)
   c. Software Engineering Electives (8 units)
      Choice of two courses from the following:
      - CS 3520 Web Site Development (4)
      - CS 3560 Introduction to Systems Programming (4) (if not used in category (a))
      - CS 4110 Compiler Design (4) (if not used in category (a))
      - CS 4330 Building Secure Software (4)
      - CS 4660 Database Architecture (4)
      - CS 4835 Human-Computer Interaction (4)
      - CS 4840 Computer Graphics (4)
Other Degree Requirements.

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

Students majoring in other fields may wish to complete a coherent pattern of work in Computer Science or Software Development for the purpose of expanding their employment and educational opportunities.

Computer Science Minor (36 units)

I. Lower Division Mathematics (8 units)
   - MATH 1304 Calculus I (4)
   - MATH 2150 Discrete Structures (4)

II. Lower Division Computer Science (16 units)
   - CS 1160 Introduction to Computer Science I (4)
   - CS 2360 Introduction to Computer Science II (4)
   - CS 2370 Introduction to Computer Science III (4)
   - CS 2430 Computer Organization and Assembly Language Programming (4)

III. Upper Division Computer Science (12 units)
   1. Two courses from the following list:
      - CS 3120 Programming Language Concepts (4)
      - CS 3240 Data Structures and Algorithms (4)
      - CS 3430 Computer Architecture (4)
      - CS 4560 Operating Systems (4)
   2. One upper division Computer Science elective.
      This may be a third course from the list in (A) above or any course from category IV of the requirements for the major in Computer Science.

Software Development Minor (36 units)

I. Required Courses (28 units)
   - CS 1160 Introduction to Computer Science I (4)
   - CS 2360 Introduction to Computer Science II (4)
   - CS 2370 Introduction to Computer Science III (4)
   - MATH 1304 Calculus I (4)
   - MATH 2150 Discrete Structures (4)
   - CS 3240 Data Structures and Algorithms (4)
   - CS 4310 Software Engineering I (4)

II. Choice of two courses from the following (8 units):
   - CS 3340 Introduction to Object-Oriented Programming and Design (4)
   - CS 3520 Web Site Development (4)
   - CS 3560 Introduction to Systems Programming (4)
   - CS 4660 Database Architecture (4)

Mathematics Minor

Students majoring in Computer Science find it relatively easy to obtain a minor in Mathematics because there is a significant overlap in lower division requirements for the CS major/Math minor. To accomplish this, a student must complete three approved upper division mathematics electives. Two of these electives must be chosen from the following five courses: MATH 3100, 3121, 3215, 3300, and 3331; the third elective must be an upper division mathematics course (which may include CS 4170, CS 4245, or any upper division Statistics or Computer Science course that is applicable to the math major, but not MATH 4021, 4022, 4023, or 4024). See undergraduate Mathematics chapter for details.

Undergraduate Courses

Mathematics courses offered by the Department of Mathematics and Computer Science are fully described in the Undergraduate Mathematics section of this catalog. (Note: In order to enroll in any baccalaureate-level Mathematics or Computer Science course, students must satisfy the Entry-Level Mathematics (ELM) requirement.)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1020</td>
<td><strong>Introduction to Computers (4)</strong></td>
</tr>
<tr>
<td></td>
<td>Computers, their use and place in modern society. Computer organization and hardware, computer software. Introduction to use of the computer, operating system commands, word processing, database management, other applications, and computer programming. Internet and its use. Ethical and societal issues. No prior computer experience necessary; course recommended for</td>
</tr>
</tbody>
</table>

\[\text{CS 4865 Graphical User Interface Programming Using a Rapid Application Development Tool (4)}\]
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisite/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3434</td>
<td>Microprocessor Lab (4)</td>
<td>An introduction to computers and computer science, problem solving, algorithms, and program design. Use of Interactive Development Environment (IDE's). Programming in C++. Topics include input and output, text files, control structures, functions, arrays. Students with no computer experience are encouraged to take CS 1020 as preparation for this course. Prerequisite: Satisfaction of the Entry Level Mathematics (ELM) requirement. Not open to students with credit for CIS 1270.</td>
</tr>
<tr>
<td>3432</td>
<td>Digital Design Lab (4)</td>
<td>Technology and design of web sites, systems and services. Human factors issues, computer-human interfaces design, web system design and development and testing; evaluation processes. Website development using multimedia, graphics, image, and animation tools. Topics from e-commerce solutions and networking fundamentals. Prerequisite: Satisfactory completion of ELM. Not open to students with credit for CS 3520. Not for credit in computer science major.</td>
</tr>
<tr>
<td>3340</td>
<td>Introduction to Object-Oriented Programming and Design (4)</td>
<td>Design and implementation of abstract data structures, including hash tables, trees, graphs. Design, implementation, and analysis of algorithms for these data structures. Prerequisites: MATH 2150, CS 2370, CS 2430.</td>
</tr>
<tr>
<td>3240</td>
<td>Data Structures and Algorithms (4)</td>
<td>Fundamental concepts of data structures. Analysis of algorithms for these data structures. Prerequisites: CS 3240 and knowledge of C or C++.</td>
</tr>
<tr>
<td>3230</td>
<td>Introduction to Computer Science II (4)</td>
<td>Continuation of CS 1160. Focuses on algorithm development, structured program design, testing, and debugging. Topics include abstract data types, pointers, linked lists, recursion. Introduction to classes. Prerequisite: CS 1160.</td>
</tr>
<tr>
<td>3231</td>
<td>Introduction to Computer Science III (4)</td>
<td>Continuation of CS 2360. Further development of programming and problem solving skills in Computer Science. Topics include elementary data structures (stacks and queues), object oriented design, and more on searching, sorting and other algorithms. Prerequisite: CS 2360.</td>
</tr>
<tr>
<td>3232</td>
<td>Computer Organization and Assembly Language Programming (4)</td>
<td>Design and assembly and test of combinational and sequential circuits. Digital systems design using computer-aided-design tools and programmable logic devices. Prerequisite: CS 3430. Cross Listed with ENGR 3432. Two hrs. lect., 6 hrs. lab.</td>
</tr>
<tr>
<td>3240</td>
<td>Digital Design Lab (4)</td>
<td>Design and assembly and test of combinational and sequential circuits. Digital systems design using computer-aided-design tools and programmable logic devices. Prerequisite: CS 3430. Cross Listed with ENGR 3432. Two hrs. lect., 6 hrs. lab.</td>
</tr>
<tr>
<td>3241</td>
<td>Microprocessor Lab (4)</td>
<td>Microprocessor organization and operation; hardware/software interaction; memory, serial, and parallel I/O port interfacing; interrupt-handling. Prerequisite: CS 3430. Cross Listed with ENGR 3434. Three hrs. lect., 3 hrs. lab.</td>
</tr>
<tr>
<td>3250</td>
<td>Web Site Development (4)</td>
<td>Web servers and browsers. HTML, images, audio and video files, indexers, forms, CGI scripts, Java programming, JavaScript. Prerequisite: CS 3240.</td>
</tr>
<tr>
<td>3260</td>
<td>Introduction to Systems Programming (4)</td>
<td>Introduction to systems programming in a modern environment. Introduction to fundamental concepts of operating systems; analysis of a particular operating system (organization, interfaces, system calls, files, process control and communication, resource sharing). Shell and C programming. Development tools. Prerequisite: CS 2360.</td>
</tr>
<tr>
<td>3350</td>
<td>Data Communications and Networking (4)</td>
<td>Fundamentals of data communications: media, transmission, encoding and processing, interfacing, error detection and handling, link control, multiplexing, circuit and packet switching. Introduction to network architecture and topology: local and wide area networks. Prerequisites: CS 3430 and knowledge of C or C++.</td>
</tr>
<tr>
<td>3355</td>
<td>Introduction to Digital Signal Processing (4)</td>
<td>Mathematical modeling of signals and systems. Continuous and discrete signals, with applications to audio, images, video, communications, and control. Frequency domain modeling and frequency response. Sampling of continuous-time signals. A simulation-based laboratory is part of the course. Prerequisites: MATH 1304, 2101; CS 1160. Cross-listed with ENGR 3752. Three hrs. lect., 3 hrs. lab.</td>
</tr>
<tr>
<td>3380</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity; completion of lower division Computer Science major requirements, and upper division standing. A maximum of 4 units will be accepted toward the Computer Science major. May be repeated for credit, for a maximum of 8 units. CR/NC grading only.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Prerequisites</td>
</tr>
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</tr>
<tr>
<td>4020</td>
<td>Computing and Social Responsibility (4)</td>
<td>Social impact and ethical aspects of computing, responsibilities of practicing professionals, effects on privacy, security, property rights of individuals and institutions, etc. Topics include system reliability, intellectual property, computer crime, attacks on computer systems, and societal dependence on computers. Prerequisites: CS 3240, or consent of instructor.</td>
</tr>
<tr>
<td>4170</td>
<td>Theory of Automata (4)</td>
<td>Formal models of automata, language, and computability and their relationships. Finite automata and regular languages. Push-down automata and context-free languages. Turing machines, recursive functions, algorithms and decidability. Prerequisites: MATH 2101, 2150, 2304.</td>
</tr>
<tr>
<td>4245</td>
<td>Analysis of Algorithms (4)</td>
<td>Design, analysis and implementation of algorithms. Methods of algorithm design, including recursion, divide and conquer, dynamic programming, backtracking. Time and space complexity analyses in the best, worst, and average cases. NP-completeness; computationally hard problems. Applications from several areas of Computer Science. Prerequisites: MATH 2101, 2304, CS 3240.</td>
</tr>
<tr>
<td>4311</td>
<td>Software Engineering II (4)</td>
<td>Concepts and issues in the development of large software projects. Systematic approaches to requirements, analysis, design, implementation, testing, and maintenance of high-quality software. Prerequisite: CS 3240.</td>
</tr>
<tr>
<td>4320</td>
<td>Software Testing and Quality Assurance (4)</td>
<td>Concepts and issues in the testing and quality control of large software projects. Topics include white box, black box, unit, integration, and validation testing; quality assurance through planning, review, and use of software metrics. Prerequisite: CS 3240.</td>
</tr>
<tr>
<td>4330</td>
<td>Building Secure Software (4)</td>
<td>Security and safety analysis in software design and development. Vulnerability detection and avoidance. Topics include authentication, principle of least privilege, buffer overflows, race conditions, time-of-check vs. time-of-use, trust management, access control, and other security relevant issues. Prerequisite: CS 3240.</td>
</tr>
<tr>
<td>4331</td>
<td>Software Engineering II (4)</td>
<td>Continuation of Software Engineering I with emphasis on the object-oriented design to implementation stages of the life cycle. Design methodologies including the Unified Modeling Language, illustrated with example design patterns. Implementation in Java. Topics include standards, documentation, instrumentation, testing. Prerequisites: CS 3340, 4310.</td>
</tr>
<tr>
<td>4332</td>
<td>VLSI Circuit Design (4)</td>
<td>Fundamental design techniques for VLSI (Very Large Scale Integrated) circuits. Theory of implementing complex integrated circuits on a microchip. Use of computer aided design tools. Prerequisites: CS 3430, 3432. Cross Listed with ENGR 4432.</td>
</tr>
<tr>
<td>4560</td>
<td>Operating Systems (4)</td>
<td>Principles of operating system design and implementation. Concurrent processes, interprocess communication, job and process scheduling; deadlock, Issues in memory management (virtual memory, segmentation, paging) and auxiliary storage management (file systems, directory structuring, protection mechanisms). Performance issues. Case studies. Prerequisites: CS 3240 and CS 3430.</td>
</tr>
<tr>
<td>4590</td>
<td>Computer Networks (4)</td>
<td>Computer network analysis, design, and implementation. A detailed study of the network, transport and application layers of the TCP/IP model. Specific emphasis on protocols, services, design issues and performance. Programming assignments using TCP/IP. Prerequisite: CS 3590.</td>
</tr>
<tr>
<td>4604</td>
<td>Wireless and Mobile Networking (4)</td>
<td>Network protocols and mechanisms to support mobility, e.g., Mobile-IP, M-RSVP, proxies. Issues including routing, tunneling, security, and handoffs. Wireless communication standards including AMPS, IS-95, GSM, PCS, and satellite standards. Underlying technologies including multiplexing and coding. Prerequisite: CS 3590.</td>
</tr>
<tr>
<td>4660</td>
<td>Database Architecture (4)</td>
<td>Relational, network, and hierarchical data models. Data description and data manipulation languages. Schemas, query processing, database system architecture. Integrity, concurrency, and security techniques. Distributed databases. Prerequisite: CS 3240.</td>
</tr>
<tr>
<td>4665</td>
<td>Database Operations and Administration (4)</td>
<td>Topics in the operation and administration of databases, including database creation, account maintenance, data import and export, system backup, and performance tuning. Hands-on experience administering an Oracle database. Prerequisite: CS 4660.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
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<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4810</td>
<td>Artificial Intelligence (4)</td>
<td>&quot;Intelligent&quot; computer programs and models of human intelligence. Game playing, robotics, computer vision, understanding natural language, knowledge engineering, computer learning. Prerequisite: CS 3240.</td>
</tr>
<tr>
<td>4835</td>
<td>Human-Computer Interaction (4)</td>
<td>Human-centered software development and evaluation, human performance models, accommodating human diversity, principles of good design and good designers, introduction to usability testing. HCI aspects of multimedia systems, information systems, and collaboration and communication. Course work includes programming projects and fieldwork. Prerequisites: CS 3240 and either CS 3120 or 3340; or consent of instructor. Cross-listed with ENGR/PSYC 4835.</td>
</tr>
<tr>
<td>4840</td>
<td>Computer Graphics (4)</td>
<td>Survey of computer graphics hardware, algorithms, techniques, and standards. Software development on color-mapped raster-scan computer graphics system. Prerequisites: MATH 2101, 2304 and CS 3240, 3430.</td>
</tr>
<tr>
<td>4845</td>
<td>Fuzzy Sets and Fuzzy Logic (4)</td>
<td>Fuzzy set theory, fuzzy logic, approximate reasoning and relations between fuzzy set theory, probability theory, belief theory, and possibility theory. Fuzzy aggregation operators, fuzzy relations, and fuzzy clustering. Class project options: decision making, pattern recognition, databases, control, data mining. Prerequisites: CS 1160, MATH 2150, and course in probability or statistics; or permission of instructor. Cross-listed with ENGR 4845 and MATH 4845.</td>
</tr>
<tr>
<td>4849</td>
<td>Game Programming (4)</td>
<td>Survey of technologies for programming computer games. Topics include: mathematics, data structures, graphics (rendering, animation, cinematography), game logic, scripting, networking and server design, audio, artificial intelligence. Prerequisites: CS 4810 or CS 4840 or equivalent experience.</td>
</tr>
<tr>
<td>4865</td>
<td>Graphical User Interface Programming Using a Rapid Application Development Tool (4)</td>
<td>Event-driven programming in a windowed Graphical User Interface environment using a Rapid Application Development tool set. Pull-down menus, tool bars and other standard control objects, pointing devices, object hierarchy, standard dialogs, connecting to databases, state table programming. Prerequisite: CS 3340.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-5)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
</tbody>
</table>

**Footnote**

1. Has a prerequisite not included in the minor.
Construction Management

Department Information

Department of Engineering
College of Science
Office: VBT 346
Phone: (510) 885-2654
Website: www.sci.csueastbay.edu/engineering/

Professors
Karina Garbesi (Geography and Environmental Studies), Ph.D. University of California, Berkeley
Christopher W. K. Lubwama (Accounting and Finance), Ph.D. Simon Fraser University (Canada)
Saeid Motavalli (Chair), Ph.D. University of Pittsburgh
Helen Zong, Ph.D. University of Houston

Associate Professors
David Bowen, Ph.D. University of California, Berkeley
Farnaz Ganjeizadeh, Ph.D. University of Alabama at Huntsville
Tammy X. Simmons-Mosley (Accounting and Finance), Ph.D. University of Wisconsin-Madison

Assistant Professors
Farzad Shahbodaghliou, Ph.D. Purdue University

B.S. in Construction Management

Program Description
The Department of Engineering offers a Bachelor of Science degree in Construction Management designed for individuals who are planning to advance their knowledge and careers in managing construction projects.

The goals of the B.S. in Construction Management are to prepare effective managers for public and private construction projects, to prepare the workforce required for the expected increase in the state's transportation infrastructure improvements, and to enable high school graduates, transfer students and working professionals to assume leadership roles in the construction industry. This program is unique in that special attention is given to working professionals with classes offered mainly at times convenient to students. Students will take required courses in computer-aided construction design, construction material and methods, legal and environmental issues in construction, project planning and control, project management, soil mechanics and cost estimating. Issues in construction safety, building codes, electrical and mechanical systems and cost accounting are also covered. Students will also have a broad choice of electives from courses in construction management, engineering, or business to personalize their expertise.

Mission Statement
The mission of the Bachelor of Science degree in Construction Management is to prepare effective managers to lead public and private construction projects, prepare a technically capable management workforce required for the expected increase in the state's transportation infrastructure improvement projects, and enable high school graduates, transfer students and working professionals to assume leadership roles in construction industry.

Student Learning Outcomes
Students graduating with a B.S. in Construction Management from Cal State East Bay will:

1. have knowledge in the core construction management areas (construction materials and methods, safety, codes, scheduling, commissioning, planning and control, project management, construction law, cost accounting, human resources management, environmental and safety issues in construction),
2. have knowledge in broad areas of construction management beyond the core areas,
3. have the ability to communicate effectively,
4. have the ability to function in teams,
5. have the knowledge of sustainable building and construction techniques and relevant state regulations,
6. have an awareness of the complex environment (involving professional and ethical responsibilities) in which they will practice their profession,
7. have the ability to educate themselves and be prepared for lifelong learning and professional development, and
8. have experience in solving real life problems.

Career Opportunities
With the expected increase in large construction work in part stemming from the increase in public spending on California's transportation infrastructure improvement, there is considerable demand for individuals who can technically and scientifically manage construction projects. The construction industry as a whole is one of the largest industries in the nation with a great need for skilled project managers. Sample jobs are construction manager, site manager and others.

Features
The B.S. in Construction Management is designed to accommodate full time students as well as working students with accommodating class times. The instructors will be selected from industry leaders with significant construction management work experience. Students will have the opportunity to take elective courses in engineering, business, or science to broaden their skills.
Admission
The B.S. in Construction Management is open to individuals planning a career or advancing their career in the construction industry and who meet general university requirements for freshmen or transfer students (see Admission/Undergraduate chapter of the catalog).

Degree Requirements
The major consists of 120 units; the B.S. in Construction Management requires the completion of 180 quarter units distributed among required courses and electives.

Sample Program
A Sample Program for this degree can be found at the department website: www.sci.csueastbay.edu/engineering/.

I. Lower Division Courses (52 Units)
- ACCT 2251 Financial Reporting and Analysis I (4)
- CHEM 1601 Basic Chemistry for the Health Sciences (4)
- CMGT 1011 Introduction to Construction Management (4)
- CMGT 2060 Construction Methods and Material I (4)
- CMGT 2070 Construction Methods and Material II (4)
- ECON 2301 Principles of Microeconomics (4)
- ENGR 1420 Engineering Graphics (2)
- MATH 1130 College Algebra (4)
- MATH 1300 Trigonometry and Analytic Geometry (4)
- PHYS 2701 Introductory Physics (4)
- PHYS 2702 Introductory Physics (4)
- PSYC 1000 General Psychology (5)
- STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division Courses (60 units)
- CMGT 3101 Statics (4)
- CMGT 3190 Construction Safety (4)
- CMGT 3280 Construction Law (4)
- CMGT 3400 Construction Project Management and Commissioning (4)
- CMGT 3450 Building Codes (4)
- CMGT 3600 Soil Mechanics and Building Foundations (4)
- CMGT 4100 Engineering Graphics for Construction Management (4)
- CMGT4200 Construction Scheduling (4)
- CMGT 4250 Electrical and Mechanical Systems in Construction (4)
- CMGT 4300 Environmental Issues and Green Building (4)
- CMGT 4400 Construction Cost Estimation (4)
- CMGT 4500 Construction Project Planning and Control, Computer Tools (4)
- CMGT 4610 Senior Project I (4)
- CMGT 4620 Senior Project II (4)
- MGMT 3610 Human Resources Management (4)

III. Elective Courses (8 Units)
Eight (8) quarter units from the following courses or other 3000 or 4000 level courses with department approval.
- ACCT 2253
- ACCT 2701
- ACCT 3210
- ACCT 3230
- ENGR 3190
- ENGR 3140
- FIN 3300
- FIN 4410
- FIN 4415
- MGMT 3600
- MGMT 3100
- MGMT 3645

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Undergraduate Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1011</td>
<td>Introduction to Construction Management (4)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>2060</td>
<td>Construction Methods and Material I (4)</td>
</tr>
<tr>
<td>2070</td>
<td>Construction Methods and Material II (4)</td>
</tr>
<tr>
<td>3101</td>
<td>Statics (4)</td>
</tr>
<tr>
<td>3190</td>
<td>Construction Safety (4)</td>
</tr>
<tr>
<td>3280</td>
<td>Construction Law (4)</td>
</tr>
<tr>
<td>3400</td>
<td>Construction Project Management and Commissioning (4)</td>
</tr>
<tr>
<td>3450</td>
<td>Building Codes (4)</td>
</tr>
<tr>
<td>3600</td>
<td>Soil Mechanics and Building Foundations (4)</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Engineering (4)</td>
</tr>
<tr>
<td>4100</td>
<td>Engineering Graphics for Construction Management (4)</td>
</tr>
<tr>
<td>4200</td>
<td>Construction Scheduling (4)</td>
</tr>
<tr>
<td>4250</td>
<td>Electrical and Mechanical Systems in Construction (4)</td>
</tr>
<tr>
<td>4300</td>
<td>Environmental Issues and Green Building (4)</td>
</tr>
<tr>
<td>4400</td>
<td>Construction Cost Estimation (4)</td>
</tr>
<tr>
<td>4500</td>
<td>Construction Project Planning and Control, Computer Tools (4)</td>
</tr>
<tr>
<td>4610</td>
<td>Senior Project I (4)</td>
</tr>
<tr>
<td>4620</td>
<td>Senior Project II (4)</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
<tr>
<td>4990</td>
<td>Special Topics (1-4)</td>
</tr>
</tbody>
</table>
Creative Video

Department Information
Departments of Art, English, Communication, Theatre and Dance
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3118

Professor
Thomas C. Hird (Theatre and Dance), M.F.A. University of California, Los Angeles

Program Director: Thomas C. Hird

Program Description
The field of video production, for television as well as for corporate and educational uses, is expanding rapidly and there is much demand by employers for people with these skills. Other programs and courses at Cal State East Bay feature documentary and news production (COMM); stage acting (THEA); fiction writing for the printed page and the Internet (ENGL). This program introduces a new dimension to each of these areas: fictional or creative video. The new minor enables these departments to collaborate and actually create several videos of broadcast quality each year, giving students the opportunity to learn skills by practicing them.

Minor Requirements
Complete 31 units from the following:

- ART 3820 Digital Video (4) (has prerequisites that are not included in the program)
- COMM 3100 Television Production/Direction (4)
- COMM 3102 Television Post-production (4)
- ENGL 2070 Beginning Workshop in Fiction (4)
- THEA 1020 Discover Acting (3) or THEA 2005 Acting Fundamentals: Improvisation (3)
- THEA 3052 Acting for the Camera (4)
- Select 4 units of lower division COMM coursework with consent of department (4)
- Select 4 units of upper division THEA coursework with consent of department (4)

Certificate Program
The certificate program in Creative Video consists of 27 units.

I. Required Courses (11 units)
   - COMM 3100 Television Production/Direction (4)
   - ENGL 2070 Beginning Workshop in Fiction (4)
   - THEA 1020 Discover Acting (3) or THEA 2005 Acting Fundamentals: Improvisation (3)

II. Electives (16 units)
   - ART 3820 Digital Video (4) (has prerequisites that are not included in the program)
   - COMM 3102 Television Post-production (4)
   - THEA 3052 Acting for the Camera (4)
   - Select 4 units of upper division THEA coursework covering teleplay acting and production, with consent of department (4)
Criminal Justice Administration

- Department Information
- Program Description
- Career Opportunities
- Preparation
- Major Requirements (B.S.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses

Department Information

Department of Criminal Justice Administration
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4069
Phone: (510) 885-3590
Website: http://class.csueastbay.edu/criminaljustice/

Associate Professors
Silvina Ituarte (Chair), Ph.D. Rutgers University
Dawna Komorosky, Ph.D. Indiana University of Pennsylvania

Assistant Professors
Julie Beck, Ph.D. University of California, Santa Cruz
Keith Inman, M.Crim. University of California, Berkeley

Program Description

The Department of Criminal Justice Administration offers an undergraduate program designed for the development of knowledge and understanding of practices, theory, and concepts of justice administration, as well as to prepare students for professional careers in justice administration, law enforcement, corrections, victim advocacy, law, and community-based programs. The major includes two specialized options and the student selects one depending on her/his career interest.

The Law Enforcement and Administration option affords the opportunity to work in government agencies and private organizations offering challenging positions in crime prevention, control, and investigation. It is designed for students interested in careers with federal, state, and local law enforcement agencies, or in law enforcement within the private sector. Employment opportunities include administrators of institutional programs, consultants to groups in mobilizing resources to combat social problems, and social scientists working toward understanding individual and group behavior and social control by means of law.

The Corrections option is designed for students interested in careers in probation, parole, correctional institutions, and affiliated forms of work. It primarily focuses on probation-related services including investigation of case histories, assessment of treatment needs, advisement to the court, and the operation of diverse types of correctional and community-based programs.

Many local, state, federal and private agencies employ Cal State East Bay criminal justice graduates. Senior majors may qualify for internship placement in criminal justice agencies throughout the Bay Area.

Local level agencies include municipal police departments, county sheriffs' offices, probation departments, halfway and pre-release houses, group homes, crisis centers, juvenile halls, welfare fraud units, computer crime analysis, and retail and industrial security agencies. State level agencies include: the Highway Patrol, California Department of Corrections and Rehabilitation, Department of Motor Vehicles, and Departments of Justice, Fish and Game, and Forestry. Federal level agencies include the Border Patrol; F.B.I.; Secret Service; Bureau of Alcohol, Tobacco and Firearms; Internal Revenue Service; National Park Service; Customs; Postal Inspection Service; and Federal Prisons.

Student Learning Outcomes

Students graduating with a B.S. in Criminal Justice from Cal State East Bay will have the following:

1. Knowledge--general knowledge about the criminal justice system, including familiarity with the criminal law, victimization, the adjudication process, corrections options, police-community relations, evidence, ethics and theory;
2. Skills--certain skills relevant to criminal justice administration, including effective interaction and communication skills, interviewing methods, investigative and research methods, statistical analysis, crime prevention methods, evidence collection, and offender assessment;
3. Disposition--ability to synthesize material from two or more domains to find solutions to practical, theoretical, or ethical questions, or to apply material to novel situations (i.e., critical thinking).

Career Opportunities

- Family Violence, Crisis, or Shelter Counselor
- Community Agency Counselor
- Community Service Coordinator
- Consumer Affairs Director
- Probation, Parole, and Corrections Officer
- Deputy Insurance Commissioner
- Equal Opportunity Representative
- ATF, CIA FBI Agent
- Group Worker
- Insurance Investigator
Preparation

It is strongly recommended that students complete the lower division (1000-2000) courses before taking the upper division courses.

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 78 units; the B.S. degree requires a total of 180 units. Credit/No Credit (CR/NC) grading is not permitted for classes used to meet the major requirements. A grade of C (2.0) or higher is required for all courses to be counted toward the major.

I. Lower Division (34 units)

(Lower division courses in the major can be satisfied by successful completion of equivalent courses at a community college.)

- CRJA 2100 Elementary Criminal Law (4)
- CRJA 2200 Basic Criminal Investigation (4)
- CRJA 2400 Evidence in Corrections and Law Enforcement (4)
- CRJA 2500 Administration of Justice (4)
- CRJA 2600 Police Community Relations (4)
- PSYC 1000 General Psychology (or 1001 or 1005) (5)
- SOC 1000 Introduction to Sociology (or one of 1001, 1002, 2001, or 2002) (4)
- STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division Core (16 units)

- CRJA 3200 Research Methods in Criminal Justice (4)
- CRJA 3700 Ethics and Justice Administration (4)
- CRJA 4127 Crime Theory (4)
- POSC 3410 Law and Society (4)

III. Option (28 units)

Students select one option to complete. In addition to the 16 units of option core courses, 12 units of electives must be taken.

A. Law Enforcement and Administration Option Core (16 units)

Students who elect to take Option A must complete each of the following four courses:

- CRJA 3300 Crime Prevention and Control (4)
- CRJA 3400 Advanced Criminal Investigation (4)
- CRJA 3610 Police Organization and Management (4)
- CRJA 3800 Comparative Evidence and Its Evaluation (4)

Under this option, students must complete a total of 12 additional upper division units from the specialized elective area.

B. Corrections Option Core (16 units)

Students who elect to take Option B must complete each of the following four courses:

- CRJA 3100 Corrections and Criminal Justice (4)
- CRJA 4123 The Crime Victim (4)
- CRJA 4700 Community Based Corrections (4)
- Select 4 units of upper-division coursework covering the topic Probation and Parole, with consent of department (4)

Under this option, students must complete a total of 12 additional upper division units from a specialized elective area.

C. Specialized Electives for Both Options (12 units)

Both Option A and Option B students must choose 12 units of elective coursework in a single specialized study area, provided that the course or courses chosen have previously not been taken as part of an option. Upon faculty advisement and approval, additional courses may also apply.

Area 1. Criminal Justice System

- CRJA 3100 Corrections and Criminal Justice (4)
- CRJA 3300 Crime Prevention and Control (4)
- CRJA 3400 Advanced Criminal Investigation (4)
- CRJA 3500 Criminal Identification (4)
- CRJA 3610 Police Organization and Management (4)
- CRJA 3800 Comparative Evidence and Its Evaluation (4)
- CRJA 4123 The Crime Victim (4)
- CRJA 4124 Sex Crime Investigation (4)
- CRJA 4125 Women in Criminal Justice (4)
- CRJA 4126 Seminar in Criminal Justice Administration (4)
- CRJA 4128 Internship in Criminal Justice (4)
CRJA 4700 Community Based Corrections (4)
CRJA 4730 Restorative Justice (4)

Area 2. Offender Treatment/Reform
- COMM 3520 Nonverbal Communication (4)
- CRJA 3100 Corrections and Criminal Justice (4)
- CRJA 4123 The Crime Victim (4)
- CRJA 4126 Seminar in Criminal Justice Administration (4)
- CRJA 4128 Internship in Criminal Justice (4)
- CRJA 4700 Community Based Corrections (4)
- CRJA 4730 Restorative Justice (4)
- PSYC 4360 Psychopharmacology (4)
- PSYC 4410 Abnormal Psychology (4)
- PSYC 4610 Psychology of Personality (4)

Area 3. Legal Aspects
- CRJA 3500 Criminal Identification (4)
- CRJA 4126 Seminar in Criminal Justice Administration (4)
- PHIL 3503 Philosophy of Law (4)
- PHIL 3510 Human Rights and Social Justice (4)
- POSC 3417 Survey of American Law (4)
- POSC 3441 American Constitutional Law (4)
- POSC 3442 American Constitutional Law: Rights (4)
- POSC/PUAD 4450 Administrative Law (4)

Area 4. Social and Cultural Perspectives
- ANTH 3720 Medical Anthropology (4)
- COMM 3240 Public Opinion (4)
- CRJA 4125 Women in Criminal Justice (4)
- CRJA 4126 Seminar in Criminal Justice Administration (4)
- CRJA 4730 Restorative Justice (4)
- MLL Three upper division courses in a single foreign language (4-4-4)
- PHIL 3510 Human Rights and Social Justice (4)
- PUAD 4800 Public Administration and Society (4)
- PUAD 4830 Organization Theory and Human Behavior (4)
- SOC 3520 Sociology of Minority Groups (4)
- SOC 3730 Juvenile Delinquency (4)
- SOC 3750 Alcohol and Drug Abuse (4)
- SOC 4740 Criminology (4)

Area 5. Internship
At least two quarters (8 units) of approved Internship placement and CRJA 4126 Seminar in Criminal Justice Administration (4)

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Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

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Minor Requirements
The minor consists of 33 units. The purpose of the minor is to provide interested students with the opportunity to study the central areas of criminal justice. The selected courses will offer instruction in law, law enforcement, ethics, corrections and the courts. The minor allows those students with career plans in the social services and business administration to acquire knowledge of criminal justice, a career area with high employment prospects. Credit/No Credit (CR/NC) grading is not permitted for classes used to meet minor requirements.

I. Lower Division (12 units)
- CRJA 2100 Elementary Criminal Law (4)
- CRJA 2200 Basic Criminal Investigation (4)
- CRJA 2500 Administration of Justice (4)

II. Lower Division Statistics Requirement (5 units)
- STAT 1000 Elements of Probability and Statistics (5)

III. Upper Division Requirements (16 units)
- CRJA 3100 Corrections and Criminal Justice (4)
- CRJA 3300 Crime Prevention and Control (4)
- CRJA 3610 Police Organization and Management (4)
- CRJA 3700 Ethics and Justice Administration (4)
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1100</td>
<td>Behind Bars: Incarceration and Creative Alternatives (4)</td>
</tr>
<tr>
<td>2100</td>
<td>Elementary Criminal Law (4)</td>
</tr>
<tr>
<td>2200</td>
<td>Basic Criminal Investigation (4)</td>
</tr>
<tr>
<td>2400</td>
<td>Evidence in Corrections and Law Enforcement (4)</td>
</tr>
<tr>
<td>2500</td>
<td>Administration of Justice (4)</td>
</tr>
<tr>
<td>2600</td>
<td>Police Community Relations (4)</td>
</tr>
<tr>
<td>3100</td>
<td>Corrections and Criminal Justice (4)</td>
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<tr>
<td>3200</td>
<td>Research Methods in Criminal Justice (4)</td>
</tr>
<tr>
<td>3300</td>
<td>Crime Prevention and Control (4)</td>
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<tr>
<td>3400</td>
<td>Advanced Criminal Investigation (4)</td>
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<tr>
<td>3500</td>
<td>Criminal Identification (4)</td>
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<tr>
<td>3610</td>
<td>Police Organization and Management (4)</td>
</tr>
<tr>
<td>3700</td>
<td>Ethics and Justice Administration (4)</td>
</tr>
<tr>
<td>3750</td>
<td>Family Violence and the Criminal Justice System (4)</td>
</tr>
<tr>
<td>3800</td>
<td>Comparative Evidence and Its Evaluation (4)</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Criminal Justice (4)</td>
</tr>
<tr>
<td>4123</td>
<td>The Crime Victim (4)</td>
</tr>
</tbody>
</table>

Consultation and research in the criminal justice system from the perspective of the victim and the victim's needs/concerns. Various facets of victimology including: victimization data, victim compensation, psychological impacts of crime on victims, and alternatives to current remedies. A grade of C (2.0) or higher is required for all courses to be counted toward the major.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4124</td>
<td>Sex Crime Investigation (4)</td>
<td>Theoretical foundations related to sexual crimes. Basic skills necessary to investigate sexual assault cases, collection and preserving physical evidence, interviewing and interrogation of subjects and victims, and successful preparation of cases for presentation. Prerequisite: CRJA 2200 or consent of instructor. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
<tr>
<td>4125</td>
<td>Women in Criminal Justice (4)</td>
<td>Women as victims, offenders and prisoners; gender sentencing differentials; women in criminal justice professions such as policing, corrections, and courts. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
<tr>
<td>4126</td>
<td>Seminar in Criminal Justice Administration (4)</td>
<td>Intensive seminar on selected issues in criminal justice administration. Prerequisite: consent of instructor. May be repeated two times when content varies, for a maximum of 12 units. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
<tr>
<td>4127</td>
<td>Crime Theory (4)</td>
<td>Major social, psychological and biological theories of crime causation. Historical and current applications of theory to justice administration and offender treatment and rehabilitation. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
<tr>
<td>4128</td>
<td>Internship in Criminal Justice (4)</td>
<td>Practical experience in a department-approved criminal justice agency (public or private). Academic assignments integrated with volunteer or paid activities. Prerequisite: departmental approval of activity. Junior or senior standing. A maximum of 8 units of 3898 and/or 4128 may be applied to electives in major. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
<tr>
<td>4700</td>
<td>Community Based Corrections (4)</td>
<td>The role of local, state and federal government in the development of community-based correctional programs. Alternatives to incarceration of the criminal. Topics include halfway houses of correction, community furlough and ex-offender employment. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
<tr>
<td>4710</td>
<td>Drugs, Law, and Society: Race, Gender and U.S. Drug Policy (4)</td>
<td>Exploration of current U.S. drug policy and consequences, such as mass incarceration. Includes historical drug scares, the War on Drugs and repercussions, drug treatment, decriminalization, race and gender analysis. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
<tr>
<td>4730</td>
<td>Restorative Justice (4)</td>
<td>Critical look at how restorative justice responds to crime by holding offenders accountable for harm committed, repairing harm to victims and community, and promoting skills in offenders to prevent crime recurrence. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
<tr>
<td>4830</td>
<td>Seminar in Forensic Research (1)</td>
<td>Criminal justice aspects of forensic research. Current issues in forensic science based on scientific, legal, and criminal justice concerns. Prerequisite: consent of instructor. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units. A grade of C (2.0) or higher is required for all courses to be counted toward the major.</td>
</tr>
</tbody>
</table>
Economics

- Department Information
- Program Description
- Career Opportunities
- Features
- Preparation
- Major Requirements (B.A.)
- Other Degree Requirements
- Minor Requirements
- Business Economics Option
- Undergraduate Courses

Department Information

Department of Economics
College of Business and Economics
Office: Valley Business and Technology Center, Rm. 442
Phone: (510) 885-3265

Student Service Center: (VBT 129, 510-885-3323)
Email: cbe_ssc@csueastbay.edu
Website: http://www.cbe.csueastbay.edu

Professors Emeriti
Jane E. Lopus, Ph.D. University of California, Davis
Stephen Shmanske, Ph.D. University of California, Los Angeles
David J. St. Clair, Ph.D. University of Utah

Professors
James C. W. Ahiakpor, Ph.D. University of Toronto (Canada)
Gregory B. Christainsen, Ph.D. University of Wisconsin, Madison
Leo Kahane (Chair), Ph.D. Columbia University
Anthony K. Lima, Ph.D. Stanford University
Lynn C. Paringer, Ph.D. University of Wisconsin, Madison

Associate Professor
Jed DeVaro, Ph.D. Stanford University

Assistant Professors
Nicolae Stoian, Ph.D. University of Arizona

Program Description

The Economics major prepares the student for a broad variety of careers including those in law, journalism, banking and insurance, government, teaching, and research. In addition, the study of economics has become essential in today's dynamic and complex business environment.

An Economics education provides the student with a logical way of approaching various problems and issues and provides qualitative skills valued highly by employers. The student learns techniques for analyzing contemporary economic problems and develops the ability to exercise sound judgment in evaluating public policy issues. Many of these skills are useful in daily decision-making irrespective of career choice. The broad background developed with the Economics major encourages the student to become an interested, understanding observer of the events of today's and tomorrow's world.

Student Learning Outcomes

Students graduating with a B.A. in Economics from Cal State East Bay will:

1. demonstrate a basic understanding of microeconomic and macroeconomic theory and econometrics
2. demonstrate the ability to present orally a coherent, logical economic argument grounded in economic theory
3. demonstrate the ability to present a coherent, logical economic argument grounded in economic theory and methods in writing
4. use appropriate computer technologies to develop research problems and present written and oral economic arguments.

Career Opportunities

- Accountant
- Analyst
- Business Executive
- Economist
- Employment Researcher/Planner
- Financial Consultant
- Foreign Service Officer
- Financial Analyst
- Management Analyst
- Market Research Analyst
- Policy Analyst
Features

The weekly Workshop in Economic Research (ECON 4895) provides a forum for presenting and debating faculty research and for inviting U.S. and international specialists in economics and management to discuss their research and published work. Some of the visiting speakers are sponsored by the Smith Center for Private Enterprise Studies which was started with a donation of more than $1,000,000 from Owen and Erma Smith of Castro Valley. Undergraduate Economics students are required to attend the workshop for two quarters for credit, usually in the senior year.

Preparation

For Advanced Placement course equivalencies, see Registration chapter

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 62-94 units; the B.A. degree requires a total of 180 units. Students receiving a B.A. degree in Economics from this university may complete one of the following three options: Accounting, Social Science Economics, or Statistical Economics.

Expiration of Courses: Major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses: Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics. Because all upper division Economics courses contain a writing component, it is strongly recommended that students complete their University Writing Skills Requirement before their junior year. Students are encouraged to improve these skills by taking MKTG 3495 (Business Communication). See the Business Administration chapter in the undergraduate section of this catalog for a course description.

Economics Major (64 units)

1. Lower Division Core (17 units)
   - ECON 2301 Principles of Microeconomics (4)
   - ECON 2302 Principles of Macroeconomics (4)
   - MATH 1810 Mathematics for Business and Social Sciences
     or MATH 1304 Calculus I (4)
   - STAT 2010 Elements of Statistics for Business and Economics (5)
     or STAT 1000 Elements of Probability and Statistics (5)

   Note: Students considering graduate school should take MATH 1304. MATH 1305, Calculus II, is recommended.

2. Upper Division Core (22 units)
   Complete the following courses as soon as possible after the lower division core has been satisfied.
   - ECON 3000 Micro-Economic Theory (4)
   - ECON 3005 Macro-Economic Theory (4)
   - ECON 3310 Money, Banking, and Financial Intermediaries (4)
   - ECON 4000 Mathematical Economics (4)
   - ECON 4400 Introduction to Econometrics (4)
   - ECON 4895 Workshop in Economic Research (1) (must be taken 2 times)

   Note: Students completing a double major in Economics and Business Administration may substitute ECON 3551 for ECON 3000.

3. Electives (24 units)
   Six upper division Economics courses, excluding ECON 3551.

4. Capstone (1 unit)
   ECON 4896 Senior Research (1).

5. Culminating Experience
   Pass a multiple choice examination grounded in micro- and macro-economic principles.

Accounting Option (98 units)

The Accounting option provides students with general exposure to the operation of the external environment to the firm (the economy) while also providing them with the accounting tools necessary to operate in a wide variety of private organizations and to obtain a C.P.A.

1. Lower Division Core (25 units)
   - PC proficiency test
   - ACCT 2251 Introduction to Financial Accounting (4)
   - ACCT 2253 Introduction to Managerial Accounting (4)
   - ECON 2301 Principles of Microeconomics (4)
   - ECON 2302 Principles of Macroeconomics (4)
   - MATH 1810 Mathematics for Business and Social Sciences
     or MATH 1304 Calculus I (4)
STAT 2010 Elements of Statistics for Business and Economics (5)
or STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division Core (36 units)
- ACCT 3170 Information Technology in Business (4)
or ACCT 4704 Financial Reporting Systems: Design and Implementation (4)
- ACCT 3211 Intermediate Financial Accounting I (4)
- ACCT 3212 Intermediate Financial Accounting II (4)
- ACCT 3213 Intermediate Financial Accounting III (4)
- ACCT 3220 Tax Accounting: Fundamentals and Individuals (4)
or ACCT 4220 Tax Accounting: Corporate Tax (4)
- ECON 3000 Micro-Economic Theory (4)
or ECON 3051 Managerial Economics and Business Strategy (4)
- ECON 3005 Macro-Economic Theory (4)
or ECON 3006 Macro-Economics for Business (4)
- ECON 3310 Money, Banking, and Financial Intermediaries (4)
- ECON 4400 Introduction to Econometrics (4)

III. Electives (36 units)
- Upper Division Accounting (12 units)
  Select three ACCT 3000-4000 level accounting courses beyond those listed as required (excluding ACCT 3228, 3898, 4227, 4900, 4915).
- Upper Division Economics (24 units)
  Select six upper division economics courses (excluding ECON 3551).

IV. Capstone (1 unit)
ECON 4896 Senior Research (1)

V. Culminating Experience
Pass a multiple choice examination grounded in micro- and macro-economic principles.

Social Science Economics Option (62 units)
The Social Science Economics option provides an avenue for students interested in the social science aspects of economics and provides a rigorous and well-rounded economics program that emphasizes its social science underpinnings.

I. Lower Division Core (17 units)
- ECON 2301 Principles of Microeconomics (4)
- ECON 2302 Principles of Macroeconomics (4)
- MATH 1130 College Algebra (4)
- STAT 2010 Elements of Statistics for Business and Economics (5)
or STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division Core (20 units)
- ECON 3000 Microeconomic Theory (4)
- ECON 3005 Macroeconomic Theory (4)
or ECON 3006 Macroeconomics for Business (4)
- ECON 3310 Money, Banking, and Financial Intermediaries (4)
- Select two of the following three:
  - SOC 3000 Introduction to Sociological Research (4)
  - HIST 3017 The Twentieth Century (4)
  - POSC 3300 Voting and Public Opinion (4)

III. Electives (24 units)
- Upper Division Economics (16 units)
  Select four upper division economics courses, excluding:
  - ECON 3551
  - ECON 3898
  - ECON 4900
- Upper Division Social Science (8 units)
  Select two courses from the following:
  - HIST 3020 Modern Imperialism and Colonialism (4)
  - HIST 3170 Europe in the 20th Century (4)
  - HIST 3224 The Cold War (4)
  - HIST 3305 Modern South Asia (4)
  - HIST 3345 The Modern Middle East (4)
  - HIST 3417 Cold War America (4)
  - HIST 3550 The History of U.S. Foreign Relations (4)
  - HIST 3605 Modern Latin America (4)
  - POSC 3120 State and Local Politics and Government (4)
  - POSC 3130 Urban Politics (4)
  - POSC 3418 U.S. Immigration Policy and Law (4)
  - POSC 3419 Labor Policy and Law (4)
  - POSC 3460 Environmental Law (4)
  - POSC 3470 International Law (4)
  - POSC 3500 World Problems and Global Response (4)
  - POSC 3505 American Foreign Policy (4)
  - POSC 3520 International Relations (4)
IV. Capstone (1 unit)
   ECON 4896 Senior Research (1)

V. Culminating Experience
   Pass a multiple choice examination grounded in micro- and macro-economic principles

Statistical Economics Option (69 units)

I. Lower Division Core (16 units)
   • ECON 2301 Principles of Microeconomics (4)
   • ECON 2302 Principles of Macroeconomics (4)
   • MATH 1304, 1305 Calculus I, II (8)

II. Upper Division Core (32 units)
   • ECON 3000 Micro-Economic Theory (4)
   • ECON 3005 Macro-Economic Theory (4)
     or ECON 3006 Macro-Economics for Business (4)
   • ECON 3310 Money, Banking, and Financial Intermediaries (4)
   • ECON 4000 Mathematical Economics (4)
   • ECON 4400 Introduction to Econometrics (4)
     or STAT 4601 Regression (4)
   • STAT 3401 Introduction to Probability Theory I (4)
   • STAT 3502 Statistical Inference I (4)
   • STAT 3900 Data Analysis Using Statistical Packages (4)
     or STAT/ECON 4950 Advanced Statistical Packages for Data Analysis (4)

Notes:
   • STAT 3401 can replace STAT 1000 as a prerequisite to ECON 3000 and 4400.
   • STAT 4601 has two prerequisites: STAT 3503 (4)
     or STAT 4000 (4)

III. Electives (20 units)
   • Upper Division Economics (12 units)
     Select three upper division economics courses, excluding
     • ECON 3551
     • ECON 3898
     • ECON 4900
   • Statistics (8 units)
     Select two courses from the following:
     • STAT 3402 Introduction to Probability Theory II (4)
     • STAT 3503 Statistical Inference II (4)
     • STAT 4860-4869 Undergraduate Seminar (4)

IV. Capstone (1 unit)
   ECON 4896 Senior Research (1)

V. Culminating Experience
   Pass a multiple choice examination grounded in micro- and macro-economic principles

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 29 units. Note: A student cannot have both a Business Economics option under the Business Administration major and an Economics minor. Students must have at least 18 units in the minor that are not counted in the major requirement. This means that business administration students cannot receive an Economics minor.

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.
I. Lower Division (17 units)
   - MATH 1130 College Algebra (4)
   - ECON 2301 Principles of Microeconomics (4)
   - ECON 2302 Principles of Macroeconomics (4)
   - STAT 2010 Elements of Statistics for Business and Economics (5)
     or STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division (12 units)
Complete the following courses as soon as possible after the lower division requirements have been satisfied:
   - ECON 3000 Micro-Economic Theory or ECON 3551 Managerial Economics and Business Strategy (4)
   - ECON 3005 Macro-Economic Theory (4) or ECON 3006 Macro-Economics for Business (4)
     or ECON 3107 Global Economic Analysis (4)
   - One elective course in Economics (ENGR/ECON 3140 may be used) (4)

Business Economics Option
An option in Business Economics is provided in the Business Administration major for business students with an interest in economics. (See the Business Administration chapter in the undergraduate section of this catalog.)

Undergraduate Courses
(Course prefix: ECON)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>1000</td>
<td>Economics of Public Issues (4)</td>
</tr>
<tr>
<td>1888</td>
<td>Economics of Sports in Our World (4)</td>
</tr>
<tr>
<td>2301</td>
<td>Principles of Microeconomics (4)</td>
</tr>
<tr>
<td>2302</td>
<td>Principles of Macroeconomics (4)</td>
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<tr>
<td>3000</td>
<td>Micro-Economic Theory (4)</td>
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<tr>
<td>3005</td>
<td>Macro-Economic Theory (4)</td>
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<tr>
<td>3006</td>
<td>Macro-Economics for Business (4)</td>
</tr>
<tr>
<td>3107</td>
<td>Global Economic Analysis (4)</td>
</tr>
<tr>
<td>3140</td>
<td>Engineering Economy (4)</td>
</tr>
<tr>
<td>3150</td>
<td>Economic History of the United States (4)</td>
</tr>
<tr>
<td>3170</td>
<td>History of Economic Thought (4)</td>
</tr>
<tr>
<td>3200</td>
<td>Comparative Economic Systems (4)</td>
</tr>
<tr>
<td>3310</td>
<td>Money, Banking, and Financial Intermediaries (4)</td>
</tr>
<tr>
<td>3370</td>
<td>Public Sector Economics (4)</td>
</tr>
</tbody>
</table>

(See ENGR 3140 for course description.)

- An introduction to economics with a focus on using economic analysis to examine current social, political, and global issues. Topics covered may include pollution, health care, crime, poverty, unemployment, and inflation. Designed for non-business and economics majors. Not open to students with credit for ECON 1888, ECON 2301, or ECON 2302.
- An introduction to economics with a focus on using economic analysis to examine current social, political, and global issues as they relate to sports in our world. Not open to students with credit for ECON 1000.
- Basic micro-economic concepts; introductory analysis of the determination of prices and output in different market situations; public policy. Prerequisites: sophomore standing and either credit for intermediate algebra or satisfactory score on the Entry-Level Math (ELM) Test.
- Basic macro-economic concepts; introductory analysis of the determination of national income and employment; money and banking; fiscal policy in a global context. Prerequisite: either credit for intermediate algebra or satisfactory score on the Entry-Level Math (ELM) Test.
- Analysis of supply and demand; production and costs; price and output determination; factor pricing and income distribution; optimum resource allocation. Prerequisites: STAT 2010 or 1000; MATH 1130 and ECON 2301 with grade not lower than a "C".
- Measurement and analysis of the determination of national income and employment; general price level; stabilization and growth. Prerequisites: ECON 2301, 2302, with grade not lower than a "C" in 2302. Not open to students with credit for ECON 3006.
- Current topics such as inflation, employment and unemployment, interest rates, exchange rates, the business cycle, and macroeconomic policies presented in a manner most useful for business students or any student interested in real-world economic issues. Prerequisites: ECON 2301, 2302, with a grade not lower than "C" in 2302. Not open to students with credit for ECON 3005.
- Analysis of the microeconomics and macroeconomics of global trade, growth, development, investment, foreign exchange markets, international capital movements, global competitiveness, international treaties and laws. Prerequisites: ECON 2301, 2302, with a grade not lower than a "C" in both courses. Not open to students with credit for ECON 4700 or ECON 4705.
- The development of the American economy and economic institutions; emphasis on factors affecting economic growth, problems, and policies.
- The key theories and individuals in the history of economic thought including Adam Smith, David Ricardo, and Karl Marx. Prerequisites: ECON 2301 and 2302.
- Comparative study of different economic systems proposed or used to deal with the economic organization of society. Prerequisite: ECON 2301.
- Essentials of commercial and central banking; financial intermediaries; monetary policy. Prerequisite: ECON 2302.
- Public sector economics; taxation, welfare economics, public goods, the rationale of government activity and collective choice. Prerequisites: ECON 2301 and 2302.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3375</td>
<td>Public Choice: The Economics of Politics (4)</td>
<td>Economic theory applied to political institutions and decision-making within governments. Allocations under various property right systems; coalitions and voting behavior; theory of constitutions; theory of bureaucracy; political economy of income redistribution, crime, violence, discrimination, federalism, nationalism, anarchy. Prerequisite: ECON 2301.</td>
</tr>
<tr>
<td>3500</td>
<td>Urban Economics (4)</td>
<td>Economic analysis of the forces determining an urban area's income, employment, land use, industrial structure, and public sector. Applications to issues such as housing, central city-suburban relationships, transportation, and neighborhood economic development. Prerequisite: ECON 2301.</td>
</tr>
<tr>
<td>3551</td>
<td>Managerial Economics and Business Strategy (4)</td>
<td>The actions and reactions of business firms and consumers in a variety of market environments, emphasizing their strategies for optimization. Course not recommended for Economics majors. Prerequisites: ECON 2301, STAT 2010 or 1000 and MATH 1810 or 1304.</td>
</tr>
<tr>
<td>3680</td>
<td>Labor Economics (4)</td>
<td>Economic analysis of labor markets, including wages and wage determination, investments in human capital, employment and unemployment. Prerequisite: ECON 2301.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. Prerequisites: At least 2.0 GPA. departmental approval of activity. Not for credit toward the Economics major or minor. May be repeated for credit, for a maximum of 8 units. CR/NC grading only.</td>
</tr>
<tr>
<td>4000</td>
<td>Mathematical Economics (4)</td>
<td>Application of linear algebra, differential calculus, and probability theory to microeconomic analysis. Topics include market equilibrium, properties of production functions, uncertainty, optimization methods, and comparative static analysis. Prerequisites: ECON 3000 or 3551; MATH 1810 or 1304; STAT 2010 or 1000.</td>
</tr>
<tr>
<td>4306</td>
<td>Environmental Economics (4)</td>
<td>Readings, reports and discussion on economic aspects of environmental problems and alternative proposed solutions: pollution, congestion, population. Prerequisite: ECON 2301.</td>
</tr>
<tr>
<td>4315</td>
<td>Monetary Theory (4)</td>
<td>Review of current literature on the demand for and supply of money; effects of monetary policy on inflation, unemployment, interest rates, and balance of payments. Prerequisite: ECON 3310.</td>
</tr>
<tr>
<td>4400</td>
<td>Introduction to Econometrics (4)</td>
<td>Applications of statistical techniques to obtain quantitative estimates of relationships suggested by economic analysis. Prerequisites: ECON 2301, 2302; STAT 2010 or 1000.</td>
</tr>
<tr>
<td>4500</td>
<td>Economics of Sports (4)</td>
<td>Considers economic issues of sports using microeconomics and statistics. Topics include: the size, importance and unique economic and legal aspects of sports markets, public funding of amateur and professional sports, player salaries and owner-player relations, and the benefits/costs of college sports. Prerequisite: ECON 2301.</td>
</tr>
<tr>
<td>4550</td>
<td>Selected Topics in Economic Analysis (4)</td>
<td>Application of economic analysis to past/contemporary economic issues. Prerequisites: ECON 2301 or 2302; see current class schedule for which course is required. May be repeated once for credit with consent of department with a different instructor and when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4680</td>
<td>International Trade (4)</td>
<td>Comprehensive coverage of the modern theory of international trade, foreign investment, the nature and effects of protection, multinational enterprise, world economic growth and international trading systems. Prerequisites: ECON 2301, 2302.</td>
</tr>
<tr>
<td>4700</td>
<td>International Finance (4)</td>
<td>Comprehensive coverage of the organization, operation and theory of foreign exchange markets, Eurocurrency and offshore financial markets, balance of payments and international adjustment, international capital flows and different types of international monetary systems. Prerequisites: ECON 2301, 2302 (formerly ECON 4105).</td>
</tr>
<tr>
<td>4710</td>
<td>International Economic Development (4)</td>
<td>Analyze the factors and theories underlying international economic development with a concentration on the nature and causes of development in Africa, Asia, Central and South America. Prerequisite: ECON 2301(formerly ECON 4110).</td>
</tr>
<tr>
<td>4895</td>
<td>Workshop in Economic Research (1)</td>
<td>Workshop activity in the preparation, presentation, and evaluation of student and faculty research projects. Prerequisite: at least junior standing. May be repeated two times for credit when content varies, for a maximum of 3 units.</td>
</tr>
<tr>
<td>4896</td>
<td>Senior Research (1)</td>
<td>Development of an economic research paper that demonstrates the ability to: 1) think critically, analytically, and creatively; 2) gather, recognize, interpret, and communicate data. Prerequisites: ECON 3000 or 3551, ECON 3005 or 3006, STAT 2010 or 1000.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
<tr>
<td>4950</td>
<td>Advanced Statistical Packages for Data Analysis (4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
</tbody>
</table>

(See STAT 4950 for course description.)
1. If ACCT 3170 is selected as a required course, ACCT 4704 may be selected as an elective. If ACCT 4704 is selected as a required course, ACCT 3170 may be selected as an elective.

2. If ACCT 3220 is selected as a required course, ACCT 4220 may be selected as an elective. If ACCT 4220 is selected as a required course, ACCT 3220 may be selected as an elective.
Educational Psychology

Department Information

Department of Educational Psychology
College of Education and Allied Studies
Office: Art and Education Bldg. 369
Phone: (510) 885-3011

Professors Emeriti
J. Dan Romero, Ph.D. University of New Mexico
Arthuriene G. Towner, Ph.D. University of California, Berkeley/San Francisco State University

Professors
Jacki L. Anderson, Ph.D. University of Wisconsin
Ann Halvorsen, Ed.D. University of California, Berkeley/San Francisco State University
R. Greg Jennings, Ph.D. University of California, Berkeley

Associate Professors
John M. Davis (Chair), Ph.D. University of California, Berkeley
Rolla Lewis, Ed.D. University of San Francisco
Janet P. Logan, Ph.D. University of Wyoming
Terry Soo-Hoo, Ph.D. University of California, Berkeley
Linda Smetana, Ed.D. Brigham Young University

Assistant Professors
Wendi J.Y. Cheng, Ph.D. University of Michigan
Randi Cowdery, Ph.D. Loma Linda University
Oanh Kim Tran, Ph.D. University of Oregon

Special Education Option: Liberal Studies

The department offers the core requirements for the Special Education Option in Liberal Studies, Area VII (see the Liberal Studies section for a full description of the Liberal Studies major; see Educational Psychology in the graduate section for descriptions of 5000-level courses).

Core Requirements (16 units)

(See the Educational Psychology chapter in the graduate section of this catalog for course descriptions.)

- EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)
- EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4)
- EPSY 5126 Special Education Law and Program Design (4)
- EPSY 5136 Educational Practices: Moderate-Severe Disabilities (4)

While the department offers primarily graduate courses, it also offers the following courses for undergraduates who are interested in Counseling, Clinical Child Psychology, and Educational Psychology. Seniors interested in transitioning to a master's degree program in any of these areas may want to consider applying for graduate credit while still an undergraduate (see Baccalaureate Degree Requirements chapter). Courses listed at the 5000 and 6000 level under Educational Psychology in the Graduate section of this catalog may also be taken for graduate credit with the same approved petition, but instructor's approval is required prior to registration.

Undergraduate Courses

(Course prefix: EPSY)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001</td>
<td>Career Planning for College Students (2) For students who are unclear about their career goals. Discussion, individual and small group activities designed to increase students' self-knowledge in terms of interests, abilities, and values, as well as information about the world of work and effective decision making techniques. Not for credit toward General Education-Breadth Requirements. CR/NC grading only.</td>
</tr>
<tr>
<td>2300</td>
<td>Strategies for Lifespan Mental Health (4) Utilizing theory and research from mental health disciplines to develop strategies for maintaining psychological health and peak performance over the lifespan. The impact of relationships, self-concept, cognitions, emotions, spirituality, body image, and diverse cultural identities on mental health.</td>
</tr>
<tr>
<td>3000</td>
<td>The Helping Relationship (4) Examines basic skills, attitudes, and resources necessary for non-licensed positions in the helping professions. Students will practice basic counseling skills, identify appropriate resources for referrals, and gain insight into their own values, reaction patterns, and interpersonal styles. May be repeated once for credit, for a maximum of 8 units. A-F grading only.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>3001</td>
<td>Orientation to Careers in Counseling (4)</td>
</tr>
<tr>
<td>3555</td>
<td>Introduction to Education for Social Justice (4)</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Educational Psychology (4)</td>
</tr>
</tbody>
</table>
Department Information

Department of Engineering
College of Science
Office: Valley Business & Technology Center, Rm. VBT 346
Phone: (510) 885-2654
Website: www20.csueastbay.edu/csci/departments/engineering/

Professors
Saeid Motavalli (Chair), Ph.D. University of Pittsburgh
Mohammad H. Qayoumi, Ph.D. University of Cincinnati
Zinovy Radovilsky (joint appointment in Engineering and Management), Ph.D. Scientific Research Institute of Labor, Moscow
Eric A. Sues (joint appointment in Engineering and Statistics), Ph.D. University of California, Davis
Helen Zong, Ph.D. University of Houston

Associate Professors
David Bowen, Ph.D. University of California, Berkeley
Farnaz Ganjeizadeh, Ph.D. University of Alabama at Huntsville

Assistant Professors
Roger Doering (joint appointment in Engineering and Mathematics/Computer Science), Ph.D. University of California, Berkeley
Farzad Shahbodaghlu, Ph.D. Purdue University

Program Description

COMPUTER ENGINEERING OPTION

Computer engineers are involved in all aspects of computing, from the design of individual microprocessors, personal computers, and supercomputers, to circuit design, as well as the integration of computer systems into other kinds of systems (a motor vehicle, for example, has a number of subsystems that are computer oriented). Common computer engineering tasks include writing embedded software for real-time micro-controllers, working sensors, designing mixed signal circuit boards, and designing operating systems.

INDUSTRIAL ENGINEERING OPTION

Industrial Engineering is the profession concerned with solving engineering problems by applying scientific logic and systems methodology and by utilizing information, energy, materials, facilities, and personnel most effectively. Its objectives are to improve quality, increase efficiency and reduce costs associated with the production of goods and services and to act as the interface between technology and humans. Engineering methods and practical knowledge are used in formulating decision models for the optimum application of engineering principles. The Industrial Engineering Program is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, Telephone: (410) 347-7700.

Mission Statement

The Engineering program at California State University, East Bay provides a quality engineering education that prepares its graduates for employment related to their major and to have an aptitude for continued learning. The program provides students with technical and problem solving capabilities, an understanding of real-world business often through practical experience, and excellent teamwork and communications skills. It promotes a high rate of student success in completing the program in a reasonable length of time and enables the transfer students to take no longer than native students in completing the upper division portion. Students graduate from the program with a high degree of satisfaction about their education. Faculty maintain a high level of currency in the discipline through a strong program of professional development and interaction with the Industrial Advisory Board.

Program Educational Objectives

The Department of Engineering provides a quality engineering education that produces graduates who:

- successfully apply their learned skills throughout their professional pursuits
- have enthusiasm and aptitude to continuously pursue learning and professional development
- have the ability to communicate and work well as individuals or on teams that include engineers and colleagues from other disciplines
- are recognized as qualified engineers with high ethical standards

Student Learning Outcomes

Computer Engineering Option: Students graduating with a B.S. degree in Engineering, Option in Computer Engineering from Cal State East Bay will have:

1. Ability to apply knowledge of mathematics, science, and engineering.
2. Ability to design and conduct experiments, as well as to analyze and interpret data.
3. Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. Ability to function on multidisciplinary teams.
5. Ability to identify, formulate and solve engineering problems.
6. Understanding of professional and ethical responsibility.
7. Ability to communicate effectively.
8. Broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. Recognition of the need for, and an ability to engage in, life-long learning.
10. Knowledge of contemporary issues.
11. Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

**Industrial Engineering Option:** Students graduating with a B.S. in Engineering, Option in Industrial Engineering from Cal State East Bay will have:

1. Ability to apply knowledge of mathematics, science, and engineering.
2. Ability to design and conduct experiments, as well as to analyze and interpret data.
3. Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. Ability to function on multidisciplinary teams.
5. Ability to identify, formulate and solve engineering problems.
6. Understanding of professional and ethical responsibility.
7. Ability to communicate effectively.
8. Broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. Recognition of the need for, and an ability to engage in, life-long learning.
10. Knowledge of contemporary issues.
11. Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

**Career Opportunities**

**Computer Engineering Option**

Computer engineers can work in a variety of industries, including Aerospace, automotive, communication designing hardware and software for computers and embedded systems.

**Industrial Engineering Option**

Industrial engineers can work in a variety of capacities, including engineering management, industrial engineer, manufacturing engineer, quality engineer, project manager and system analyst.

**Features**

Students interested in Engineering at Cal State East Bay may complete the first two years at a local community college. In so doing, it is important to determine, prior to taking courses, if the community college courses chosen have been articulated with the Cal State East Bay Engineering curriculum. Engineering senior design projects will be offered in conjunction with local industry.

**Preparation**

Prospective Engineering students should complete four years of high school mathematics, a year each of high school chemistry and physics with labs, and a computer programming course if available.

**Major Requirements (B.S.)**

**Option in Computer Engineering**

The major with this option consists of 138 units. The B.S. Degree requires 183 units.

**Sample Program**

A Sample Program for this degree can be found at the [department website](#).
II. Upper Division Core Requirements (58 units)
- CS 3240 Data Structures and Algorithms (4)
- CS/ENGR 3430 Computer Architecture (4)
- CS/ENGR 3432 Digital Design Lab (4)
- CS/ENGR 3434 Microprocessor Lab (4)
- CS/ENGR 3752 Introduction to Digital Signal Processing (4)
- CS/ENGR 4432 VLSI Circuit Design (4)
- CS/ENGR 4435 Computer Architecture II (4)
- CS 4560 Operating Systems (4)
- ENGR 3010 Electric Circuits Theory II (4)
- ENGR 3101 Statics and Dynamics (4)
- ENGR/ECON 3140 Engineering Economy (4)
- ENGR 4610 Senior Design I (3)
- ENGR 4620 Senior Design II (3)
- MATH 3331 Differential Equations (4)
- STAT/ENGR 3601 Statistics and Probability for Science and Engineering I (4)

III. Electives (8 units)
Choice of two courses from the following:
- CS 3120 Program Language Concepts (4)
- CS 3560 Introduction to System Programming (4)
- CS 3590 Data Communication and Networking (4)
- CS 4310 Software Engineering I (4)
- CS 4590 Computer Networks (4)
- CS 4594 Broadband Networks and Communications (4)
- CS 4596 Wireless and Mobile Networking (4)
- CS 4840 Computer Graphics (4)
- ENGR 3190 Human Factors Engineering (4)
- ENGR 4200 Systems Simulation (4)
- ENGR 4280 Design and Management of Human Work Systems (4)
- ENGR 4300 Quality Engineering (4)
- ENGR 6200 Project Management (4)
- ENGR/STAT 6300 Applied Quality Assurance (4)
- ENGR 6400 Quantitative Methods in Engineering Management (4)
- Or other 3000 or 4000 level courses in Engineering or Computer Science with department approval.

Option in Industrial Engineering
The major with this option consists of 143 units. The B.S. Degree requires 180 units.

Sample Program
A Sample Program for this degree can be found at the department website.
III. Electives (12 units)

- Select four (4) units from the following:
  - BIOL 3020 Genetics, Evolution, and Humanity (4)
  - BIOL 4020 Contemporary Human Biology (4)
  - MATH 3331 Differential Equations (4)
  - MATH/CS 3750 Numerical Analysis I (4)

- Select eight (8) units from the following:
  - ENGR 3898
  - ENGR 4180
  - ENGR 4900
  - ENGR 4990
  - MATH 4841
  - MGMT/ENGR 3600
  - or other 3000 and 4000 level courses with department approval

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Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

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Undergraduate Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1011</td>
<td>Engineering: An Introduction (3)</td>
</tr>
<tr>
<td>1201</td>
<td>Engineering Graphics (2)</td>
</tr>
<tr>
<td>2010</td>
<td>Electric Circuit Theory I (3)</td>
</tr>
<tr>
<td>2060</td>
<td>Materials Science (4)</td>
</tr>
<tr>
<td>2070</td>
<td>Fundamentals of Manufacturing (4)</td>
</tr>
<tr>
<td>3010</td>
<td>Electric Circuit Theory II (4)</td>
</tr>
<tr>
<td>3020</td>
<td>Work Design and Measurement (4)</td>
</tr>
<tr>
<td>3101</td>
<td>Statics and Dynamics (4)</td>
</tr>
<tr>
<td>3140</td>
<td>Engineering Economy (4)</td>
</tr>
<tr>
<td>3190</td>
<td>Human Factors Engineering (4)</td>
</tr>
</tbody>
</table>

Undergraduate Courses (Course prefix: ENGR)
3430 Computer Architecture (4)
(See CS 3430 for course description.)

3432 Digital Design Lab (4)
(See CS 3432 for course description.)

3434 Microprocessor Lab (4)
(See CS 3434 for course description.)

3600 Theories of Management (4)
(See MGMT 3600 in Business Administration chapter for course description.)

3601 Statistics and Probability for Science and Engineering I (4)
(See STAT 3601 for course description.)

3602 Statistics and Probability for Science and Engineering II (4)
(See STAT 3602 for course description.)

3752 Introduction to Digital Signal Processing (4)
(See CS 3752 for course description.)

3841 Operations Research (4)
Theory and application of deterministic optimization techniques. Topics selected from project management, networks, linear
programming, non-linear programming, game theory and dynamic programming. Prerequisite: MATH 2304.

3898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus activities. Prerequisites:
- at least a 2.5 GPA, junior or senior standing, departmental approval of activity. A maximum of 4 units will be accepted toward the
- Engineering major. May be repeated for credit, for a maximum of 8 units. CR/NC grading only.

3999 Issues in Engineering (4)
Readings, discussion, and research on contemporary and/or significant issues in engineering. May be repeated for credit when
content varies, for a maximum of 8 units.

4090 Economic Decision Systems (4)
Economic evaluation of information for complex decisions. Analysis of risks and uncertainties. Bayes theory and models. Decision
theory, sequential decisions, and value of information applied to financial evaluation and control. Major project justification
procedures. Prerequisites: ENGR 3140, STAT/ENGR 3601.

4100 Production Planning and Control (4)
Inventory planning and control systems. Implementation of manufacturing resource planning including demand forecasting,
production planning, master scheduling, bill-of-material, and inventory master file. Capacity requirements planning and shop floor
control. Project management. Prerequisites: ENGR 2070, 3841; STAT/ENGR 3601. Three hrs. lect., 3 hrs. lab.

4180 Product-Process Design (4)
Investigation of the product and process design cycle as a source of competitive advantage. Topics include functional maps,
aggregate planning, cross-functional integration, design for manufacturability, and the design-build-test cycle. Case studies and site
visits used extensively to reinforce concepts presented in lectures and reading assignments. Prerequisites: ENGR 2070, 3140.

4200 Systems Simulation (4)
Design and analysis of manufacturing and service systems by simulation. Function of random variables. Random number and
function generators, programming and characteristics of simulation languages. Prerequisites: CS 1160, ENGR 3841, STAT/ENGR
3601. Three hrs. lect., 3 hrs. lab.

4280 Design and Management of Human Work Systems (4)
Qualitative principles and techniques used to maximize labor productivity, employee satisfaction, and organizational performance in
work settings. Topics include worker motivation and incentive systems, leadership, worker autonomy, work groups and participatory
organizational structures including quality control circles, total productive maintenance teams, and socio-technical systems.
Prerequisites: ENGR 3020, ENGR 3190.

4300 Quality Engineering (4)
Quality control, reliability, maintainability, and integrated logistic support. Statistical theory of process control and sampling
inspection. Risks associated with decisions based on operating characteristics of control charts and sampling plans. Reliability and
life testing methods. Economics of statistical QC. Prerequisites: ENGR 2070, STAT/ENGR 3601.

4330 Advanced Work Measurement (4)
Predetermined time systems. Time formulas. Standard data systems. Use of statistical methods. Standard data systems applied to
clerical, manufacturing, and micro assembly. Developing and maintaining computerized systems. Prerequisites: ENGR 3020, CS
1160, STAT/ENGR 3601. Three hrs. lect., 3 hrs. lab.

4350 Reliability Engineering (4)
Reliability concepts and mathematical models, mechanical device reliability, electrical device reliability, systems reliability and
maintainability, reliability data, assurance program elements. Prerequisites: ENGR 3841.

4400 Systems Modeling (4)
Integration, problem identification, and the application of problem resolution techniques in manufacturing and service domains.
System approach to problem identification, description, modeling, and resolutions derived by traditional optimization techniques as
well as artificial intelligence methods. Supply chain modeling methods, logistics support analysis, procurement, and outsourcing
strategies. Prerequisite: ENGR 4100.

4430 Facilities Planning and Design (4)
Design concepts and input requirements in planning and design of new or renovation of existing manufacturing systems. Product,
process, and flow and activity analysis techniques. Flow lines and buffering techniques. Computer-aided layout design and
evaluation. Design of handling systems. Math models of location problems. Prerequisites: ENGR 3020 and 3841. Three hrs. lect., 3
hrs. lab.

4432 VLSI Circuit Design (4)
(See CS 4432 for course description.)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>4435</td>
<td>Computer Architecture II (4)</td>
<td>(See CS 4435 for course description.)</td>
<td>----------</td>
</tr>
<tr>
<td>4610</td>
<td>Senior Design I (3)</td>
<td>Development of technical writing and presentation skills through class discussions, proposal writing and presentations. Development of team skills through identification and development of team project proposal and through team building exercises. Utilization of engineering design process and project management techniques in proposal development. Introduction of engineering ethics through case studies. Prerequisites for Engineering Department: Senior standing and departmental approval. Prerequisites or co-requisites for Industrial Engineering Option: any three of ENGR 4100, 4200, 4300, 4430. Prerequisites or co-requisites for Computer Engineering Option: CS 4430 and CS 4560.</td>
<td>----------</td>
</tr>
<tr>
<td>4620</td>
<td>Senior Design II (3)</td>
<td>Utilization of industrial engineering skills and engineering design concepts including development of alternative solutions and economic analysis of alternatives to complete an industrial project. Prerequisite: ENGR 4610.</td>
<td>----------</td>
</tr>
<tr>
<td>4835</td>
<td>Human-Computer Interaction (4)</td>
<td>(See CS 4835 for course description.)</td>
<td>----------</td>
</tr>
<tr>
<td>4845</td>
<td>Fuzzy Sets and Fuzzy Logic (4)</td>
<td>(See CS 4845 for course description.)</td>
<td>----------</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
<td>----------</td>
</tr>
<tr>
<td>4990</td>
<td>Special Topics for Upper Division Students (1-4)</td>
<td>Group study of a selected topic, the title to be specified in advance. Prerequisite: permission of instructor. Maximum of 4 units per quarter and 8 units total.</td>
<td>----------</td>
</tr>
</tbody>
</table>
Department Information

Department of English
College of Letters, Arts, and Social Sciences
Office: Music and Business Building, Room 2579
Phone: (510) 885-3151
Website: http://csueastbay.edu/english/

Professors Emeriti
Kathleen Margaret Lant, Ph.D. University of Oregon
Marilyn N. Silva, Ph.D. University of California, Berkeley

Professors
Diedre L. Badejo, Ph.D. University of California, Los Angeles
Eileen A. Barrett, Ph.D. Boston College
Debra Barrett-Graves, Ph.D. University of Kentucky
Dennis M. Chester (Chair), Ph.D. University of Washington
Jacqueline Doyle, Ph.D. Cornell University
Susan A. Gubernat, M.F.A. University of Iowa
Stephen D. Gutierrez, M.F.A. Cornell University
E. J. Murphy, Ph.D. University of Illinois
Ke Zou, Ph.D. University of Southern California

Associate Professors
Eve M. Lynch, Ph.D. University of California, Davis
Sarah E. Nielsen, Ph.D. University of California, Davis
Margaret Tomlinson-Rustick, Ph.D. Washington State University

Composition Coordinator: Margaret Tomlinson-Rustick

Lecturers
Cynthia Andrzejczyk
Sartaz Aziz
Scott Bentley
Sheila Coles
Sally Cooperman
Mary D’Alleva
Susan Fox
Eva Fuchs
Kathleen Grow
Aaron Jason
Jan Lerman
Rochelle Nameroff
Maureen Newey
Michael Rovasio
Marina Sapozhnikov
Jeff Scott
Paul White

Program Description

Contrary to popular opinion, most students who major in English do not become public school teachers, although many do choose a career in teaching. Rather, English majors go into all areas of business and government and wherever else the ability to read and write the English language effectively leads to opportunities for advancement and success. The English major is a widely recognized and respected preparation for graduate degrees in law, medicine, social services, and business. It also provides an excellent foundation for freelance and broadcast journalism. The academic backgrounds of management personnel in private and public organizations attest to how appropriate the English major is for those who pursue careers in management and administration.

Student Learning Outcomes

Students graduating with a B.A. in English from Cal State East Bay will:

1. be able to analyze and interpret various kinds of texts;
2. be able to express their understandings and interpretations in clear and cogent prose;
3. be able to discuss at least one theoretical perspective about language and/or literature;
4. demonstrate knowledge of key English language texts in their options: Literature, Creative Writing, Language and Discourse, and Interdisciplinary Language, Literature, and Writing Studies;
5. demonstrate facility with conducting research in traditional/nontraditional ways, including library research, the Internet, and data collection and analysis.

Career Opportunities

- Advertising Copy Writer
- Author/Critic
- Bookstore Manager
- Continuity Editor
- Corporate Communications Director
- Foreign Service Officer
- Freelance Journalist/Writer
- Greeting Card Editor/Writer
- Lawyer
- Librarian
- Media Specialist
- Newspaper Reporter
- Public Information Officer
- Publicity Director
- Publishing Agent
- Radio/TV Agent
- Script Writer
- Teacher/Professor
- Technical Writer

Preparation

For Advanced Placement course equivalencies, see Registration chapter

Major Requirements (B.A.)

Please consult an adviser in your major department for clarification and interpretation of your major requirements. The major consists of 72-84 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (40 units)
(While ENGL 1001 and ENGL 1002 are not listed as core requirements in the major, they are prerequisites for core classes and campus graduation requirements.)

- TWO of the following three introductory courses (8)
  - ENGL 2030 Introduction to Critical Writing on Prose Fiction (4)
  - ENGL 2040 Introduction to Critical Writing on Poetry (4)
  - ENGL 2050 Introduction to Critical Writing on Drama (4)
- ENGL 3010 Modern English Grammar (4)
- ENGL 3020 Advanced Expository Writing (4)
- ENGL 3080 Critical Theory of Literature (4)
- ENGL 4251 Shakespeare (4)
- ENGL 4890 Senior Seminar in English (4)
- ONE upper division English course in British or American literature before 1900 (4)
- ONE upper division English course in Ethnic-American or Global literatures after 1900 (4)
- ONE upper-division Elective (excluding ENGL 1001, 1002, 3000, 3001, 3003) (4)

II. Courses in Supporting Fields (0-12 units)
Majors must complete, with grades of C-/CR or better, one year of a college-level foreign language or must pass a translation test administered by the English Department.

III. Option Requirements (32 units)
The Department of English offers several options for degree candidates. Majors must choose ONE of the following options: A. Literature, B. Creative Writing, C. Language and Discourse, and D. Interdisciplinary Language, Literature, and Writing Studies.

A. Literature (32 units)

- ENGL 4151 Introduction to Chaucer,
  OR ENGL 4260 Milton (4)
- THREE upper-division English courses in literature of the 18th and/or 19th centuries (at least one British and at least one American) (12)
- TWO upper-division English courses in literature of the 20th and/or 21st centuries (8)
- ONE upper-division English course in Women's or Gay and Lesbian literature (4)
- ONE upper-division course in Global literatures (4)

B. Creative Writing (32 units)

- ENGL 2070 Beginning Workshop in Fiction (4)
- ENGL 2075 Beginning Workshop in Poetry (4)
- ENGL 3070 Intermediate Workshop in Fiction (4)
  OR ENGL 4075 Advanced Workshop in Poetry (4)
- ENGL 3070 Intermediate Workshop in Fiction (a second time if chosen above) (4)
C. Language and Discourse (32 units)

- ENGL 3005 Study of Language (4)
- ENGL 3010 Modern English Grammar (whichever one was not chosen for Core Curriculum above) (4)
- ENGL 3015 Introduction to Phonology (4)
- ENGL 3040 Linguistic History of the English Language (4)
- ENGL 4010 Current Theories in Formal Grammar (4)
- ENGL 4040 Language in the U.S.A. (4)
- ONE upper division course covering a single aspect (or a group of closely related aspects) of the English language, with consent of an English advisor (4)
- TWO upper division English electives (excluding ENGL 3000, 3001, 3003) (8) (Courses in language and discourse from departments other than English may be used for this option, with the approval of the Chair of the English department. Especially relevant here are courses such as ANTH 3800 Language and Culture, ANTH 3801 Language in the Modern World, PSYC 4740, Psycholinguistics, PHIL 3322 The Phenomenon of Language, and COMM courses in rhetoric and communication theory.)

D. Interdisciplinary Language, Literature, and Writing Studies (32 units)

In formal consultation with two professors—one from the English Department and one from a department other than English—and with the approval of the Chair of the English department, students may propose a program of 32 upper division units in literature, language, rhetoric, or writing drawn from various departments in the university. At least 16 of these units must be in English.

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Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

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Single Subject Matter Preparation Program

The English Department does not have a Single Subject Matter Preparation Program at this time. Students who intend to pursue the Secondary Credential must pass the CSET for subject matter certification. Consult a department advisor.

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Minor Requirements

I. English (32 units)

The minor in English consists of 32 units, excluding ENGL 1001, 1002, 3000, 3001, and 3003 approved by an English Department adviser.

At least one course in writing beyond the freshman level; after completing ENGL 1001, choose from ENGL 2030, 2040, 2070, 3020, 3070, 3075, 4070, 4075. (Apply units to either lower or upper division units below.)

English courses, excluding ENGL 1001 and 1002

- Lower Division (0-12)
- Upper Division (20-32)

II. Creative Writing (32 units)

Any candidate for the bachelor's degree (except for English majors with the Creative Writing option) may also elect to obtain a Minor in Creative Writing. After completing ENGL 1001, (s)he must complete 32 quarter units, approved by a Creative Writing advisor.

- ENGL 2070 Beginning Workshop in Fiction (4)
- ENGL 2075 Beginning Workshop in Poetry (4)

Select a minimum of 24 quarter units from:

- ENGL 3070 Intermediate Workshop in Fiction (4)
- ENGL 3071 Writing Women's Lives: A Workshop (4)
- ENGL 3075 Intermediate Workshop in Poetry (4)
- ENGL 4070 Advanced Workshop in Fiction (4)
- ENGL 4075 Advanced Workshop in Poetry (4)
- ENGL 4900 Independent Study in Creative Writing (maximum of 4 quarter units) (1-4)
- Upper division Modern American or British literature, or genre courses (4-8)

Note: Creative writing courses may be repeated for credit. See course descriptions for limitations.

Single Subject Matter Preparation Program

The English Department does not have an approved Single Subject Matter Preparation Program. English majors preparing to teach in the public schools must pass the CSET in order to have single-subject matter certification in English.

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Competency Program In Written English

This program is designed for non-native speakers of English.
English Courses (19 units)

After completing all developmental coursework assigned as a result of scoring below 151 on the English Placement Test (EPT), students must complete, with grades of "A," "B," "C," or "CR," the following courses:

- ENGL 0930 Basic Reading, Composition, and Grammar for Non-Native Speakers of English (4)
- ENGL 1001 College Writing I (4)
- ENGL 1002 College Writing II (4)
- ENGL 1101 Adjunct Grammar Workshop and Lab for Non-Native Speakers of English I (1)
- ENGL 1102 Adjunct Grammar Workshop and Lab for Non-Native Speakers of English II (1)
- SPPA 3005 Verbal American English Skills (4)
- SPPA 0980 Speech Laboratory for Non-Native Speakers of English (1)

Undergraduate Courses

Developmental Writing

Students should consult the section of the catalog entitled "Appropriate Coursework Based on EPT Results" for guidelines in choosing the proper developmental writing course(s). This appears in the Registration chapter of this catalog.

Developmental Writing (Course prefix: ENGL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>0725, 0730, 0735</td>
<td>Basic Reading and Composition for Speakers of English as a Second or Foreign Language I, II, III (4 each)</td>
</tr>
</tbody>
</table>

Reading and writing for academic purposes, with special attention to the needs of those for whom English is a second or foreign language. Prerequisite: Score of 150 or lower on EPT. Units do not count toward the baccalaureate degree. May be repeated for credit, for a maximum of 8 units. A/B/C/NC grading only.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>0801, 0802, 0803</td>
<td>The Intensive Learning Experience in Writing I, II, III (4 each)</td>
</tr>
</tbody>
</table>

A three-course sequence in basic (remedial) writing, mandatory for students who have scored 141 and below on the English Placement Test (EPT). The workshops focus on the practice of standard written English. Classes may not be used as prerequisites to the Competency Program in Written English for Non-Native Speakers of English. Units do not count toward the baccalaureate degree. Grading is A/B/C/NC only.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>0910</td>
<td>Developmental Writing I (4)</td>
</tr>
</tbody>
</table>

A writing workshop preparatory to the written communication requirements, ENGL 1001 and 1002. Developing college essay writing skills, with special attention to style and usage. Prerequisite: Total Score on EPT of 142-146. Co-requisite: ENGL 0988 if ESL. Class may not be used as a prerequisite to the Competency Program in Written English Proficiency for Non-Native Speakers of English unless 0988 is taken concurrently. Units do not count toward baccalaureate degree. May be repeated two times with consent and advice of instructor or department, for a maximum of 12 units. A/B/C/NC grading only.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>0989</td>
<td>Tutoring Support for ENGL 1001 (2)</td>
</tr>
</tbody>
</table>

Tutoring support course for first-year students with Total scores of 147-150 on the English Placement Test. Serves students in ENGL 1001 classes linked to first-year G.E. clusters. CR/NC grading only.

Undergraduate (Course prefix: ENGL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001</td>
<td>College Writing I (4)</td>
</tr>
</tbody>
</table>

An introduction to writing for academic purposes, critical analysis, and argumentation. Must complete course with a grade of "C-" or better in order to earn General Education credit. Prerequisite: Total Score of 147 or higher on the EPT or exemption from the EPT, passing ENGL 0910, or ENGL 0803. May be repeated for credit, but only the first enrollment may be applied to the Written Communication G.E. requirement if completed with a C- or better.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>1002</td>
<td>College Writing II (4)</td>
</tr>
</tbody>
</table>

Further work in expository writing with emphasis on argumentation and persuasion. Introduction to the preparation and writing of the research paper. Prerequisite: ENGL 1001 with grade of "C-" or better.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1101</td>
<td>Adjunct Grammar Workshop and Lab for Non-Native Speakers of English (1)</td>
</tr>
</tbody>
</table>

Focus on developing accuracy and style in written English. Co-requisite: Enrollment in ENGL 1001.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>1102</td>
<td>Adjunct Grammar Workshop and Lab for Non-Native Speakers of English II (1)</td>
</tr>
</tbody>
</table>

Focus on developing accuracy and style in written English. Co-requisite: Enrollment in ENGL 1002.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Vocabulary Study for Non-Native Speakers of English (4)</td>
</tr>
</tbody>
</table>

Vocabulary study, including word-formation, history, and idiomatic usage, for non-native speakers of English. Not open for credit towards General Education-Breadth Requirements or English major or minor. A/B/C/NC grading only.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Grammar for Writers (4)</td>
</tr>
</tbody>
</table>

Instruction in the structure and style of the standard, literary English sentence. Review of traditional grammar and usage, with attention to the integration of the sentence into its logical and rhetorical contexts.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>Introduction to Critical Writing on Prose Fiction (4)</td>
</tr>
</tbody>
</table>

The theory and practice of critical writing, based on readings in prose fiction. Prerequisite: ENGL 1002.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2040</td>
<td>Introduction to Critical Writing on Poetry (4)</td>
</tr>
</tbody>
</table>

The theory and practice of critical writing, based on readings in poetry. Prerequisite: ENGL 1002.

<table>
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<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2050</td>
<td>Introduction to Critical Writing on Drama (4)</td>
</tr>
</tbody>
</table>

The theory and practice of critical writing, based on readings in drama. Prerequisite: ENGL 1002.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>2070</td>
<td>Beginning Workshop in Fiction (4)</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2075</td>
<td>Beginning Workshop in Poetry (4)</td>
</tr>
<tr>
<td>2600</td>
<td>Patterns of Immigration and Migration in U.S. Literature (4)</td>
</tr>
<tr>
<td>2745</td>
<td>Portrayal of American Groups through Film (4)</td>
</tr>
<tr>
<td>3000</td>
<td>Writing for Proficiency (4)</td>
</tr>
<tr>
<td>3001</td>
<td>Writing for Proficiency for Non-Native Speakers of English (4)</td>
</tr>
<tr>
<td>3003</td>
<td>Discursive Writing (4)</td>
</tr>
<tr>
<td>3005</td>
<td>Study of Language (4)</td>
</tr>
<tr>
<td>3010</td>
<td>Modern English Grammar (4)</td>
</tr>
<tr>
<td>3015</td>
<td>Introduction to Phonology (4)</td>
</tr>
<tr>
<td>3020</td>
<td>Advanced Expository Writing (4)</td>
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<tr>
<td>3025</td>
<td>Introduction to Technical and Professional Writing (4)</td>
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<tr>
<td>3040</td>
<td>Linguistic History of the English Language (4)</td>
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<tr>
<td>3050</td>
<td>Language and Gender (4)</td>
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<tr>
<td>3070</td>
<td>Intermediate Workshop in Fiction (4)</td>
</tr>
<tr>
<td>3071</td>
<td>Writing Women’s Lives: A Workshop (4)</td>
</tr>
<tr>
<td>3075</td>
<td>Intermediate Workshop in Poetry (4)</td>
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<td>3080</td>
<td>Introduction to Critical Theory of Literature (4)</td>
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<tr>
<td>3400</td>
<td>Masterworks of British Literature (4)</td>
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<tr>
<td>3600</td>
<td>Masterworks of American Literature (4)</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>3650</td>
<td>Women and Literature (4)</td>
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<td>3660</td>
<td>Native American Literature (4)</td>
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<td>3670</td>
<td>Asian/Filipino American Literature (4)</td>
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<tr>
<td>3690</td>
<td>Black Literature I (4)</td>
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<tr>
<td>3691</td>
<td>Black Literature II (4)</td>
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<tr>
<td>3700</td>
<td>Classical Literature (4)</td>
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<td>3710</td>
<td>Medieval Literature (4)</td>
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<td>3715</td>
<td>Dante's World I (4)</td>
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<td>3716</td>
<td>Dante's World II (4)</td>
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<td>3720</td>
<td>Renaissance Humanism (4)</td>
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<td>3725</td>
<td>Petrarch and Boccaccio (4)</td>
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<td>3730</td>
<td>The Neo-Classical Tradition (4)</td>
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<td>3740</td>
<td>The Romantic Era: 1770-1830 (4)</td>
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<tr>
<td>3745</td>
<td>The Gothic (4)</td>
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<tr>
<td>3760</td>
<td>Literature of the Twentieth Century (4)</td>
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<tr>
<td>3770</td>
<td>Gay and Lesbian Literature (4)</td>
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<tr>
<td>3850</td>
<td>The Graphic Novel: Form and Meaning in Comics (4)</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
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<tr>
<td>3999</td>
<td>Issues in English Language and Literature (4)</td>
</tr>
<tr>
<td>4000</td>
<td>Seminar in English Education (2)</td>
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<tr>
<td>4005</td>
<td>Informational and Instructional Technology in the English Classroom (2)</td>
</tr>
<tr>
<td>4010</td>
<td>Current Theories in Formal Grammar (4)</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>4070</td>
<td>Advanced Workshop in Fiction (4)</td>
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<tr>
<td>4072</td>
<td>Ebonics for Writers (2)</td>
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<td>4075</td>
<td>Advanced Workshop in Poetry (4)</td>
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<tr>
<td>4151</td>
<td>Introduction to Chaucer (4)</td>
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<tr>
<td>4251</td>
<td>Shakespeare (4)</td>
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<tr>
<td>4260</td>
<td>Milton (4)</td>
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<td>4325</td>
<td>Studies in 18th-Century British Literature (4)</td>
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<td>4411</td>
<td>Studies in Early 19th-Century British Literature (4)</td>
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<tr>
<td>4412</td>
<td>Studies in Late 19th-Century British Literature (4)</td>
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<tr>
<td>4635</td>
<td>Studies in Mid-19th-Century American Literature (4)</td>
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<tr>
<td>4636</td>
<td>Studies in Late 19th-Century American Literature (4)</td>
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<tr>
<td>4637</td>
<td>Studies in 20th-Century American Literature (4)</td>
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<tr>
<td>4650</td>
<td>Studies in American Women's Literature (4)</td>
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<td>4710</td>
<td>Bible for Students of Literature (4)</td>
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<tr>
<td>4720</td>
<td>Mythology (4)</td>
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<td>4740</td>
<td>History of Children’s Literature (4)</td>
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<td>4741</td>
<td>Children's Literature in the 20th Century (4)</td>
</tr>
<tr>
<td>4742</td>
<td>The Fairy Tale (4)</td>
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<tr>
<td>4743</td>
<td>Children's Folklore (4)</td>
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<td>4745</td>
<td>Film Criticism (4)</td>
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<td>4780</td>
<td>Special Topics Children's Literature (4)</td>
</tr>
<tr>
<td>4810</td>
<td>English Drama Before 1642 (4)</td>
</tr>
<tr>
<td>4827</td>
<td>20th-Century Poetry (4)</td>
</tr>
<tr>
<td>4831</td>
<td>British Novel Before 1800 (4)</td>
</tr>
<tr>
<td>4832</td>
<td>British Novel, 1800-1914 (4)</td>
</tr>
<tr>
<td>4833</td>
<td>British Novel from 1914 to 1945 (4)</td>
</tr>
</tbody>
</table>
A study of the development of the 20th century British novel from World War I through World War II. Prerequisites: ENGL 1001 and junior standing.

4840 The Short Story (4)
Development of the modern short story in America and Europe. Prerequisite: ENGL 2030.

4860 American Fiction to 1914 (4)
The development of American fiction from Cooper to Dreiser, including Poe, Hawthorne, Melville, Twain, James, and others. Prerequisites: ENGL 2030 and 2040.

4870 The American Novel, 1914-1945 (4)
Development of the 20th century American novel from World War I through World War II. Prerequisites: ENGL 1001 and junior standing.

4874 The American and British Novel, 1945-1975 (4)
Development of the American and British novel in the post-war period, 1945-1975. Prerequisite: ENGL 2030.

4876 Current American and British Novel (4)
Development of the British and American novel since 1975. Prerequisite: ENGL 2030.

4890 Senior Seminar in English (4)
Development of the English major portfolio and preparation for exit examination in the option. Prerequisites: English major and Senior standing.

4900 Independent Study (1-4)
May be repeated for credit with consent of instructor, for a maximum of 12 units.

Footnote

1. Students should consult the section of the University Catalog or Class Schedule dealing with the English Placement Test (see Registration chapter in this catalog) before registering for English 1001. Because this is the freshman-level, transferable composition course (for California community colleges, colleges, and universities), students enrolling in the course should, at the time of entry, be able to write brief essays showing adequacy in
   1. selection of a controlling idea appropriate to the given writing task;
   2. coherent development of that idea to a reasoned conclusion;
   3. use of sentences that demonstrate some structural variety and that contain language appropriate to the audience and purpose, and
   4. control of the conventions of standard, written English (relative freedom from errors such as fragments, run-together sentences, faulty agreement, and improper pronoun reference) and of mechanics (capitalization, spelling, and punctuation).

   The work of the course is to strengthen these skills by extensive practice in the writing of expository essays suitable for college-level credit. Students deficient in these prerequisite skills will be advised to take developmental writing courses before enrolling in English 1001.
Environmental Science

- Department Information
- Program Description
- Career Opportunities
- Advanced Placement
- Major Requirements (B.S.)
- Other Degree Requirements
- Undergraduate Courses

Department Information

Department of Earth and Environmental Sciences
College of Science
Office: North Science 329
Phone: (510) 885-3486
Email: geology@csueastbay.edu
Website: http://www20.csueastbay.edu/csci/departments/earth/index.html

Professors
Michael Lee (Geography and Environmental Studies), Ph.D. London School of Economics (England)
Susan Opp (Biological Sciences), Ph.D. University of Massachusetts
Jeffery C. Seitz (Chair) (Earth and Environmental Sciences), Ph.D. Virginia Polytechnic Institute and State University

Associate Professors
Mitchell Craig (Earth and Environmental Sciences), Ph.D. Georgia Institute of Technology
Luther M. Strayer (Earth and Environmental Sciences), Ph.D. University of Minnesota

Assistant Professors
Danika LeDuc (Chemistry and Biochemistry), Ph.D. University of California, Berkeley
Jean E. Moran (Earth and Environmental Sciences), Ph.D. University of Rochester

Environmental Science Program Coordinator: Jean E. Moran

Program Description

Environmental scientists study and analyze the physical and biotic components of the environment; determine the impact of humans on ecosystems; develop strategies and plans to mitigate negative natural and human impacts; protect human and natural environments, and restore natural systems. The Environmental Science program provides interdisciplinary scientific preparation for students wishing to pursue knowledge and employment in the fields of environmental research, consulting, and oversight. Additional objectives of the program include provision of sufficient preparation for graduate studies in environmental sciences and allied fields and partial satisfaction of the Single Subject Matter Preparation Program for a teaching credential in science. The Bachelor of Science degree major in Environmental Science is an interdisciplinary program of study in the Department of Earth and Environmental Sciences with faculty participation from the Departments of Biological Sciences, Chemistry and Biochemistry, and Geography and Environmental Studies. In contrast to the B.A. degree major in Environmental Studies, the B.S. degree major in Environmental Science requires students to take a structured core of science courses from a variety of physical and life science disciplines, as well as a specialized upper division option in life science, physical science or environmental systems and resource management.

Student Learning Outcomes

Students graduating with a B.S. in Environmental Science from Cal State East Bay will:

1. demonstrate literacy of the principles of form, function and organization of organisms at the levels of molecules, cells, tissues, organs, organisms, populations, communities and ecosystems;
2. demonstrate knowledge of the fundamental principles of chemistry, chemical structure, bonding, equilibrium, dynamics, and reactions, as well as classes of organic compounds and reactions;
3. understand the nature and distribution of earth materials, the processes by which the materials are formed and altered, the nature and development of the landscape, and interpretation of earth history;
4. demonstrate knowledge of the major components of the physical environment, including landforms, climate, vegetation, and soils;
5. demonstrate scientific literacy and ability to engage in scientific inquiry concerning environmental issues through the evaluation and analysis of scientific literature, and presentation of results in written and oral form.

Career Opportunities

- Air Quality Controller
- Atmospheric Scientist
- Biological Consultant
- Bioremediation Consultant
- Chemical Consultant
- Ecosystem and Habitat Restoration
- Environmental Consultant
- Environmental Field or Lab Technician
- Environmental Health Scientist
- Environmental Manager
- Environmental Policy Developer
Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENSC 2800.

Major Requirements (B.S.)

It is important to consult an advisor in your major program for clarification and interpretation of your major requirements. The major in Environmental Science consists of 105-114 units; the B.S. degree requires a total of 180 units.

I. Course Prerequisites and Other Admission Requirements

Students entering the Environmental Science program as first year students are expected to have the same high school preparatory courses as other science majors. Admission to the degree program is open to all students admitted to Cal State East Bay. Transfer students may have lower division course deficiencies that must be completed after entry to the program. Continuation in the program is contingent on satisfactory progress in the university as described in the catalog. Note: Students must meet with an Environmental Science advisor to discuss prerequisites and updates to course offerings.

II. Lower Division Core (52-61 units)

- ENSC 2400 Environmental Biology (4) and ENSC 2401 Environmental Biology Laboratory (1)
  or BIOL 1402 Plant Biology (5) and BIOL 1403 Animal Biology (5)
- CHEM 1101, CHEM 1102, CHEM 1103 General Chemistry (5, 5, 5)
- ENSC 2800 Environmental Problems of California (4)
- ENSC 2900 Field Activity in Environmental Science (3)
- GEOL 2101 Physical Geology (5) and GEOL 2102 Earth and Life Through Time (4)
  or GEO/ENSC 2210 Environmental Geology (4) and GEO/ENSC 2211 Environmental Geology Laboratory (1)
- GEOL/GEOG 2600 Introduction to GIS (4)
- MATH 1304 Calculus I (4)
- PHYS 2701, PHYS 2702, PHYS 2703 Introductory Physics (4, 4, 4)

III. Upper Division Core (23 units)

- BIOL 3110 Principles of Ecology (4)
- ENSC/GEOL 3500 Environmental Hydrology (4)
- ENSC 4800 Seminar in Environmental Science (3)
- ENV 4100 Environmental Impact Analysis (4)
- GEOG 3000 Resource Management (4)
- STAT 3010 Statistical Methods in the Social Sciences (4)
  or STAT 3031 Statistical Methods in Biology (4)

IV. Electives (8 units)

- Complete one elective from the following:
  - ECON 4306 Environmental Economics (4)
  - GEOG 4330 Sustainable Development (4)
  - HIST 3505 California Environmental History (4)
  - PHIL 3151 Environmental Ethics (4)
  - POSC 3460 Environmental Law (4)
  - POSC 4171 Public Policy and Environment (4)
- Complete one elective from the following:
  - ENSC 3999 Issues in Environmental Sciences (4)
  - ENSC/GEOL 4140 Hazardous Waste Management (4)
  - ENSC 4200 Global Change (4)

V. Options

A student must declare an option by the time he/she has completed 44 units of the Core courses. Students may elect to change their option with the notification of their advisor. Options are available in Life Science, Physical Science, and Environmental Systems and Resource Management, and are designed to provide in-depth study of a specific field. Each option requires 22 units within the discipline, in a combination of required courses and electives.

A. Environmental Systems and Resource Management (22 units minimum)

- ENV 4910 Internship in Environmental Studies (2-4)
- Two or three courses from the following (8-15 units by advisement):
  - ENV 3400 Environmental Resource Analysis (4)
  - GEOG 3030 Fundamentals of Geographic Information Systems (4)
  - GEOG 3410 Air-Photo Interpretation (4)
GEOG 3450 Literature and Research Methods (5)
GEOG 3605 Computer Cartography (5)
GEOG 4425 Remote Sensing of Earth Environments (4)
GEOG 4605 Applications of GIS (5)
Two or three courses from the following (7-13 units by advisement):
- BIOL/GEOG 4130 Biogeography (4)
- ENVT 4800 Senior Seminar in Environmental Studies (3)
- ENVT/GEOG 4320 Energy and Society (4)
- ENVT/GEOG 4350 Water Resources and Management (4)
- GEOL 3110 Principles of Geomorphology (4)
or GEOG 3115 Physical Landscape Analysis (4)
- One of: ENVT 4300 Environmental Field Studies (5)
or GEOG 4125 Field Physical-Biotic Geography (4)
or GEOG/ENVT 3480 Applied Field Studies (4)

B. Life Science (22 units)

- BIOL 4351 Biological Conservation (4)
- Electives from the following courses or other approved courses (18 units by advisement):
  - BIOL 3215 Marine Biology (4)
  or MSC 4103 Marine Ecology (6)
  - BIOL 3216 Freshwater Environments (4)
  - BIOL 3898 Cooperative Education (2)
  - BIOL 4175 Population Biology (4)
  - BIOL 4200 Plant Taxonomy (4)
  - BIOL 4340 Environmental Microbiology (4)
  - BIOL 4518 Animal Behavior (4)
  - BIOL 4530 Ecological Methods (4)
  - BIOL 4565 Ornithology (4)
  - BIOL 4583 Vertebrate Biology (4)
  - MSC 4104 Quantitative Marine Science (6)
  - MSC 4144 Biological Oceanography (8)

C. Physical Science (22 units)

Electives from the following courses and/or other approved courses (22 units by advisement)
- CHEM 2200 Quantitative Analysis (5)
- CHEM 2301 Survey of Organic Chemistry (4)
- CHEM 2302 Survey of Organic Chemistry (4)
- CHEM 3898 Cooperative Education (Internship) (2)
- CHEM 4601 Environmental Chemistry I (4)
- CHEM 4602 Environmental Chemistry II (4)
- CHEM 4900 Independent Study (2)
- GEOL 3110 Principles of Geomorphology (4)
- GEOL 3601 Mineralogy and Optical Crystallography (5)
- GEOL 3701 Igneous and Metamorphic Petrology (5)
- GEOL 3801 Sedimentology and Stratigraphy (5)
- GEOL 3810 Structural Geology (5)
- GEOL 3910 Geologic Field Methods (3)
- GEOL 4010 Applied Geophysics (5)
- GEOL 4130 Survey of Geochemistry (4)
- GEOL 4320 Hydrogeology (4)
- MATH 1305 Calculus II (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Undergraduate Courses

(Course prefix: ENSC)

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<tr>
<th>Course Number</th>
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<tbody>
<tr>
<td>2210</td>
<td>Environmental Geology (4)</td>
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<tr>
<td></td>
<td>See GEOG 2210 for course description.</td>
</tr>
<tr>
<td>2211</td>
<td>Environmental Geology Laboratory (1)</td>
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<td>See GEOL 2211 for course description.</td>
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<tr>
<td>2400</td>
<td>Environmental Biology (4)</td>
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<tr>
<td></td>
<td>Introduction to living organisms focusing on organismal interactions with their environment and with other organisms, relationships between organismal structure and function, effects of humans on biological diversity and ecosystems, and conservation of species.</td>
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<td>Course Code</td>
<td>Title</td>
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<td>Environmental Biology Laboratory (1)</td>
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<td>Environmental Problems of California (4)</td>
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<td>Global Environmental Problems (4)</td>
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<td>Issues in Environmental Science (4)</td>
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<td>4140</td>
<td>Hazardous Waste Management (4)</td>
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<td>4200</td>
<td>Global Change (4)</td>
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<td>4800</td>
<td>Seminar in Environmental Science (3)</td>
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<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
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</table>
Environmental Studies

- Department Information
- Program Description
- Career Opportunities
- Scholarship
- Advanced Placement
- Major Requirements (B.A.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses

Department Information
Department of Geography and Environmental Studies
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3193; FAX: (510) 885-2353
Website: http://class.csueastbay.edu/geography

Professors
Karina Garbesi, Ph.D. University of California, Berkeley
David Larson (Chair), Ph.D. University of California, Berkeley
Michael Lee, Ph.D. London School of Economics (England)
Gary Li, Ph.D. State University of New York at Buffalo
Scott Stine, Ph.D. University of California, Berkeley

Associate Professor
David Woo, Ph.D. University of California, Santa Barbara

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Program Description
The Environmental Studies major is designed to provide an interdisciplinary and multidisciplinary overview of the environmental studies field, coupled with an in-depth study of one subfield. The core requires coursework in the sciences and social sciences and students may build options based on one or several related fields in these categories.

As part of the Environmental Studies major, students must select a 20-24 unit program of electives. Three options allow students latitude in providing specialization to a particular field of interest: Environment and Society, Physical Environment and Sustainable Resource Management. Courses in these options must be distributed across three departments.

Environmental Studies majors are provided internship opportunities through assignments in public and private agencies on projects related to citizen action, environmental planning, or in research. Ten to twenty hours weekly are required. Supervision and evaluation are by agency personnel and the course is conducted by the instructor. The internship may be repeated once for credit.

Student Learning Outcomes

1. recognition of their potential to function as professional Environmental Managers (whether they choose to become one or not);
2. a basic knowledge of politics, law, economics, biology, chemistry, geography and geology;
3. the ability to communicate orally and in writing;
4. the ability to solve basic quantitative problems;
5. familiarity with the practical/field dimensions of a range of Bay Area environmental problems and issues;
6. the ability to assist in the preparation of, and to critically review EIRs/EIAs;
7. a solid understanding of the key interrelationships between society, the economy and the environment.

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Career Opportunities

- Administrator
- Citizen Activist
- Consumer Affairs Specialist
- Educator
- Energy Impact Assessor
- Environmental Auditor
- Environmental Compliance Officer
- Historic Preservationist
- Journalist
- Land Acquisition Analyst
- Lawyer Librarian
- Mediator
- Open Space and Recreation Planner
- Solid Waste and Recycling Specialist
- Water Control Inspector
- Watershed Manager
Scholarship

Richard and Evelyn Thoman Scholarship in Geography and Environmental Studies

One $500 scholarship awarded each academic year for full-time undergraduate or graduate studies. Awards are limited to students with upper division or graduate standing. A grade point average of 3.5 or higher is required, and demonstrated scholastic and creative ability in the field of Geography or Environmental Studies.

Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENVT 2000.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 92-94 units; the B.A. degree requires a total of 180 units.

I. Lower Division (32-33 units)

- ENSC 2400 and 2401 (5) (preferred) or BIOL 1000, or BIOL 1001 and BIOL 1002 (5)
- CHEM 1100 (5)
- ECON 2301 (4) or GEOG 2310 (4)
- ENV 2000 (4)
- GEOG 2100 (4) or GEOG 2400 (4)
- GEOG 2210 and 2211 (5) (preferred) or ENVT 1000 (5), or ENVT 1001 and ENVT 1002 (6)
- STAT 1000 or STAT 2010 (5)

II. Upper Division (44-45 units)

- ECON 4306 or PHIL 3151 (4)
- ENV 3400, ENV 4100, and ENV 4800 (11)
- GEOG 3000 (4)
- GEOG 3030 (4)
- GEOG 3450 (5)
- HIST 3505 (4)
- POSC 3460 or POSC 4171 (4)
- Any two of the following: (8-9)
  - ENV/GEOG 3480
  - ENV 4300
  - GEOG 4125

III. Program of Electives (16 units)

Students must select one of the following options. Four courses, totaling 16 units, distributed across at least two catalog prefixes, in one of the following three options:

A. Environment and Society

- ENV/GEOG 4320 Energy and Society (4)
- ENV 4910 Internship in Environmental Studies (2-4)
- ECON 4306 Environmental Economics (4)*
- GEOG 4330 Sustainable Development (4)
- HSC 2001 Environmental Factors in Health (4)
  OR HSC 3200 Environmental Health (4)
- INTS 3100 Global Systems (4)
- PHIL 3151 Environmental Ethics (4)
- PHIL 3511 Philosophy of Human Rights and Global Justice (4)
- POSC 3120 State and Local Politics and Government (4)
- POSC 3130 Urban Politics (4)
- POSC 3800 Public Policy Analysis (4)
- POSC 4171 Public Policy and the Environment (4)*
- PUAD 4800 Public Administration and Society (4)
- REC 4050 Social Justice in Leisure and Hospitality (4)

* if not used for upper division core

B. Physical Environment

- BIOL/GEOG 4130 Biogeography (4)
- ENSC 3500 Environmental Hydrology (4)
- ENV 4910 Internship in Environmental Studies (2-4)
- GEOG 2100 Physical Geography (4)*
- GEOG 2410 Introduction to Maps (4)
- GEOG 3115 Physical Landscape Analysis (4)
- GEOG 3120 Climatic Change (4)
- GEOG 4125 Field Course in Physical-Biotic Geography (4)
- GEOG 4425 Remote Sensing of Earth Environments (4)
- GEOL 1201 Introduction to Oceanography (4)
- GEOL 1202 Oceanography Laboratory (2)
GEOL 2000 Introduction to the Geology of California (4)
GEOL 2101 Physical Geology (5)
GEOL 2301 Natural Hazards (4)
GEOL 3040 Fundamentals of Meteorology (4)
GEOL 3100 Geology of Western Regional Parks (4)
GEOL 3110 Principles of Geomorphology (4)
GEOL 3200 Regional Field Geology (1-2)
GEOL 3400 General Oceanography (4)
GEOL 4320 Hydrology (4)
* if not used for lower division core

C. Sustainable Resource Management
Required courses (8 units):
- ENVT/GEOG 4320 Energy and Society (4)
- GEOG 4350 Water Resources and Management (4)
Electives (8 units):
- BIOL 3110 Principles of Ecology (4)
- ECON 4306 Environmental Economics (4)*
- ENGR/MGMT 3110 Project Management (4)
- ENSC 3500 Environmental Hydrology (4)
- ENSC 4140 Hazardous Waste Management (4)
- ENVT 4910 Internship in Environmental Studies (2 – 4)
- GEOG 3410 Air-Photo Interpretation (4)
- GEOG 3600 Cartographic Principals and Graphic Communication (5)
- GEOG 3605 Computer Cartography (5)
- GEOG 4330 Sustainable Development (4)
- GEOG 4355 Watershed Management (4)
- GEOG 4425 Remote Sensing of Earth Environments (4)
- GEOG 4605 Applications of GIS (5)
- HOS 4550 Global Tourism (4)
- POSC 4445 Bureaucratic Politics and Administrative Law (4)
- REC 3305 Outdoor Living Skills (4)
OR REC 4705 Outdoor Adventure Recreation (4)
*If not used for upper-division core

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Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements

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Minor Requirements
The minor is designed to encourage and enable students enrolled in any major to organize their elective courses around a broad study of the environment and its problems from both a social and scientific perspective. The minor consists of 35-36 units arranged in an integrated pattern, as approved by an advisor. The core program includes four sequential courses (totaling 15-16 units) which are required of all students in the minor. The remaining 20 units are electives selected from the list below.

I. Core Courses (15-16 units)
- ENVT 2000 Introduction to Environmental Studies (4)
  or GEOG 3000 Sustainable Resource Management (4)
- ENVT 3400 Environmental Resource Analysis (4)
- ENVT 4300 Environmental Field Studies (5)
  or ENVT 3480 Applied Field Studies (4)
- ENVT 4800 Senior Seminar in Environmental Studies (3)

II. Electives (20 units minimum)
20 units of courses from outside the major department, chosen from the following list and selected to include classes with at least two different program prefixes (e.g. HIST and REC)*:
- BIOL 2005 Natural History of California (5)
- ENVT 4320 Energy and Society (4)
- GEOG 3120 Climate Change (4)
- GEOG 4330 Sustainable Development (4)
- GEOG 4350 Water Resources and Management (4)
- GEOG 4355 Watershed Management (4)
- GEOL 2200 and GEOL 2201 Environmental Geology and Lab (6)
- HIST 3505 California Environmental History
- HOS 4550 Global Tourism (4)
- HSC 3200 Environmental Health (4)
- PHIL 3151 Environmental Ethics (4)
**Undergraduate Courses**

<table>
<thead>
<tr>
<th>Course Prefix: ENVT</th>
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<tbody>
<tr>
<td><strong>Course Number</strong></td>
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</table>
| 2000 | Introduction to Environmental Studies (4)  
Survey of important local, national, and world environmental problems, emphasizing a multidisciplinary approach. Not open to students with credit for ENVT 2001. |
| 2001 | Environmental Perspectives (4)  
Basic concepts of the global human environment: problems and causes, including ecosystem imbalance, human population explosion, fossil fuel depletion and search for alternatives, air and water pollution, solid and hazardous waste disposal, climate change, deforestation, and rangeland management. Not open to students with credit for ENVT 2000. |
| 3400 | Environmental Resource Analysis (4)  
Quantitative methods for environmental problem solving including unit analysis, computer aided analysis, common functions, statistics, and error analysis. |
| 3480 | Applied Field Studies (4)  
(See GEOG 3480 for course description.) |
| 3898 | Cooperative Education (1-4)  
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Environmental Studies major; a maximum of 4 units will be accepted toward the Geography minor. May be repeated for credit for a maximum of 8 units. CR/NC grading only. |
| 3999 | Issues in Environmental Studies (4)  
Readings, discussion, and research on contemporary and/or significant issues in environmental studies. May be repeated for credit when content varies, for a maximum of 8 units. |
| 4100 | Environmental Impact Analysis (4)  
The language and changing dynamics of the environmental review process. Contents and standards of environmental impact reports and their role in the planning process. |
| 4300 | Environmental Field Studies (5)  
Weekly visits to various sites throughout the Greater Bay Area to observe environmental processes. Natural areas, industrial facilities, environmentally related agencies. Prerequisites: ENVT 4100 and senior standing in Environmental Studies. One hr. lect., 8 hrs. field. |
| 4320 | Energy and Society (4)  
(See GEOG 4320 for course description.) |
| 4800 | Senior Seminar in Environmental Studies (3)  
Problem-oriented around selected topics of environmental concern, and requiring projects or reports. Prerequisites: ENVT 2000, 4300; restricted to seniors completing the major or minor in Environmental Studies. |
| 4900 | Independent Study (1-4)  
May be repeated for credit with consent of instructor, for a maximum of 12 units. |
| 4910 | Internship in Environmental Studies (2-4)  
Assignments in public and private agencies on projects related to citizen action, environmental planning, or in research. Supervision and evaluation by agency personnel and the course instructor. Students exchange ideas and experiences in weekly group sessions which are conducted by the instructor. Prerequisite: ENVT 2000 and consent of instructor. May be repeated once for credit, for a maximum of 8 units. Ten to twenty hours weekly. |

**Footnotes**

1. Prerequisite for ECON 4306  
2. If not taken as a required core course alternative.
Ethnic Studies

Program Description

The Department of Ethnic Studies is central to the university’s commitment “to educational excellence for a diverse society.” It offers a major, minors, and courses that are interdisciplinary in nature and provide a holistic approach to the study of the United States’ multiracial, multicultural, and multigender immigrant society. The department’s faculty provide areas of study that integrate social science and literary theory, as well as anthropological and sociological concepts within a historical and humanistic perspective. The underlying goal of Ethnic Studies is to provide a better understanding of diversity in American culture and thought.

The Ethnic Studies major consists of a core of Ethnic Studies courses, support courses in other departments in the university, and Options in African American, Asian American, Genders and Sexualities in Communities of Color, Latino/a, and American Indian Studies. The curriculum is multidisciplinary as well as interdisciplinary. The major helps the student qualify for graduate work in social sciences, law, and humanities, and for work in municipal, state, and federal government. Of equal importance are the advantages the major provides to work in community service organizations concerned with opportunities and problems of various ethnic and racial groups.

Student Learning Outcomes

Students graduating with a B.A. in Ethnic Studies from Cal State East Bay will: 1) demonstrate an understanding of the historical and contemporary experiences of American ethnic minorities as racialized people in the United States; 2) demonstrate a heightened awareness, understanding, and tolerance for racial, gender, and cultural diversity; including an awareness of the importance of structuring work environments that mirror the racial, ethnic, gender, and cultural diversity of service populations; and an ability to engage people from all backgrounds and cultures in informed discussions about ethnicity and ethical issues; 3) demonstrate a knowledge of interdisciplinary and multidisciplinary models of analysis, and the ability to apply these models to past and contemporary racial and ethnicity issues; 4) demonstrate a comparative knowledge of the ways in which migrant and immigrants minority groups adjust to U.S. society and the factors that contributed to and/or hindered their success.

Career Opportunities

- Teacher
- Attorney
- Diversity Specialist
- Journalist
- Public/International Relations Specialist
- Government Service
- Professor
- Researcher
- Writer

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 60 units; the B.A. degree requires a total of 180 units.

I. Core Courses (16 units)
II. Area Breadth Courses (12 units)
Choose three of the courses listed below in consultation with an advisor. [One breadth area course (4 units) from another department can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

- ES 1001 Introduction to Ethnic Studies (4)
- ES 3000 Ethnic Writers (4)
- ES 3820 Race Matters (4)
- ES 4020 Senior Seminar (2)
- ES 4030 Senior Thesis (2)

- ENGL 4750 Multicultural Children's and Adolescent Literature (4)
- ES 1005 Viewing Diversity (4)
- ES 2130 Ethnicity and Humor (4)
- ES 3030 Immigrant and Refugee Women (4)
- ES 3110 Racism in America I (4)
- ES 3290 Community Development (4)
- ES 3340 Interracial Sex and Marriage (4)
- ES 3710 Racialized Masculinities (4)
- ES 3730 Women of Color, Genders and Sexualities (4)
- ES 3810 History of Minority Education (4)
- ES 3999 Issues in Ethnic Studies
- ES 4300 Queer of Color Subjects and Critical Theory
- POSC/ES 3333 Ethnic and Minority Politics
- WOST/ES 3420 Minority Women in America (4)

III. Primary Option Area (20 units)
Choose one of the following options. Choose five courses in the option's area of study in consultation with an advisor. [One course from another department (4 units) can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

A. African American Studies Option
- ENGL 3692 Black Literature II (4)
- ENGL/ES 3691 Black Literature I (4)
- ES 2100 Blacks in the Americas (4)
- ES 2300 The Black Cinematic Tradition (4)
- ES 3105 African American Identity (4)
- ES 3120 The Civil Rights Movement (4)
- ES 3130 Slavery in America (4)
- ES 3140 Racism and Sports (4)
- ES 3145 African American Music (4)
- ES 3165 African American Sexuality (4)
- ES 3180 The World of the Black Child (4)
- ES 3303 Contemporary African American Women Writers (4)
- ES 3405 African American Folklore (4)
- ES 3720 James Baldwin (4)
- HIST/ES 3567 African American History (4)
- SOC 3415 Sociology of the African American Family (4)

B. American Indian Studies Option
- ANTH 3500 North American Indians (4)
- ANTH 3505 Indians of California (4)
- ENGL 3660 Native American Literature (4)
- ES 2400 Introduction to American Indian Studies (4)
- ES 3305 Contemporary American Indian Life (4)
- ES 3310 God is Red: American Indian World View (4)
- ES 3330 American Indian Revitalization Movements (4)
- ES 3800 Peoples of Central America (4)

C. Asian American Studies Option
- ENGL 3670 Asian/Filipino American Literature (4)
- ES 3551 Asian American Women and Men (4)
- ES 3552 The Chinese Experience in the United States (4)
- ES 3555 Asian American Family Patterns (4)
- ES 3556 Concentration Camps, U.S.A. (4)

D. Genders and Sexualities in Communities of Color Option
- ES 3165 African American Sexuality (4)
- ES 3210 Latinas in the United States (4)
- ES 3303 Contemporary African American Women Writers (4)
- ES 3430 Interracial Sex and Marriage (4)
- ES 3551 Asian American Women and Men (4)
- ES 3710 Racialized Masculinities (4)
- ES 3720 James Baldwin (4)
- ES 3730 Women of Color, Genders and Sexualities (4)
- ES 4300 Queer of Color Subjects and Critical Theory (4)
- ES/WOST 3030 Immigrant and Refugee Women (4)
WOST/ES 3420 Minority Women in America (4)

E. Latino/a Studies Option
- ES 3202 Latino/a Writers (4)
- ES 3210 Latinas in the United States (4)
- ES 3230 Oral Traditions (4)
- ES 3243 Latino/a Perspectives in Film (4)
- ES 3805 Latin American Immigration (4)
- ES 4290 Latino Politics and Public Policy (4)
- HIST 3515 Mexican Americans and the West (4)
- SOC 3416 Sociology of the Mexican American Family (4)

IV. Secondary Option Area (12 units)
Choose three courses from one of the options above not selected for the primary option, in consultation with an advisor. [One course from another department (4 units) can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

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Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

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Minor Requirements

African American Studies Minor (24 units)
The African American Studies minor offers the student majoring in another discipline the opportunity to obtain knowledge and understanding of America's largest racial minority and its relationship to the larger society. Students considering careers in teaching, government service, foreign affairs, business, health-science related fields, and law may find the minor compatible.

I. Lower Division (8 units)
Two lower-division courses in African American studies, selected in consultation with an Ethnic Studies advisor.

II. Upper Division (16 units)
- ES 4020 Senior Seminar (2)
- ES 4030 Senior Thesis (2)
- Twelve (12) additional upper-division units in African American studies, selected in consultation with an Ethnic Studies advisor.

American Indian Studies Minor (24 units)
The American Indian Studies minor offers the student majoring in another discipline the opportunity to acquire knowledge and understanding of the original peoples of the United States as well as the entire Western Hemisphere and Pacific. This academic minor addresses historical, political, cultural, and intellectual issues of Native nations, providing an interdisciplinary basis for understanding the historical and contemporary problems not only of Native peoples, but of the United States as a colonial and military power.

I. Eight units from the following:
Select 4 units of lower division coursework covering the topic of American Indian Studies, with consent of department (4)

Plus one of the following:
- ANTH 1000 Introduction to Anthropology (4)
- ANTH 1300 Introduction to Cultural Anthropology (4)
- ES 1001 Introduction to Ethnic Studies (4)
- ES 1200 Introduction to Latino/a Studies (4)
- SOC 1000 Introduction to Sociology (4)

II. Twelve units from the following:
- ES 3305 Contemporary American Indian Life (4)
- ES 3310 God is Red: American Indian World View (4)
- ES 3330 American Indian Revitalization Movements (4)
- ES 3800 The Peoples of Central America (4)

III. Four units from the following:
- ANTH 3500 North American Indians (4)
- ANTH 3505 Indians of California (4)
- ES 3000 Ethnic Writers (4)
- ES 3030 Immigrant/Refugee Women (4)
- ES 3110 Racism in America (4)
- ES 3120 Civil Rights Movements (4)
- ES 3202 Latino/a Writers (4)
- ES 3805 Latin American Immigration (4)
- HIST 3500 History of California (4)
- HIST 3511 The American West (4)
- TED 5038 Multicultural Education (4)

Asian American Studies Minor (24 units)
The Asian American Studies minor offers the student majoring in another discipline the opportunity to acquire knowledge and understanding of one of the major ethnic groups in the United States and its developing relationship to the larger society. Students considering careers in teaching, government service, foreign affairs, business, health-sciences related fields and law may find the minor compatible with their career goals.

I. Core Courses (8 units)
- Select 4 units of lower division coursework covering the topic of Asian American Studies, with consent of department (4)
- ES 4020 Senior Seminar (2)
- ES 4030 Senior Thesis (2)

II. Electives (16 units)
- ES 3552 Chinese Experience in the United States (4)
- Twelve (12) additional upper-division units in the Asian American Option, selected in consultation with an Ethnic Studies advisor.

Ethnic Studies Minor (24 units)
I. Core Courses (8 units)
- ES 1001 Introduction to Ethnic Studies (4)
- ES 4020 Senior Seminar (2)
- ES 4030 Senior Thesis (2)

II. Electives (16 units)
Sixteen (16) upper division units. At least one course must be taken in each of the five existing major options: African American Studies, Asian American Studies, American Indian Studies, Latino/a Studies, and Genders and Sexualities in Communities of Color, selected in consultation with an Ethnic Studies advisor.

Genders and Sexualities in Communities of Color Minor (24 units)
In this minor, students will have the opportunity to focus critical attention on the intersection of race, gender, and sexuality through a variety of expressive and rhetorical modes, including performance, literature, music, visual arts, digital media, and public debate. Grounded in contemporary queer of color theory and woman of color feminist scholarship, courses in this minor explore gender and sexuality as complex social formations that produce a multiplicity of identities and practices.

I. Core Courses (8 units)
- Select 4 units of lower division coursework covering the topic of Genders and Sexualities in Communities of Color, with consent of department (4)
- ES 4020 Senior Seminar (2)
- ES 4030 Senior Thesis (2)

II. Electives (16 units)
Select 4 courses from the following:
- ES/WOST 3030 Immigrant and Refugee Women (4)
- ES 3165 African American Sexuality (4)
- ES 3210 Latinas in the United States (4)
- ES 3303 Contemporary African American Women Writers (4)
- ES 3430 Interracial Sex and Marriage (4)
- ES 3551 Asian American Women and Men (4)
- ES 3710 Racialized Masculinities (4)
- ES 3720 James Baldwin (4)
- ES 3730 Women of Color, Genders and Sexualities (4)
- ES 4300 Queer of Color Subjects and Critical Theory (4)
- WOST/ES 3420 Minority Women in America (4)

Latino/a Studies Minor (24 units)
The Latino/a minor offers the student majoring in another discipline the opportunity to acquire knowledge and understanding of one of the oldest, yet continuing, immigrant groups in the United States, and its developing relationship to the larger society. Students considering careers in teaching, government service, foreign affairs, business, health-sciences related fields and law may find the minor compatible with their career goals.

I. Core Courses (8 units):
- Select 4 units of lower division coursework covering the topic of Latino/a Studies, with consent of department (4)
- ES 4020 Senior Seminar (2)
- ES 4030 Senior Thesis (2)

II. Electives Courses (16 units)
Any 16 units of Latino/a Studies courses, to be selected in consultation with an Ethnic Studies Advisor.

Undergraduate Courses

General Ethnic Studies Courses (Course prefix: ES)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001</td>
<td>Introduction to Ethnic Studies (4)</td>
</tr>
<tr>
<td></td>
<td>An examination of dominant historical and philosophical research trends in Ethnic Studies. Multi- and inter-disciplinary approaches to the study of the African American, Asian American, Mexican/Latino American, and Native American experience.</td>
</tr>
<tr>
<td>1005</td>
<td>Viewing Diversity (4)</td>
</tr>
</tbody>
</table>
Basic social science approaches to the study of local, national, and global constructions and representations of cultural diversity.

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1201</td>
<td>Ethnicity in American History I (4) Topical and comparative approach to the contributions of diverse peoples and cultures to the development of the United States from European contact to 1877.</td>
</tr>
<tr>
<td>1202</td>
<td>Ethnicity in American History II (4) Topical and comparative approach to the contributions of diverse peoples and cultures to the development of the United States from 1877 to the present.</td>
</tr>
<tr>
<td>2130</td>
<td>Ethnicity and Humor (4) A comparative approach to the study of ethnicity and humor. Emphasis on shifting structural and cultural themes in American ethnic humor, from 1950 to the present.</td>
</tr>
<tr>
<td>3000</td>
<td>Ethnic Writers (4) A critical examination of the novels of twentieth century minority American writers. Advanced principles of composition and style. Fulfills the University Writing Skills Requirement for students who began work on the present degree before Fall quarter 1985. Prerequisite: ENGL 1001 or equivalent.</td>
</tr>
<tr>
<td>3030</td>
<td>Immigrant and Refugee Women (4) Changes and continuities in the lives of immigrant and refugee women, especially with reference to the conditions leading to their departure from their countries of origin and adaptation and resettlement in the United States. Cross-listed with WOST 3030.</td>
</tr>
<tr>
<td>3230</td>
<td>Oral Traditions (4) Critical examination of oral traditions, collective memory, folklore, and testimonial literature of America's multicultural experience. Emphasis on community dynamics, immigration, pop-culture, folklore, and family history.</td>
</tr>
<tr>
<td>3333</td>
<td>Ethics and Minority Politics (4) (See POSC 3333 for course description.)</td>
</tr>
<tr>
<td>3420</td>
<td>Minority Women in America (4) (See WOST 3420 for course description.)</td>
</tr>
<tr>
<td>3430</td>
<td>Interracial Sex and Marriage (4) Interracial sex and marriage in the U.S. through literature and film. Themes/images will be placed within a larger historical context of shifting attitudes about race and gender.</td>
</tr>
<tr>
<td>3700</td>
<td>Special Topics in Ethnic Studies (4) Topics of current interest in Ethnic Studies. Prerequisite: Consent of instructor. May be repeated once for credit for a maximum of 8 units.</td>
</tr>
<tr>
<td>3810</td>
<td>History of Minority Education (4) Interdisciplinary analysis of the development and the rise of a multi-ethnic society. Focus on the development of educational opportunities for minorities and women.</td>
</tr>
<tr>
<td>3820</td>
<td>Race Matters (4) A social discourse on race. Course will examine discussions of race by important American writers and scholars and the extent to which these dialogues inform critical cultural and social issues and policies on race and ethnicity.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Ethnic Studies (4) Readings, discussion, and research on contemporary and/or significant issues in ethnic studies. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4020</td>
<td>Senior Seminar (2) A cross-discipline and interdisciplinary approach to theory and method. Emphasis on methodological and theoretical models that have shaped and informed the field of Ethnic Studies. Course will integrate a field learning component. Prerequisite: senior status.</td>
</tr>
<tr>
<td>4030</td>
<td>Senior Thesis (2) A cross-disciplinary and interdisciplinary approach to theory and method. Emphasis on organization and writing of a major research paper. Prerequisite: E S 4020.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (4) May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
</tbody>
</table>

African American Studies Courses (Course prefix: ES)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1022</td>
<td>African Americans and Popular Culture (4) Focus on the performing arts as a medium for understanding ethnicity and American popular culture. Topics include African Americans in relation to artistic voice, access, marginality, and exclusion.</td>
</tr>
<tr>
<td>2000</td>
<td>Introduction to African American Studies (4) Introduction to African American Studies as a discipline. Focus on absence of critical discourse that engages the historical, political, and economic dimensions of African American life. Examination of historical and recent theoretical trends in the field.</td>
</tr>
<tr>
<td>2100</td>
<td>Blacks in the Americas (4) The historical, cultural, socioeconomic and political dimensions of the Black presence in the Americas, i.e., North and South America, and the Caribbean; 1619 to date. Emphasis on cross-cultural analysis with the objective to further understand the present day dynamics among these diverse groups in the &quot;New World.&quot;</td>
</tr>
<tr>
<td>2175</td>
<td>African American Spoken Word Performance (4) An interdisciplinary approach to African American oral performance. The course will focus on African American spoken word genres (i.e., sermons, talkstory, dozens, slam poetry, etc.) as artistic and performance events.</td>
</tr>
<tr>
<td>2300</td>
<td>The Black Cinematic Tradition (4) A critical examination of historically significant black films, from 1915 to the present. Comparative and interdisciplinary in approach. The impact of the minstrel theatre tradition on early black films, the role of independent film producers and directors in creating...</td>
</tr>
</tbody>
</table>
alternative and more multidimensional images of blacks, and the more recent crossover tradition in American films. Representative films from each decade.

2301 Telling Black Stories on Film (4)
First of a two-quarter course on telling black stories on film. Peer-to-peer relationships between CSUEB students and high school students, with the goal of writing film scripts that will be developed in the second part of the course. Prerequisite: ES 2300 or consent of instructor. CR/NC grading only.

2302 Developing Black Stories on Film (4)
Second of a two-quarter course on developing black stories on film. Peer-to-peer relationships between CSUEB and high school students, with the goal of pitching film scripts for development. Provides students with a roadmap for taking stories from concept to film. Prerequisite: ES 2301. CR/NC grading only.

3103 The African Diaspora (4)
An interdisciplinary approach to the African Diaspora in the Americas. Introduction to major works that focus on the cultural, historical, and intellectual experiences of Africans in the Diaspora.

3105 African American Identity (4)
A study of the unique psychology which evolved as a result of the Black experience in America and how it is related to the basic processes of human behavior.

3110 Racism in America I (4)
An examination of racist attitudes, behavior, and policies of America and Americans.

3120 The Civil Rights Movement (4)
The historical, socioeconomic and political development of the major civil rights movements in the United States.

3130 Slavery in the Americas (4)
The African slave trade and slavery. Emphasis on the relations among the institutions of slavery, racism and capitalism.

3140 Racism and Sports (4)
Biographical approach to the study of racism in sports. The lives of significant African American sports figures as a backdrop for an examination of broader social, economic, and political issues. Not open to students with credit for KPE 3735.

3145 African American Music (4)
Organization and development of the types, forms and styles of music as they relate to the history of the African American.

3146 Jazz on Film (4)
Critical perspectives on cinematic representations of jazz music and musicians. Emphasis on deconstructing history of racialized images of African American jazz innovators.

3147 The Fictional Africa (4)
A critical comparative examination of Africa and people of African descent as depicted in literature, film, and other popular media.

3165 African American Sexuality (4)
The historical impact of African sexual attitudes and practices on both the European and the slave. The subsequent social and structural development in this society of contemporary African American sexual attitudes and behaviors. Within this context, a critical analysis of longheld African American sexual stereotypes and related problems.

3180 The World of the Black Child (4)
The impact of a variety of socializing agents on the mental and emotional development of the Black child in this society. Emphasis on a critical examination of the growing body of research and related theory and its practical application to Black children.

3303 Contemporary African American Women Writers (4)
Interpretation and discussion of literary works by contemporary African American women writers. Emphasis on the shifting trends in content, form, and structure.

3405 African American Folklore (4)
Survey of major genres of African American folk culture, i.e., tales, songs, jokes, etc. Focus on African American folk tradition, as artifact and performance form.

3567 African American History (4)
(See HIST 3567 for course description.)

3691 Black Literature I (4)
(See ENGL 3691 for course description.)

3720 James Baldwin (4)
Critical assessment of James Baldwin's contribution to American discourses on race, gender, and sexuality through interpretation of his novels, short stories, essays, and plays. Emphasis on Baldwin's synthesis of race and gay consciousness and the political dimensions of homosexuality.

3721 African-American Philosophical Perspectives (4)
(See PHIL 3721 for course description.)

3898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. May be repeated for a maximum 8 units. CR/NC only.

American Indian Studies Courses (Course prefix: ES)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2320</td>
<td>American Indian Oral Literature (4)</td>
</tr>
<tr>
<td></td>
<td>An examination of American Indian oral tradition in historical and contemporary contexts. Approaches oral and written literatures as</td>
</tr>
</tbody>
</table>
### Genders and Sexualities in Communities of Color Courses (Course prefix: ES)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2400</td>
<td>Introduction to American Indian Studies (4) Introduction to academic discipline of American Indian Studies. Includes several overlapping themes: North American history, education, religion, etc., and provides the interdisciplinary basis for understanding historical and contemporary problems of American Indian peoples. <em>Not open to students with credit for ES 1300.</em></td>
</tr>
<tr>
<td>3305</td>
<td>Contemporary American Indian Life (4) Social and economic conditions of contemporary American Indian Life. Stereotypes, discrimination, poverty, and their effects on individuals. Contemporary social movements.</td>
</tr>
<tr>
<td>3310</td>
<td>God is Red: American Indian World View (4) A comparative study of American Indian belief systems, world views, and religions, analyzing their roles and importance in Indian life.</td>
</tr>
<tr>
<td>3330</td>
<td>American Indian Revitalization Movements (4) Study of American Indian movements aimed at liberation and revitalization from the effects of European conquest. Social and political problems of political domination. <em>Prerequisite: Consent of instructor.</em></td>
</tr>
<tr>
<td>3800</td>
<td>Peoples of Central America (4) The developmental relationship between United States’ communities of Central America origin and contemporary Central America. Focus on historical, socioeconomic, and cultural factors, as well as nationalistic movements, economic dependence, migration patterns (to the United States) and social change.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4) Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. <em>Prerequisites: at least a 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. May be repeated for credit for a maximum of 8 units. CR/NC only.</em></td>
</tr>
<tr>
<td>4550</td>
<td>Father Sky/Mother Earth: American Indian Science (4) Investigation into American Indian sciences including agriculture, astronomy and climatology. Examination of American Indian resource management, genetic engineering, and ecological restoration as well as the ways different cultures organize and categorize domains of knowledge. Strongly recommended prerequisite: ES 2400.</td>
</tr>
</tbody>
</table>

### Asian American Studies Courses (Course prefix: ES)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2500</td>
<td>Introduction to Asian American Studies (4) Introduction to the Asian American experience from an interdisciplinary perspective including popularized version of Asian Americans as the &quot;model minority,&quot; theoretical, statistical, historical, and personal approaches. Critical analysis and discussion of the position Asian Americans hold in society. <em>Not open to students with credit for ES 1500.</em></td>
</tr>
<tr>
<td>3351</td>
<td>Asian American Women and Men (4) Through a survey of changing images and roles of Asian women and men in the United States, course explores how gender has been socially constructed. Conceptions of masculinity and femininity will be treated as relational and comparisons will be made between Asian Americans and other racial groups.</td>
</tr>
<tr>
<td>3352</td>
<td>The Chinese Experience in the United States (4) Survey of the Chinese American experience from the nineteenth century &quot;bachelor&quot; societies to the present. Special attention given to issues of generation, social class, gender, sexual orientation, year and condition of entry, and place of residence. <em>Not open to students with credit for ES 2552.</em></td>
</tr>
<tr>
<td>3353</td>
<td>Asian American Sites and Sounds (4) A combined field and in-class exploration of Asian American historical sites, neighborhoods, and cultural productions. Some field trips will be taken as a class; some independently. Students must provide their own transportation and admission fees.</td>
</tr>
<tr>
<td>3355</td>
<td>Asian American Family Patterns (4) The family is conceptualized as an adaptable institution. How changes in larger society-immigration, race relations, gender roles-affect the Asian family in the United States. Topics include &quot;bachelor&quot; communities, picture brides, and interracial relationships. <em>Not open to students with credit for SOC 3417. Cross-listed with SOC 3555.</em></td>
</tr>
<tr>
<td>3357</td>
<td>Asian American Film Festival (4) In-class scholarly research on Asian American films from local annual film festivals. Hands-on film festival experience with the Center for Asian American Media and/or the San Francisco International Film Festival. <em>May be repeated once for credit when content varies, for a maximum of 8 units.</em></td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4) Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. <em>Prerequisites: at least a 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. May be repeated for credit for a maximum of 8 units. CR/NC only.</em></td>
</tr>
</tbody>
</table>
2700 Introduction to Genders and Sexualities in Communities of Color (4)
Critical study of the social construction of gender and sexuality in African American, Latino/a, Asian American, and Native American communities and contexts. Not open to students with credit for ES 1700.

3710 Racialized Masculinities (4)
Historical, cultural, structural, and personal meanings of masculinity for men and women of color. Ontological and epistemological explorations of race, class, gender, and sexuality.

3730 Women of Color, Genders and Sexualities (4)
Critical examination of the multiple meanings of gender and sexuality to women of color in the US. May include discussion of lesbian and bisexual of color identities, reproductive politics, and safe-sex practices.

3898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA, departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. May be repeated for credit for a maximum of 8 units. CR/NC only.

4300 Queer of Color Subjects and Critical Theory (4)
Examination of cultural and theoretical work constituting queer of color identities. Emphasis on queer theory and its precursors, including Freud and Foucault, in relation to people of color.

Latino/a Studies Courses (Course prefix: ES)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 2200          | Introduction to Latino/a Studies (4)  
Historical, multidisciplinary overview of Latino/a studies. Focus on the socio-political and cultural experience of U.S. Latinos/as. Critical review of extant literature in the field, with particular emphasis on immigrant trends and identity and borderland issues. Not open to students with credit for ES 1200. |
| 3202          | Latino/a Writers (4)   
The writings, literary topics, and especially the novels of twentieth century Chicano writers. |
| 3210          | Latinas in the United States (4)   
Examines historically, culturally, and theoretically the condition of Latinas in the United States. |
| 3243          | Latino/a Perspectives in Film (4)   
Film screenings, lectures, classroom discussions, and readings on the Latino/a experience and theory of cinema. Seminal works in the areas of documentary, narrative and experimental film; film as a reflection of the values of society. |
| 3255          | The Chicano Movement (4)   
Historical and social aspects of the Chicano Movement. Examines the artistic, political, and literary contributions of the Chicano Movement and its impact on American society. |
| 3265          | Latino/a Sexualities (4)   
Interdisciplinary examination of Latino/a sexualities, including discussion of historical dimensions, popular culture representations, parent-child communication, sex work, HIV education, social construction of Latino/a heterosexualities, and GLBTQ Latinos/as. |
| 3805          | Latin American Immigration (4)   
An examination of Mexican, Puerto Rican and Latin American immigration to the United States from a comparative political-economic perspective. |
| 3898          | Cooperative Education (1-4)   
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. May be repeated for credit for a maximum of 8 units. CR/NC only. |
| 4290          | Latino Politics and Public Policy (4)   
Contemporary social issues and public policy questions in the Mexican American/Latino community. Areas include race relations, immigration, feminization of poverty, education, housing, unemployment, juvenile delinquency, and criminal justice. |
Filipino and Filipino American Studies

Program Description

The Filipino and Filipino American Studies Minor serves several purposes. First, this minor strengthens the study of Asian civilizations and U.S. ethnic minority groups at Cal State East Bay by focusing on Filipinos and Filipino Americans. Second, students interested in taking courses related to Filipino and Filipino American experiences will be able to count these courses toward a minor. Third, the minor provides a foundation of cultural and social knowledge for students who plan to take business courses which deal with Filipino American communities and/or who plan to participate in international student exchanges with universities in the Philippines. Currently, students may participate in exchange programs between Cal State East Bay and selected universities in the Philippines such as De La Salle University, University of Northern Philippines, Silliman University, and the University of the Philippines (Diliman).

Minor in Filipino and Filipino American Studies

The minor consists of a minimum of 28 units of coursework selected from the following lists of core and elective courses. No more than 10 units of coursework applied toward a major may be counted for the minor. With the approval of the Filipino and Filipino American Studies advisor, a maximum of eight other appropriate units, including independent study or directed research, may be substituted for the Electives requirement.

I. Core Courses (20 units)
   - SOC 3507 Filipino American Communities (4)
   - SOC 3550 Filipino Labor/Immigration (4)
   - MLL 1651 Elementary Filipino I (4)
   - MLL 1652 Elementary Filipino II (4)
   - THEA 3311 Filipino Theatre (4)

II. Electives (8 units)
   - ANTH 3710 Anthropology and Museums (4)
   - COMM 4830 Intercultural Communication (4)
   - ECON 4710 International Economic Development (4)
   - ENGL 3670 Asian/Filipino American Literature (4)
   - ENTR 4490 Practicum in Small Business Management (4)
   - ES/WOST 3030 Immigrant and Refugee Women (4)
   - ES 3551 Asian American Women and Men (4)
   - ES 3555 Asian American Family Patterns (4)
   - GEOG 3550 Geography of Southeast Asia (4)
   - HIST 3517 The Immigrants’ West (4)
   - MKTG 4450 Marketing Seminar (4)
   - MLL 1653 Elementary Filipino III (4)
   - POSC 3204 Political Systems of Asia (4)
   - POSC 3418 U.S. Immigration Policy and Law (4)
   - SOC 3425 Prejudice and Discrimination (4)
   - SOC 3510 Sociology of Identity (4)
   - SOC 3520 Sociology of Minority Groups (4)
   - THEA 3233 Modern Philippine Dramatic Literature and Styles (4)
   - WOST 3550 Women, Work, and Family Life (4)

Footnotes

1. These elective courses require Filipino and Filipino American studies content and approval of an advisor.
2. Students, whose Filipino language competency places them out of lower division coursework, must complete 8 additional units from the list of electives (excluding MLL 1653).
# General Studies

## Department Information

**Academic Programs and Graduate Studies**

<table>
<thead>
<tr>
<th>General Education Office: Student Services and Administration Building, 1st Floor</th>
<th>Phone: (510) 885-2941</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education Director: Sally Murphy (Communication)</td>
<td></td>
</tr>
</tbody>
</table>

## General Information

GS courses are interdisciplinary courses not housed in any department or college. They are primarily designed for General Education purposes.

## Undergraduate Courses

### Undergraduate Courses (Course prefix: GS)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 1010 | General Education Activities (1)  
Integrates thematic and basic subject course content. Builds communities to support attainment of expected G.E. course outcomes through group and individual strategies. Identifies learning styles of individual students. Integrates academic support services. Must be taken three times for credit, once each quarter of the frosh year. A-F grading only. Two hrs. act. |
| 1011 | General Studies Activities I (1)  
| 1021 | General Studies Activities II (.5)  
| 1031 | General Studies Activities III (.5)  
Academic skill development in support of linked cluster courses. Continued development of student portfolio. Focus on academic planning, goal setting, and freshman advising. Class meets first 7 weeks of the quarter. Co-requisite: concurrent enrollment in linked Freshman cluster courses. A-F grading only. Two hrs. act. |
| 1099 | Academic Decathlon (4)  
Directed independent study to help prepare area high school students to successfully participate in the United States Academic Decathlon Program. Prerequisite: Consent of instructor. CR/NC grading only. |
| 2500 | Peer Mentoring Practicum (2)  
Theory and practice of peer mentoring. Focus on developing mentoring role in the classroom and developing the competencies to work with instructors and students to increase the opportunities for academic success. Prerequisite: Consent of instructor. May be repeated for credit five times for a maximum of 12 units. |
| 3000 | McNair Scholars Seminar (1-4)  
Content varies with level of student Scholars ranging between the importance of graduate studies, researching appropriate graduate programs, preparing papers for conference submission, conference participation and presentation skills, applying to graduate school, GRE test-preparation, etc. Prerequisite: Approval of McNair Scholars program faculty. Co-requisite: Participation in McNair program. May be repeated for a maximum of 12 units. Only 8 units credit may be applied toward the degree. CR/NC grading only. |
| 3998 | Honors Research (1-4)  
Students in the University Honors Program work individually or in small groups with a faculty mentor on a research project. Prerequisites: admission to Honors Program, Junior standing or above, GS 3998. May be repeated once for credit, for a maximum of 2 units. |
| 3999 | Honors Seminar (1)  
Students in the University Honors Program present the results of their research projects to their peers. Prerequisites: admission to Honors Program, Junior standing or above, GS 3998. May be repeated once for credit, for a maximum of 2 units. |
| 4010 | Tutoring for Learning: Theory and Practice (1-4)  
Introduces the dynamic processes of tutoring and learning. Surveys the literature on tutoring theory, and combines tutoring observation and experience in the university tutoring center to provide informed training for tutors or teachers. May be repeated for credit, for a maximum of 12 units. |
| 4999 | Senior Honors Thesis (1)  
Writing of a senior honors thesis in preparation for graduation from the University Honors Program. Prerequisites: admission to Honors Program; GS 3998, 3999: Senior standing. |
Geography

- Department Information
  - Program Description
  - Career Opportunities
  - Features
  - Scholarship
- Major Requirements (B.A.)
- Major Requirements (B.S.)
- Other Degree Requirements
- Minor Requirements
- Certificate in Cartography and GIS
- Certificate in Sustainable Resource Management
- Undergraduate Courses

Department Information

Department of Geography and Environmental Studies
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3193; FAX: (510) 885-2353
Website: [http://class.csueastbay.edu/geography](http://class.csueastbay.edu/geography)

Professors
Karina Garbesi, Ph.D. University of California, Berkeley
David Larson (Chair), Ph.D. University of California, Berkeley
Michael Lee, Ph.D. London School of Economics (England)
Gary Li, Ph.D. State University of New York at Buffalo
Scott Stine, Ph.D. University of California, Berkeley

Associate Professors
David Woo, Ph.D. University of California, Santa Barbara

Program Description

Geography is the study of the spatial distributions and spatial relations within the human-environment system. Attention is focused on historic and contemporary human activities within the context of the physical-biotic and cultural environment, and on humanity as one of the major agents of change of the earth's surface. A curriculum in Geography helps students understand the world's landscape and how it has been transformed or altered by either the earth's natural processes or human modifications.

At Cal State East Bay, students can choose between a Bachelor of Science (B.S.) degree and a Bachelor of Arts (B.A.) degree with a major in Geography. A B.S. degree major is appropriately suited for students with career objectives in the professional field of Geography. It is also highly recommended for those planning to enter a graduate school program in Geography. Obtaining a Bachelors of Arts degree major provides for a liberal education, and prepares students for positions in business, government, foreign service, and especially teaching. Combining geography with coursework in other social sciences or with other science fields is excellent preparation for teachers in secondary education. Both majors require 61 units, 16 lower division and 45 upper division.

Student Learning Outcomes

Students graduating with a B.A. or B.S. in Geography from Cal State East Bay will: 1) have developed a broad and deep understanding of the critical factors and fundamental concepts of the discipline of Geography; 2) have the ability to communicate orally and in writing; 3) have a solid understanding of regional and global affairs; 4) be familiar with the urban and rural geography of the Bay Area; 5) be able to prepare, use and interpret maps and other spatial data with and without the aid of computers.

Career Opportunities

- Aerial Photo Interpreter
- Agricultural Geographer
- Archaeologist
- Cartographer
- Census Analyst
- Climatologist
- Community Development Specialist
- Demographer
- Ecologist
- Economic Development Analyst
- Environmental Analyst/Planner
- Map Curator
- Recreational Resource Planner
- Soil Conservationist
- Transportation Planner
- Urban Geographer
- Zoning Specialist/Surveyor
Features

With the arrangement of a faculty advisor, students in the Bachelor of Science program can select from the following fields of concentration: biogeography, cartography, cultural geography, economic geography, historical geography, history and philosophy of geography, physical geography, regional geography.

The department also offers a Certificate Program in Cartography and G.I.S. for those wanting to learn skills and methods in data collection, interpretation, and analysis as well as the design, compilation, production, and reproduction of maps.

Geographic internships are available. Individual students may be assigned to public, private, or volunteer agencies.

Scholarship

Richard and Evelyn Thoman Scholarship in Geography and Environmental Studies

One $500 scholarship is awarded each academic year for full-time undergraduate or graduate studies. Awards are limited to students with upper division or graduate standing. A grade point average of 3.5 or higher is required, and demonstrated scholastic and creative ability in the field of Geography or Environmental Studies.

Major Requirements (B.A.)

The major consists of 61 units in geography; the B.A. degree requires a total of 180 units.

I. Lower Division (16 units)
   - GEOG 2100 Physical Geography (4)
   - GEOG 2300 Cultural Geography (4)
   - GEOG 2310 Economic and Resource Geography (4)
   - GEOG 2410 Introduction to Maps (4)

II. Upper Division (45 units)
   - GEOG 3450 Literature and Research Methods (5)
   - Four units of an upper division GEOG course covering field geography of the San Francisco Bay region with consent of advisor (4)
   - One Physical Course (4 units):
     - GEOG 3115 Physical Landscape Analysis
   - One Technical Course (4 units) selected from:
     - GEOG 3410 Air-Photo Interpretation
     - GEOG 3600 Cartographic Principles
   - One Cultural Course (4 units) selected from GEOG 3000-level courses with consent of advisor.
   - One Resource Course (4 units) selected from:
     - GEOG 3000 Sustainable Resource Management
     - GEOG 3320 Food, Culture and Environment
     - GEOG 4320 Energy and Society
     - GEOG 4350 Water Resources and Management
   - One Regional Course (4 units) selected from 3500 series
   - Plus 16 units of electives in geography, including not more than 4 additional units in the 3500 series, and to include at least 8 units of the 4000-level series by advisement

Note: The following courses or their equivalents have to be completed if a student in the B.A. program in Geography desires to enter the M.A. degree program in Geography:
   - GEOG 3410 Air-Photo Interpretation
   - GEOG 3600 Cartographic Principles
   - GEOG 3000-level course in applied field studies, with consent of advisor

III. Proficiency Requirements

Proficiency in reading a foreign language, at the first-year level, must be demonstrated by successful completion of a departmental examination; or proficiency in statistics, at the level of a 3000-series course, must be demonstrated by passing an examination set by the Statistics Department; or proficiency in Mathematics, at the level of Calculus III, must be certified by the Department of Mathematics and Computer Science. Appropriate coursework will be recommended to students who do not pass an examination.

Major Requirements (B.S.)

The major consists of 61 units in Geography; the B.S. requires a total of 180 units.

I. Lower Division (16 units)
   - GEOG 2100 Physical Geography (4)
   - GEOG 2300 Cultural Geography (4)
   - GEOG 2310 Economic and Resource Geography (4)
   - GEOG 2410 Introduction to Maps (4)

II. Upper Division (45 units)
   - GEOG 3410 Air-Photo Interpretation (4)
   - GEOG 3450 Literature and Research Methods (5)
   - GEOG 3600 Cartographic Principles (4)
   - GEOG 3000-level course in applied field studies, with consent of advisor (4)
One Physical Course (4 units):
  - GEOG 3115 Physical Landscape Analysis

One Cultural Course (4 units) selected from the group comprising the 3300 series

One Field Course (4 units):
  - GEOG 4325 Field Course in Cultural-Urban Geography

Two Regional Courses (8 units) selected from the 3500 series.

Plus 8 units of electives in Geography, in the 4000 series by advisement.

III. Proficiency Requirements
Proficiency in reading a modern language, at the first-year level, must be demonstrated by successful completion of a departmental examination; or proficiency in statistics, at the level of a 3000 series course, must be demonstrated by passing an examination set by the Statistics Department; or proficiency in Mathematics, at the level of Calculus III, must be certified by the Department of Mathematics and Computer Science. Appropriate coursework will be recommended to students who do not pass an examination.

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements
The minor consists of 36 units.

- GEOG 2100 (4 units)
- GEOG 2300 (4 units)
- GEOG 3410 (4 units)
- Two regional courses (3500 series) from different instructors (8 units)
- Four courses from one of the following groups (16 units):
  A. Human Geography Option: GEOG 2310, 3320, 3360; one course selected from GEOG 3000-level courses with consent of advisor
  B. Physical-Biotic Resources Option: GEOG 3115, 3120, 4320, 4350

Certificate in Cartography and GIS
The Cartography and GIS Certificate Program consists of 20 units. It is designed to prepare students in methods of data collection, interpretation, and analysis as well as the design, compilation, production, and reproduction of maps, thus enabling students to be current in the field of cartography.

Select at least 20 units from the following:

- GEOG 3410 Air-Photo Interpretation (4)
- GEOG 3600 Cartographic Principles and Graphic Communication (4)
- GEOG 3605 Computer Cartography (5)
- GEOG 4425 Remote Sensing of Earth Environments (4)
- GEOG 4605 Applications of GIS (5)

Certificate in Sustainable Resource Management
Prerequisites: STAT 1000 Elements of Probability and Statistics (5), or equivalent, and AA degree, or equivalent, or completion of lower division requirements for a four-year degree program.

The certificate consists of a total of 28 units.

I. Required Courses (12 units)

- GEOG 3000 Sustainable Resource Management (4)
- ENVT 3400 Environmental Resource Analysis (4)
- ENVT 4100 Environmental Impact Analysis (4)
- MGMT 3110 Project Management (4)

II. Elective Courses (12 units)
Select three courses from the following list:

- GEOG/ENVT 3480 Applied Field Studies (4)
- GEOG/ENVT 4320 Energy and Society (4)
- GEOG 4330 Sustainable Development (4)
- GEOG 4350 Water Resources and Management (4)
- GEOG 6780 Seminar in Environmental Planning (4)
- GEOG 8820 Seminar in Sustainable Cities (4)
- MGMT 6460 Strategic Management for a Sustainable Society (4)

Undergraduate Courses
Introductory (Course prefix: GEOG)
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2100</td>
<td>Physical Geography (4) Major components of the physical environment, including landforms, climate, vegetation, and soils. Three hrs. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>2300</td>
<td>Cultural Geography (4) Thematic introduction to the cultural systems operating to change the earth's surface; contemporary topics of human population, technology, social organization, spatial interaction, communication, and ideology. One half-day field trip required.</td>
</tr>
<tr>
<td>2310</td>
<td>Economic and Resource Geography (4) Location and linkages of economic activities as they relate to resource management. How goods and services produced by and for humans are geographically organized. Special emphasis on the historical antecedents of contemporary economic processes and international issues.</td>
</tr>
<tr>
<td>2320</td>
<td>Geography of World Development (4) Global wealth, poverty and inequality from a geographical perspective. Trends in important economic, environmental and sociocultural dimensions of world development. The who, why, and when and where aspects of the distribution of wealth at selected city, national and global scales.</td>
</tr>
<tr>
<td>2410</td>
<td>Introduction to Maps (4) Reading and interpretation of commonly used maps; map appreciation, design, and evaluation; art of map-making. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>2600</td>
<td>Introduction to GIS (4) See GEOL 2600 for course description.</td>
</tr>
<tr>
<td>3000</td>
<td>Sustainable Resource Management (4) The earth as a source of land, water, biotic, mineral and energy resources. The role of human populations in their use, sustainable development, and exploitation.</td>
</tr>
<tr>
<td>3030</td>
<td>Fundamentals of Geographic Information Systems (4) Fundamentals of location-related information management, manipulation, and display. Usage of commercially available GIS software in business; education; and physical, social and life sciences. Not open to students with credit for GEOG 4600. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3115</td>
<td>Physical Landscape Analysis (4) The geomorphic evolution of the landscape with emphasis on the last 3 million years. Processes and landscape histories, especially as they relate to climate, climatic change, and tectonics. Prerequisite: GEOG 2100 or consent of instructor.</td>
</tr>
<tr>
<td>3120</td>
<td>Climate Change (4) Pre-modern and modern changes and variations in climate with emphasis on the geological, geomorphological, and biological records. Causes (natural and human-induced, including contemporary global warming) and consequences (natural and cultural) of climate change. Prerequisites: GEOG 2100 or consent of instructor.</td>
</tr>
<tr>
<td>3200</td>
<td>Asian Americans: Spatial Disparity and Multiculturalism (4) Ethnic diversity and settlement patterns of Asian communities in California and the United States; immigration history and demographic changes of different Asian ethnic groups; socio-economic profiles, cultural identities, and contemporary issues of Asian Americans.</td>
</tr>
<tr>
<td>3210</td>
<td>Food, Culture and Environment (4) Origins and diffusion of agriculture, from its earliest practices to today's global food economy. Emphasis on ethno-cultural food choices and environmental consequences of cuisine and food supply from farm to market to table.</td>
</tr>
<tr>
<td>3320</td>
<td>Urban Geography (4) Contemporary Western, chiefly American, urbanism as a dynamic spatial phenomenon; functional structure of cities, spatial interaction, urban settlement patterns, urban environmental quality with regional comparisons.</td>
</tr>
<tr>
<td>3330</td>
<td>Urban Planning (4) Overview of planning processes conducted at county and city levels. Includes legal background, administrative processes, planning issues, research methods and case studies. It is recommended that GEOG 3330 be taken before GEOG 3340.</td>
</tr>
<tr>
<td>3340</td>
<td>Asian Ams: Spatial Disp &amp; Multiculturalism (4) Asian Americans: Historical Geography of North America (4) Historical-geographic processes of exploration, migration, settlement, urbanization, cultural integration, land use and resource exploitation from the 15th through the 20th centuries.</td>
</tr>
<tr>
<td>3405</td>
<td>Field Regional Geography (1) Reconnaissance field study of geography of selected areas in California and adjoining regions. May be repeated but no more than two units may be applied to Geography major. Thirty hrs. field/lab. CR/NC grading only.</td>
</tr>
<tr>
<td>3410</td>
<td>Air-Photo Interpretation (4) The principles of airborne remote sensing and image interpretation for environmental resource management. Hands-on experience in photogrammetric stereoscopy and image measurement of spatial data. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>3450</td>
<td>Literature and Research Methods (5) Seminar in the basic geographical and environmental literature, source materials and research methods. Intensive exercises in both written and oral communication. Fulfills the University Writing Skills requirement for students who began work on the present degree before Fall Quarter, 1985.</td>
</tr>
<tr>
<td>3480</td>
<td>Applied Field Studies (4) Field-based research project. Application of techniques and methods, including field observation, sampling, data collection, and computer-based analysis. Presentation of results in graphic and written forms. Prerequisite: ENVT 3400 or consent of instructor. May be repeated once for credit with consent of instructor, for a maximum of 8 units. Cross-listed with ENVT 3480. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>Course Number</td>
<td>Course Information</td>
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</tr>
<tr>
<td>3500</td>
<td>Geography of the United States and Canada (4) Systematic analysis of the distinctive human-use regions of the United States and Canada emphasizing their character, personality, and economic profile. Case studies of resource use dilemmas.</td>
</tr>
<tr>
<td>3505</td>
<td>Geography of California (4) The natural and cultural processes which have shaped the landscape of contemporary California. California's varied environments, especially how they have been perceived, modified, and significantly altered by humans.</td>
</tr>
<tr>
<td>3515</td>
<td>Geography of South America (4) Distinguishing characteristics among the Andean countries of Spanish heritage, the Guianas, and the largest country-Brazil.</td>
</tr>
<tr>
<td>3540</td>
<td>Geography of China and Japan (4) China and Japan as modern industrial powers. Comparative analysis of spatial patterns, economic development, natural resources, and social transformations that shape their respective cultural landscapes. Regional identities in the context of globalization.</td>
</tr>
<tr>
<td>3550</td>
<td>Geography of Southeast Asia (4) Physical resources, patterns of land use, economic development, and urbanization; problems and prospects of mainland and island countries from Myanmar to Indonesia and the Philippines. This region is an Islamic, Buddhist, Hindu, Christian cultural complex.</td>
</tr>
<tr>
<td>3600</td>
<td>Cartographic Principles and Graphic Communication (4) Fundamentals of map design and production. Emphasis on the humanistic and technical aspects of cartography. The essence of the map communication theory and gestalt theory of human perception; effective symbolization of spatial data. One hr. lect., 6 hrs. act.</td>
</tr>
<tr>
<td>3605</td>
<td>Computer Cartography (5) Introduction to the principles of modern digital cartography. Hands-on experience in computer mapping. Basic concepts, software, hardware of computer cartography; spatial data structure and database management; and lab-oriented software applications. Prerequisites: GEOG 2410 and 3600. Two hrs. lect., 6 hrs. act.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4) Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Geography major; a maximum of 4 units will be accepted toward the Geography minor. May be repeated for credit for a maximum of 8 units. CR/NC grading only.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Geography (4) Readings, discussion, and research on contemporary and/or significant issues in geography. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
</tbody>
</table>

**Advanced (Course prefix: GEOG)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>4130</td>
<td>Biogeography (4) (See BIOL 4130 for course description.)</td>
</tr>
<tr>
<td>4320</td>
<td>Energy and Society (4) Distribution of sources, production trends, use patterns, potentials of water, wind, volcanic, tidal, solar, and other sources of power; emphasis upon fossil fuels and nuclear energy. Cross-listed with ENVT 4320.</td>
</tr>
<tr>
<td>4330</td>
<td>Sustainable Development (4) Oxymoron or achievable goal? The major forces that shape national resource and economic development. Case studies that examine experiences with bilateral and multi-lateral development assistance. The close relationship between sustainable development, economics, demography, resource geography and the environment. Prerequisite: GEOG 3000.</td>
</tr>
<tr>
<td>4350</td>
<td>Water Resources and Management (4) The historical, geographical, legal, and economic bases for the distribution and allocation of water, stressing California and the arid West; the environmental impact of water use; past and current issues and controversies in water distribution and redistribution.</td>
</tr>
<tr>
<td>4425</td>
<td>Remote Sensing of Earth Environments (4) Introduction to remote sensing applications on earth resource management. Focus on non-photographic earth observation systems such as near-infrared, thermal-infrared, and radar. Principles of remote sensing; types of imaging systems; and digital image processing. Prerequisites: GEOG 3410 and consent of instructor. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4605</td>
<td>Applications of GIS (5) Interdisciplinary applications of GIS technology on the mapping, monitoring, analysis, management and conservation of environmental resources such as water, land use, agriculture and wildlife. Prerequisite: GEOG 3030. Two hrs. lect., 4 hrs. act.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4) May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
</tbody>
</table>

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Geology

Department Information

Department of Earth and Environmental Sciences
College of Science
Office: North Science 329
Phone: (510) 885-3486
Email: geology@csueastbay.edu
Website: www.sci.csueastbay.edu/earth

Professor
Jeffery C. Seitz (Chair), Ph.D. Virginia Polytechnic Institute and State University

Associate Professors
Mitchell Craig, Ph.D. Georgia Institute of Technology
Luther M. Strayer, Ph.D. University of Minnesota

Assistant Professor
Jean Moran, Ph.D. University of Rochester

Program Description

Geology is the study of the earth and of life and the natural processes occurring in or on the earth through time. Along with studying the impacts of human activities on the environment, students can learn about the causes of earth processes such as earthquakes, volcanoes, the formation of mountains, the effect of erosion and deposition, and the formation of rocks and minerals and their uses. Coursework combined with observations on field trips provide Cal State East Bay students with an understanding of natural processes and the human impact on the environment.

The undergraduate degree programs consist of required courses plus electives designed to meet the needs of students with objectives ranging from employment at the Bachelor's degree level, through preparation for a secondary school teaching credential, to graduate study in Geology. A B.S. major in Geology is the primary, professional program in Geology, and serves as preparation for employment in the field, usually on a technical level; those wishing to do independent geological work should plan on graduate study. The B.A. degree major is designed for persons who do not necessarily plan to become professional geologists or to go on to graduate work. (Note: Transfer from the B.A. to the B.S. program or vice versa can be accomplished.)

Student Learning Outcomes

Students graduating with a B.S. in Geology from Cal State East Bay will be able to:
1. do independent geologic mapping, including preparation of a geologic map, legend, and geologic history;
2. prepare, draft, and describe a stratigraphic section;
3. describe and explain the structural geology of a region; and
4. communicate geologic concepts.

Students graduating with a B.A. in Geology from Cal State East Bay will be able to:
1. under supervision, to do geologic mapping, or serve as field assistant to a senior geologist;
2. prepare, under supervision, stratigraphic sections and structural cross sections;
3. communicate geologic concepts.

Career Opportunities

- Engineering Geologist
- Environmental Geologist
- Geochemist
- Geologist
- Geophysicist
- Hydrologist
- Mineralogist
- Paleontologist
- Park Ranger
- Petrologist
- Seismologist
The undergraduate Geology programs emphasize field and laboratory training. Many opportunities for field and laboratory research exist throughout northern California and elsewhere.

The Cummings Earth Science Club, a student organization, sponsors a variety of activities including speakers, field trips, employment workshops, and student-faculty gatherings. The club is an important part of department life, providing students with opportunities to make professional contacts, to explore graduate school and professional options, and to enjoy the company of others with similar interests. For more information, contact the faculty advisor or the current club president at (510) 885-3486.

Students completing the Geology major may apply four (4) units of mathematics and eight (8) units of chemistry (or physics) to the Natural Sciences and Mathematics requirement (Area B) in their General Education Requirements. (See the General Education Evaluator and Class Schedule for more information.)

**Major Requirements (B.S.)**

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 108 units; the B.S. degree requires a total of 180 units.

**I. Core Courses (77-80 units)**
- CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5)
- GEOL 2101 Physical Geology (5)
- GEOL 2102 Earth and Life Through Time (4)
- GEOL 3601 Mineralogy and Optical Crystallography (5)
- GEOL 3701 Igneous and Metamorphic Petrology (5)
- GEOL 3801 Sedimentology and Stratigraphy (5)
- GEOL 3810 Structural Geology (5)
- GEOL 3910 Geologic Field Methods (3)
- GEOL 4800 Seminar (2)
- GEOL 4000-level course on Field Geology, with consent of advisor (8)
- MATH 1304, 1305 Calculus I and II (4, 4)
- PHYS 1001, 1002, 1003 General Physics or PHYS 2701, 2702, 2703 Introductory Physics (12-15)

**II. Electives (28-31 units)**
Twenty-eight (28) to 31 units, depending on physics sequence completed, from among the courses listed below. At least 10 units must be in 4000-level geology courses. Up to 12 of the elective units may be satisfied with appropriate courses in Biological Sciences, Chemistry, Mathematics and Computer Science, Physics, and/or Statistics approved in advance by a faculty advisor.

GEOL 3110, 3400, 4101, 4130, 4320, 4800 (not more than 2 units), 4900, 4910 (not more than 4 units for 4900 and 4910 combined)

Students interested in a specific subdiscipline (e.g., applied geology, oceanography, geochemistry) are urged to consult the appropriate departmental faculty advisor to ensure an appropriate choice of electives.

**Note:** Course substitutions made after arrival at Cal State East Bay must have prior written approval of the faculty advisor.

**Major Requirements (B.A.)**

The major consists of 72-75 units; the B.A. requires a total of 180 units.

**I. Core Courses (55-58 units)**
- CHEM 1101, 1102, 1103 General Chemistry (5, 5, 5) and PHYS 1700 Elementary Physics (4) and PHYS 1780 Elementary Physics Laboratory (1)
- or CHEM 1100 Introduction to College Chemistry (5) and PHYS 2701-2-3 Introductory Physics (4, 4, 4)
- GEOL 2101 Physical Geology (5)
- GEOL 2102 Earth and Life Through Time (4)
- GEOL 3601 Mineralogy and Optical Crystallography (5)
- GEOL 3701 Igneous and Metamorphic Petrology (5)
- GEOL 3801 Sedimentology and Stratigraphy (5)
- GEOL 3810 Structural Geology (5)
- GEOL 3910 Geologic Field Methods (3)
- GEOL 4800 Seminar (2)
- MATH 1300 Trigonometry and Analytic Geometry (4)

**II. Electives (17 units)**
Any additional geology courses at the 3000 and 4000 level, except GEOL 3040, 3050, 3060, 3100, 3401 and 3898. At least two courses must be at the 4000 level (no more than 4 units of GEOL 4900 may be applied).

**Other Degree Requirements**

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the
Minor Requirements

The minor consists of 28-34 units

I. Core Courses

- GEOL 2101 Physical Geology (5)
- GEOL 2102 Earth and Life Through Time (4)

II. Electives

One lower division elective from the following (4-5 units):

- GEOL 1000 Earth Systems Science (5)
- GEOL 1001 Introduction to Earth Sciences (or 1003, 1005, or 1006) (4)
- GEOL 1201 Introduction to Oceanography (4)
- GEOL 2000 Introduction to the Geology of California (4)
- GEOL 2300 Natural Disasters (or 2301) (4)

Four upper division electives, chosen from the following with assistance of minor advisor (15-20 units):

- GEOL 3040 Weather and the Atmosphere (4)
- GEOL 3050 Volcanoes and Plate Tectonics (4)
- GEOL 3100 Geology of the Western National Parks (4)
- GEOL 3110 Principles of Geomorphology (4)
- GEOL 3400 General Oceanography (4)
- GEOL 3401 The Oceans (4)
- GEOL 3601 Mineralogy and Optical Crystallography (5)
- GEOL 3701 Igneous and Metamorphic Petrology (5)
- GEOL 3801 Sedimentology & Stratigraphy (5)
- GEOL 3810 Structural Geology (5)
- GEOL 3910 Geologic Field Methods (3)
- GEOL 4320 Hydrogeology (4)

Undergraduate Courses

(Prefix: GEOL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>Earth Systems Science (5)</td>
</tr>
<tr>
<td></td>
<td>Introduction to the nature and evolution of the solid Earth, hydrosphere, atmosphere and solar system. Emphasizes interdisciplinary thought and research. Not for credit toward Geology major. Not open to students with credit for GEOL 1001, 1002, 1003, 1005, or 1006. Four hrs. lect., 3 hrs. lab; field trips(s).</td>
</tr>
<tr>
<td>1001</td>
<td>Introduction to the Earth Sciences (4)</td>
</tr>
<tr>
<td></td>
<td>Composition, structure and evolution of the earth. Interactions of lithosphere, hydrosphere, and atmosphere. Relations of geologic systems, hazards, and resources to human environment and future. Not open to students with credit for GEOL 1000, 1003, 1005 or 1006.</td>
</tr>
<tr>
<td>1002</td>
<td>Earth Sciences Laboratory (1)</td>
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<tr>
<td></td>
<td>Laboratory investigation of the Earth system: solid Earth, hydrosphere, atmosphere, and solar system. Geologic materials, maps, earthquakes, landslides, weather, oceans and currents, planets. Field trip. Prerequisite: GEOL 1001 (or 1003, 1005, or 1006) or concurrent enrollment. Not open to students with credit for GEOL 1000. Not for credit in Geology major. Three hrs. lab.</td>
</tr>
<tr>
<td>1003</td>
<td>How Earth Systems Work (4)</td>
</tr>
<tr>
<td></td>
<td>How the earth's lithosphere, hydrosphere, and atmosphere work and the earth's place in the universe. Not open to students with credit for GEOL 1000, 1003, 1005 or 1006.</td>
</tr>
<tr>
<td>1005</td>
<td>Earth Science (4)</td>
</tr>
<tr>
<td></td>
<td>The earth's place in the universe with emphasis on how the earth's lithosphere, hydrosphere and atmosphere work. Not open to students with credit for GEOL 1000, 1001, 1003 or 1006.</td>
</tr>
<tr>
<td>1006</td>
<td>Earth Systems and Energy (4)</td>
</tr>
<tr>
<td></td>
<td>Nature and evolution of solid Earth, hydrosphere, atmosphere and solar system. Emphasizes interdisciplinary thought and the role of energy in the Earth system and energy resources. Not for credit toward Geology major. Not open to students with credit for GEOL 1000, 1001, 1003 or 1005.</td>
</tr>
<tr>
<td>1201</td>
<td>Introduction to Oceanography (4)</td>
</tr>
<tr>
<td></td>
<td>Origin of ocean basins, nature of the sea floor, physical/chemical characteristics of sea water, ocean currents, marine life, relationships between humans and the sea. Not for credit toward Geology major.</td>
</tr>
<tr>
<td>1202</td>
<td>Oceanography Laboratory (2)</td>
</tr>
<tr>
<td></td>
<td>Introductory laboratory exercises in principles of oceanography, including distribution of temperature and salinity, currents, sea-floor topography, bottom sediments, waves and tides, and beach dynamics. Prerequisite: prior or concurrent enrollment in GEOL 1201. Not applicable to the Geology majors. One hr. lect., two hrs. lab activity.</td>
</tr>
<tr>
<td>2000</td>
<td>Introduction to the Geology of California (4)</td>
</tr>
<tr>
<td></td>
<td>The geologic history and development of California. Rocks, minerals and natural resources. Processes that shape California</td>
</tr>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>2101</td>
<td>Physical Geology (5)</td>
</tr>
<tr>
<td>2102</td>
<td>Earth and Life Through Time (4)</td>
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<tr>
<td>2201</td>
<td>Environmental Geology (4)</td>
</tr>
<tr>
<td>2211</td>
<td>Environmental Geology Laboratory (1)</td>
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<tr>
<td>2300</td>
<td>Natural Disasters (4)</td>
</tr>
<tr>
<td>2301</td>
<td>Natural Hazards (4)</td>
</tr>
<tr>
<td>2600</td>
<td>Introduction to GIS (4)</td>
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<tr>
<td>3040</td>
<td>Weather and the Atmosphere (4)</td>
</tr>
<tr>
<td>3050</td>
<td>Volcanoes and Plate Tectonics (4)</td>
</tr>
<tr>
<td>3100</td>
<td>Geology of the Western National Parks (4)</td>
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<tr>
<td>3500</td>
<td>Environmental Hydrology (4)</td>
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<tr>
<td>3601</td>
<td>Mineralogy and Optical Crystallography (5)</td>
</tr>
<tr>
<td>3701</td>
<td>Igneous and Metamorphic Petrology (5)</td>
</tr>
<tr>
<td>3800</td>
<td>Achievements of Women in Science (4)</td>
</tr>
<tr>
<td>3801</td>
<td>Sedimentology and Stratigraphy (5)</td>
</tr>
</tbody>
</table>
3810 Structural Geology (5)
Geometric, kinematic and dynamic analysis of structures of igneous, sedimentary and metamorphic rocks. Laboratory emphasis on descriptive geometry and stereographic solutions to structural problems; geologic maps and structure sections. Prerequisite: GEOL 2101 or equivalent. Three hrs. lect., 6 hrs. lab.; field trip.

3898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA and departmental approval of activity. Not for credit in Geology major. May be repeated for up to 8 units. CR/NC grading only.

3910 Geologic Field Methods (3)
Introduction to geologic field methods and instruments, use of aerial photographs and topographic maps in geologic mapping, preparation of geologic maps of local areas. Prerequisites: GEOL 3701, 3801, and 3810 (any of these courses may be taken concurrently). One hr. lect., 6 hrs. field.

3999 Issues in Geological Sciences (4)
Readings, discussion, and research on contemporary and/or significant issues in geological sciences. May be repeated for credit when content varies, for a maximum of 8 units.

4010 Applied Geophysics (5)
Geophysical methods for determination of subsurface geology, including seismic refraction and reflection, ground-penetrating radar, gravity, magnetism, and resistivity. Basic geophysical theory. Collection of geophysical data in the field and analysis on the computer. Prerequisites: GEOL 2101, MATH 1304, and PHYS 2702 or consent of instructor. Three hrs. lect., 6 hrs. lab.; field trip required.

4020 Seismic Exploration (4)
Seismic exploration methods, including data acquisition, processing, modeling, and interpretation. Survey design, source and receiver types, selection of acquisition parameters. Static and gain corrections, deconvolution, velocity analysis, migration and inversion methods. Prerequisites: GEOL 2101, MATH 1304, and PHYS 2701, or consent of instructor. Not open to students with credit for GEOL 6020. Three hrs. lect., 3 hours lab.

4130 Survey of Geochemistry (4)
Chemical evolution of the universe and earth, chemistry of rock formation, hydrothermal solutions and weathering, isotopes and trace elements. Prerequisites: GEOL 3601 (may be taken concurrently) and CHEM 1103 or equivalents.

4140 Hazardous Waste Management (4)
(See ENSC 4140 for course description.)

4200 Introduction to Planetary Science (4)
Introduction to the formation and origin of the solar system. Celestial mechanics, stellar evolution, meteoritics, planetary interiors, surfaces, and atmospheres, moons, asteroids, comets, extraterrestrial life. Prerequisite: GEOL 3601 or equivalent.

4320 Hydrogeology (4)
The hydrologic cycle, from precipitation, evapotranspiration, infiltration and runoff, to surface and groundwater. Hydrograph analysis, stream gaging and discharge determination. Groundwater occurrence, movement and evaluation. Hydrologic regions of U.S., emphasizing the western states. Prerequisite: GEOL 2101 or equivalent. Field trip(s). Three hrs. lect., 3 hrs. lab.

4600 GIS for Earth Sciences (5)
An introduction to applications of Geographic Information Systems (GIS) to geology and other earth sciences. Designing, automating, and analyzing a spatial database; linking data sets; creating maps; generating reports and customizing ARC/INFO software. Prerequisites: GEOL 2101 or permission of instructor. Three hrs. lect., 6 hrs. lab.

4800 Seminar (2)
Critical, in-depth study of selected topics of current and classical research in geology; topics not repeated in two-year interval. Prerequisite: senior standing or permission of instructor. May be repeated, but no more than 6 units may be applied to Geology major.

4900 Independent Study (1-4)
May be repeated for credit with consent of instructor, for a maximum of 12 units. CR/NC grading only.

4910 Senior Thesis (2)
Independent research project with a written thesis, digital map, or similar final product to be completed by students desiring to graduate with a B.S. in geology with research experience (see department for guidelines). only. Prerequisites: senior level in Geology and thesis advisor’s approval. CR/NC grading only.

Marine Science Courses
(See the undergraduate Marine Science chapter for descriptions of the following courses.)
- MSC 4141 Geological Oceanography (6)
- MSC 4142 Physical Oceanography (6)
- MSC 4143 Chemical Oceanography (6)

Footnote
1. Students needing a relatively rigorous preparation in mathematics and physics (e.g., for graduate study) are strongly urged to complete the calculus-based physics sequence (PHYS 1001, 1002, 1003); this requires completion of the additional calculus course MATH 2304. The additional 4 units earned in calculus may be applied to elective requirement II.
Health Care Administration

Department Information

Department of Public Affairs and Administration
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4122
Phone: (510) 885-3282
Website: [http://class.csueastbay.edu/publicadmin](http://class.csueastbay.edu/publicadmin)

Associate Professor Emeritus
George F. Goerl, Ph.D. University of California, Davis

Professors
Linda Dalton, Ph.D. Radcliff College/Harvard University
O. Jombo ("Jay") Umeh, Ph.D. Texas Tech University

Associate Professors
Jennifer L. Eagan, Ph.D. Duquesne University
Toni E. Fogarty (Chair), Ph.D. University of California, Berkeley
Frank E. Scott, D.P.A. University of La Verne

Assistant Professors
Michael Y. Moon, Ph.D. Teachers College, Columbia University

General Information

While the program in Health Care Administration is an interdisciplinary graduate program leading to the M.S. in Health Care Administration, the following course is offered for undergraduates who may be interested in pursuing the master's degree in health care administration or who wish to learn more about health care systems. HCA 4200 is a prerequisite for "Classified Graduate" status in the M.S. in Health Care Administration program. The other foundation courses are PUAD 4830 Organization Theory and Human Behavior or MGMT 3614 Organizational Behavior, and STAT 1000 Elements of Probability and Statistics (or its equivalent). See the Health Care Administration chapter in the graduate section of this catalog for additional information.

Upper Division Courses (Course prefix: HCA)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 3999          | Issues in Health Care Administration (4)  
Readings, discussion, and research on contemporary and/or significant issues in health care administration. May be repeated for credit when content varies, for a maximum of 8 units. |
| 4200          | Social Construction of Health Care (4)  
The origin and structure of health care delivery systems. How ideas about health and medical care are anchored in social and cognitive relationships. The assumptions that inhibit systemic change and change strategies given these assumptions. |

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Health Sciences

Department Information

Department of Nursing and Health Sciences
College of Science
Office: North Science 143
Phone: (510) 885-3481

Professor Emerita
Pamela K. Parlocha, D.N.Sc. University of California, San Francisco

Associate Professor Emerita
Theresa A. Gorman, M.S.N. University of California, San Francisco

Professors
Roberta F. Durham, Ph.D. University of California, San Francisco
Carolyn M. Fong (Chair), Ph.D. University of California, Berkeley

Associate Professors
Kimberly A. Kim, Ph.D. University of Wisconsin
Lindsay McCrea, Ph.D. University of California, San Francisco
Lynn A. VanHofwegen, D.N.P. Case Western Reserve University

Assistant Professors
Renee M. Granados, M.S.N. California State University, Dominguez Hills
Nancy Hoffman, J.D. Golden Gate University
Denise Li, Ph.D. University of California, San Francisco
Lois Ritter, Ed.D. University of San Francisco
Michelle Telesz, Ph.D. University of California, San Francisco
Oscar Wambugu, Ph.D. University of California, Berkeley
Jacqueline C. Willetts, M.S. California State University, Hayward

Program Description

Health, the second largest industry in the United States, employs over eight million workers. Physicians represent only 7% of this workforce, and there are over 200 other professions in the health sciences field. Many of these professions can be entered directly with a B.S. degree in Health Sciences. Other professions may require graduate training. Career opportunities and competition for admission to programs varies with each profession. Students should, therefore, plan carefully with a faculty advisor for career and training alternatives.

The B.S. degree with a major in Health Sciences offers a program of instruction with four elective areas of study (options). Students select one of these options to meet career needs and should seek faculty advising in making their selection.

Student Learning Outcomes

Students graduating with a B.S. in Health Sciences from Cal State East Bay will have achieved the following:

1. Knowledge Integration and Synthesis. Students will integrate knowledge from general education courses and will synthesize knowledge from the biological, physical, social and health sciences;
2. Career Management Throughout the Lifespan. Students will select an option area of study in the health sciences and will apply skills gained in computing, speaking, writing, analysis, critical thinking and knowledge synthesis to the management of their careers in the health sciences;
3. Professional Team Work. Students will apply management and communication skills to work effectively in teams, partnerships, and larger groups toward accomplishing goals in health education, health care advocacy, research and grant writing, and other services related to indirect patient care;
4. Professional Demeanor and Ethical Behavior. Students will practice the ethics and professional behaviors appropriate to the health professions and incorporate these practices into their interactions with one another as colleagues, with supervisors and staff in the workplace, with diverse and multicultural client groups, and with the general public;
5. Professional Standards and Quality of Practice. Students will acquire knowledge of industry standards pertinent to their specialty area in the health sciences and will maintain best practices through membership in the appropriate professional associations and through continuing education and lifelong learning.

Career Opportunities

By selecting one of the four elective areas of study, students can prepare for graduate study or for employment in an entry-level career position. Graduate study is available in several fields: the clinical health professions, community health education, epidemiology, health administration, planning, and other public health specialties. Graduates of the program are prepared to enter career positions in both governmental and non-
governmental organizations. These include state and county health departments, hospitals, community clinics, health service agencies, nursing homes, environmental health agencies, insurance and pharmaceutical companies, and many other employment settings.

**Major Requirements (B.S.)**

The major in Health Sciences consists of 115-126 units; the B.S. degree requires a total of 180 units.

Note: A grade of 'C' or better is required in each course with a HSC prefix.

The following Lower Division and Upper Division Core must be completed for the following options only: Administration and Management Option, Pre-Clinical Preparation Option with a Pre-Nursing Specialization or Pre-Health Specialization, and the Community Health Option. (Please Note: The Option in Pre-Clinical Preparation with a Pre-Doctoral Specialization and the Option in Environmental Health and Safety each have their own list of Lower Division and Upper Division Core courses).

I. **Lower Division Core (45-47 units)**

- ANTH 1000 Introduction to Anthropology (4) or SOC 1000 Introduction to Sociology (or one of SOC 1001, 1002, 2001, or 2002) (4)
- BIOL 1001 Introduction to Biology (or 1005) (4) and BIOL 1002 Introduction to Biology Lab (or 1004 or 2005) (1)
- BIOL 2010 (or 2011), 2020 Human Physiology and Anatomy I, II (5, 5)
- BIOL 2025 Introduction to Microbiology (5)
- OR BIOL 3405 Microbiology (6)
- OR BIOL 4010 Microbes and Humanity (4)
- HSC 1000 Introduction to Health Professions Practice (4)
- HSC 1100 Health: Maintenance of Wellness (4)
- NURS 2010 Principles of Nutrition and Medical Nutrition Therapy (4)
- OR BIOL 3070 Human Nutrition (4)
- PSYC 1000 General Psychology (or 1001 or 1005) (5)
- STAT 1000 Elements of Probability and Statistics (5)

II. **Upper Division Core (43)**

- ANTH 3720 Medical Anthropology (4)
- OR SOC 4720 Medical Sociology (4)
- HSC 3200 Environmental Health (4)
- HSC 3300 Health Care Systems in the US (4)
- HSC 3350 Health Legislation and Government Programs (4)
- HSC 3400 Community Health (4)
- HSC 3550 Health Care Law and Ethics (4)
- HSC 3800 Multicultural Issues in Health Care (4)
- HSC 4010 Research and Program Evaluation in Health Science (4)
- HSC 4500 Supervised Field Training and Report Writing (3)
- HSC 4600 Health Systems Management (4)
- HSC 4700 Senior Seminar (4)

III. **Options (36-65 units)**

Select one of the following four options in consultation with your faculty advisor. The choice of option should reflect your career goals and a willingness to acquire an in-depth knowledge of one area of the Health Sciences major.

*Note: Non-Health Sciences option courses may have prerequisites. Include these prerequisites in your academic planning.*

A. **Administration and Management (36 units)**

See Lower Division Core and Upper Division Core as outlined above in sections I and II.

Complete the following courses (20 units):

- ACCT 2251 Introduction to Financial Accounting (4)
- ECON 2301 Principles of Microeconomics (4)
- HSC 2200 Research and Writing in Health Care (4)
- MGMT 3600 Theories of Management (4)
- MKTG 3401 Marketing Principles (4)

Select an additional 16 units from one or more of the following areas: management, policy, evaluation, finance, or marketing in consultation with your faculty advisor.

B. **Pre-Clinical Preparation (36-65 units)**

1. **Pre-Nursing Specialization (36 units)**

See Lower Division Core and Upper Division Core as outlined above in sections I and II.

Complete the following course:

- HSC 2200 Research and Writing in Health Care (4)

The following classes are suggested to prepare for a career in nursing. Select 32 additional units with the approval of your faculty advisor.

- CHEM 1601-1602 Basic Chemistry for the Health Sciences (4 each)
- CHEM 3400 Introductory Biochemistry (4)
- COMM 1000 Public Speaking (4)
- OR COMM 1004 Interpersonal Communication (4)
- HIST 4710 History and Trends in Nursing (4)
- HDEV 3800 Human Development and Interaction (4)
- OR PSYC 4420 Developmental Psychology (4)
- NURS 2005 Clinical Pathophysiology (4)
- PSYC 3420 Stress and Coping (4)
2. Pre-Health Specialization (36 units)
See Lower Division Core and Upper Division Core as outlined above in sections I and II.

Complete the following course:

- HSC 2200 Research and Writing in Health Care (4)

Select 32 additional units in preparation for programs in nutrition, occupational therapy, respiratory therapy, dental hygiene, physical therapy, genetic counseling, or social work. Suggested courses depend on career choice. Courses will be chosen from physical, life, and social sciences, and arts and humanities in consultation with your faculty advisor.

3. Pre-Doctoral Specialization (65 units for the option; 120 units for the major.)
Please Note: The Pre-Doctoral Specialization has its own separate Lower Division and Upper Division courses, as listed below:

a. Lower Division Core (4 units)
   - HSC 2200 Research and Writing in Health Care (4)

In preparation for programs in medicine, dentistry, pharmacy, optometry or veterinary science, in addition to your faculty advisor, please also consult and register with the Pre-Professional Health Academic Program (PHAP) Advisor. See PHAP website (www.sci.csueastbay.edu/PHAP) for the recommended course list which includes the following basic science foundation courses.

b. Upper Division Core (51 units)
   - STAT 3031 Statistical Methods in Biology (4)
   - BIOL 3070 Human Nutrition (4)
   - ANTH 3720 Medical Anthropology (4) OR SOC 4720 Medical Sociology (4)
   - HSC 3200 Environmental Health (4)
   - HSC 3300 Health Care in the US (4)
   - HSC 3350 Health Legislation and Government Programs (4)
   - HSC 3400 Community Health (4)
   - HSC 3550 Health Care Law and Ethics (4)
   - HSC 3800 Multicultural Issues in Health Care (4)
   - HSC 4010 Research and Program Evaluation in Health Science (4)
   - HSC 4500 Supervised Field Training and Report Writing (3)
   - HSC 4600 Health Systems Management (4)
   - HSC 4700 Senior Seminar (4)

c. Option Courses (65 units)
   - BIOL 1401-02-03 (5 units each)
   - CHEM 1101-02-03 (5 units each)
   - CHEM 3301-02-03 (5 units each)
   - PHYS 2701-02-03 (4 units each)
   - MATH 1304 (4)
   - BIOL 3065 (4)

The following courses are not required for the health sciences major but are recommended additional preparation for biomedical careers. As different biomedical careers have different course recommendations, students need to consult with a prehealth professions adviser (preprof@csueastbay.edu) before choosing any of these courses.

Advanced Science Courses (40 units)
   - BIOL 3121 Principles of Genetics (5)
   - BIOL 3122 Principles of Developmental Genetic Analysis (4)
   - BIOL 3151 Principles of Animal Physiology (5)
   - BIOL 3405 Microbiology (6)
   - BIOL 4510 Neurobiology (4)
   - CHEM 4411-12-13 General Biochemistry (4 units each)
   - MATH 1305 Calculus II (4)

C. Community Health (36 units)
This option will prepare you for a national exam and potential certification as a Community Health Educator Specialist.
See Lower Division Core and Upper Division Core as outlined above in sections I and II.

Complete the following courses (20 units):
   - BIOL 3020 Genetics, Evolution, and Humanity (4)
   - BIOL 3065 Humans and Sex (4)
   - BIOL 3410 Epidemiology (4)
   - HSC 2200 Research and Writing in Health Care (4)
   - HSC 3700 Health Behavior and Health Education Theory (4)

Select an additional 16 units of coursework from the list below in consultation with your faculty advisor.
   - COMM 3240 Public Opinion (4)
   - COMM 3510 Small Group Communication (4)
   - HSC 2510 Introduction to Peer Health Education (3)
D. Environmental Health and Safety (60 units for the option; 115 units for major)

NOTE: The Environmental Health and Safety Option has its own separate Lower Division and Upper Division courses, as listed below:

1. Lower Division Core (4 units)
   - HSC 2200 Research and Writing in Health Care (4)

2. Upper Division Core (51 units)
   - STAT 3031 Statistical Methods in Biology (4)
   - BIOL 3070 Human Nutrition (4)
   - ANTH 3720 Medical Anthropology (4) OR SOC 4720 Medical Sociology (4)
   - HSC 3200 Environmental Health (4)
   - HSC 3300 Health Care Systems in the US (4)
   - HSC 3350 Health Legislation and Government Programs (4)
   - HSC 3400 Community Health (4)
   - HSC 3550 Health Care Law and Ethics (4)
   - HSC 3800 Multicultural Issues in Health Care (4)
   - HSC 4010 Research and Program Evaluation in Health Science (4)
   - HSC 4500 Supervised Field Training and Report Writing (3)
   - HSC 4600 Health Systems Management (4)
   - HSC 4700 Senior Seminar (4)

3. Option Courses (60 units)
   - BIOL 1401 Molecular and Cellular Biology (5)
   - BIOL 1402 Plant Biology (5)
   - BIOL 1403 Animal Biology (5)
   - BIOL 3405 Microbiology (6)
   - BIOL 3410 Epidemiology (4)
   - CHEM 1101-2-3 General Chemistry (5 each)
   - CHEM 2301-2 Survey of Organic Chemistry (4 each)
   - MATH 1304 Calculus I (4)
   - PHYS 2701-2 Introductory Physics (4 each)

For students preparing to apply for the Registered Environmental Health Specialist (EHS) Certification, you must select an additional 16 units from the following list of courses. These courses are required for the certification exam but not for the health sciences major.

- ENV 4100 Environmental Impact Analysis (4)
- GEOG 3000 Sustainable Resource Management (4)
- GEOG 4350 Water Resources and Management (4)
- PHYS 4001 Electromagnetism I (3) (see prerequisite)
- POSC 3460 Environmental Law (4)
- POSC 4171 Public Policy and the Environment (4)
- REC 3200 Wellness Through Leisure (4)
- REC 3305 Outdoor Living Skills (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 24 units. Complete 24 units of Health Sciences (HSC) prefix courses of which at least 12 units must be upper division. Specific courses related to a student's major and/or educational and career goals must be selected in consultation with a Health Sciences faculty advisor.
### Certificate in Pre-Physical Therapy

A certificate in Pre-Physical Therapy can be earned in conjunction with the major in Health Sciences. For additional information and a referral to a pre-professional adviser in physical therapy, contact the Department of Kinesiology and Physical Education at 885-3061.

### Undergraduate Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td><strong>HSC</strong></td>
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<tr>
<td><strong>Course</strong></td>
<td><strong>Information</strong></td>
</tr>
<tr>
<td>1000</td>
<td>Introduction to Health Professions Practice (4)</td>
</tr>
<tr>
<td>1100</td>
<td>Health: Maintenance of Wellness (4)</td>
</tr>
<tr>
<td>2001</td>
<td>Environmental Factors in Health (4)</td>
</tr>
<tr>
<td>2200</td>
<td>Research and Writing in Health Care (4)</td>
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<tr>
<td>2500</td>
<td>Principles of Personal Nutrition (4)</td>
</tr>
<tr>
<td>2510</td>
<td>Introduction to Peer Health Education (3)</td>
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<tr>
<td>2550</td>
<td>Peer Health Education Practicum (2-3)</td>
</tr>
<tr>
<td>3100</td>
<td>Introduction to Global Health (4)</td>
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<tr>
<td>3200</td>
<td>Environmental Health (4)</td>
</tr>
<tr>
<td>3250</td>
<td>Genes and Human Health (4)</td>
</tr>
<tr>
<td>3300</td>
<td>Health Care Systems in the U.S. (4)</td>
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<tr>
<td>3350</td>
<td>Health Legislation and Government Programs (4)</td>
</tr>
<tr>
<td>3400</td>
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<td>Consumer Health (4)</td>
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<td>3700</td>
<td>Health Behavior and Health Education Theory (4)</td>
</tr>
<tr>
<td>3800</td>
<td>Multicultural Issues in Health Care (4)</td>
</tr>
</tbody>
</table>

*Note: Course prefixes and numbers are placeholders for illustrative purposes only.*
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity. A maximum of 8 units will be accepted toward the Health Sciences major. May be repeated for credit for a maximum of 8 units. CR/NC grading only.</td>
<td></td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Health Sciences (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in health sciences. May be repeated for credit when content varies, for a maximum of 8 units.</td>
<td></td>
</tr>
<tr>
<td>4010</td>
<td>Research and Program Evaluation in Health Science (4)</td>
<td>Use of scientific research methods to evaluate efficacy of public health prevention programs. Computer lab time included. Prerequisites: all 3000-level courses in Health Science, 24 elective units in option area, and permission of instructor.</td>
<td></td>
</tr>
<tr>
<td>4500</td>
<td>Supervised Field Training and Report Writing (3)</td>
<td>A supervised internship field experience in a health or health-related setting. Ninety hours fieldwork total. Prerequisites: graduating senior status, completion of all major requirements except HSC 4700, completion of all elective units, and permission of instructor.</td>
<td></td>
</tr>
<tr>
<td>4600</td>
<td>Health Systems Management (4)</td>
<td>Theory and practice of managing integrated systems. Critical review of key changes in evolution of health care organizations. Impact of changes on functions of management; approaches to governing health care organizations. Prerequisites: all HSC courses numbered lower than 4500 and permission of instructor.</td>
<td></td>
</tr>
<tr>
<td>4700</td>
<td>Senior Seminar (4)</td>
<td>Capstone course. Integration and synthesis of knowledge, skills and internship work. Prerequisites: graduating senior status, completion of all Health Science courses required for the major and 28 elective units in option area, and permission of instructor.</td>
<td></td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
<td></td>
</tr>
</tbody>
</table>
History

- Department Information
- Program Description
- Career Possibilities
- Features
- Preparation
- Major Requirements (B.A.)
- Other Degree Requirements
- Minor Requirements
- Certificate in Public History
- Undergraduate Courses

Department Information

Department of History
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4036
Phone: (510) 885-3207; FAX: (510) 885-4791
Website: http://class.csueastbay.edu/history/

Professor Emeritus
Henry F. Reichman, Ph.D. University of California, Berkeley

Professors
Dee E. Andrews, Ph.D. University of Pennsylvania
Vahid Fozdar, Ph.D. University of California, Berkeley
Richard A. Garcia, Ph.D. University of California, Irvine
Jessica Weiss, Ph.D. University of California, Berkeley

Associate Professors
Nicole C. Howard, Ph.D. Indiana University
Robert A. Phelps, Ph.D. University of California, Riverside
Nancy M. Thompson (Chair), Ph.D. Stanford University

Assistant Professors
Bridget Ford, Ph.D. University of California, Davis
Linda Ivey, Ph.D. Georgetown University
Khal Schneider, Ph.D. University of California, Berkeley

Program Description

Students who pursue work in History benefit in a variety of ways. Their studies afford them entree to the riches of the recorded past and understanding of the process of historical change. At the same time, a History major enables them to develop critical reading and writing skills which are valuable in life and in any employment field they choose to enter.

Student Learning Outcomes

- Students graduating with a B.A. in History from Cal State East Bay should:
  1. know basic analytic concepts that help historians assemble, organize, and interpret evidence;
  2. demonstrate significant knowledge of major events and trends in their area of concentration;
  3. be able to write and speak clearly and persuasively about historical themes and topics;
  4. be able to conduct basic historical research in primary source materials, provide original interpretation of sources, and provide accurate referencing for all sources;
  5. be able to comprehend differences and similarities among peoples and cultures over time and be able to address historical issues from an informed perspective.

Career Possibilities

- Archivist
- Attorney
- Corporate Historian
- Curator
- Diplomat/Foreign Service Officer
- Government Service
- International Relations Specialist
- Journalist
- Legal Assistant
- Librarian
- Museum Worker
- Professor
- Politician
- Public Administrator
- Researcher
The B.A. degree major in History requires 68 units in History, 24 at the lower division and 44 at the upper division level. Foundation courses (28 units) provide an introduction to the methods and purposes of historical study, historical writing, and surveys of world history and U.S. history. Option requirements (16 units) permit specialization in a particular area, while elective courses (16 units) provide additional breadth. Capstone courses in historiography and historical method acquaint students with the theory and history of historical study and provide opportunities for the student to engage in original historical research.

Preparation

Students planning to major in History should pay particular attention to the lower division requirements in the major: some of these may be satisfied before coming to Cal State East Bay.

Advanced Placement: Students who score a "3," "4," or "5" on the College Entrance Examination Board's Advanced Placement Test in European History will be granted 8 units of credit for HIST 1015 and HIST 1016 which count towards the lower division requirements in the History major. Students who earn a "3," "4," or "5" on the College Entrance Examination Board’s Advanced Placement Test in U.S. History will receive 8 units of credit equivalent to HIST 1101 and 1102. Credit will apply to the U.S. history and U.S. Constitution requirements for graduation, but not to the California state and local government requirement. An additional course is required to complete the California state and local government requirement.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 68 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (36 units)

A. Foundation Courses (28 units)

The following courses should be taken as early in the major as possible:

- HIST 1014 World Civilizations I (or 1017) (4)
- HIST 1015 World Civilizations II (4)
- HIST 1016 World Civilizations III (4)
- HIST 1101 History of the United States to 1877 (4)
- HIST 1102 History of the United States Since 1877 (4)
- HIST 2010 Introduction to History (4)
- HIST 3010 Historical Writing (4)

B. Capstone Courses (8 units)

The following courses should be taken in the student's final three quarters. All Foundation courses must be completed before enrollment in Capstone courses.

1. HIST 4030 Historiography (4)
2. One from the following (4):
   - HIST 4031 Historical Research Methods
   - HIST 4032 Introduction to Public History

II. Option Requirements (16 units)

The Department of History offers several options for degree candidates. Majors should choose one of the following options: United States History, European History, Asian History, Latin American History, History of California and the American West. Students may also design a topical (e.g., women's history), geographic (e.g., Russian history), or period (e.g., ancient and medieval history) option of their own with the advance written approval of the department chair.

A. United States History

1. Two courses (8 units) from the following:
   - HIST 3411
   - HIST 3412
   - HIST 3413
   - HIST 3414
   - HIST 3415
   - HIST 3416
   - HIST 3417

2. Two courses (8 units) from the following:
   - HIST 3224
   - HIST 3500
   - HIST 3503
   - HIST 3505
   - HIST 3511
   - HIST 3515
   - HIST 3517
   - HIST 3530
   - HIST 3547
B. European History
1. Two courses (8 units) from the following:
   - HIST 3107
   - HIST 3108
   - HIST 3127
   - HIST 3128
   - HIST 3130
   - HIST 3150
   - HIST 3160
   - HIST 3170
2. Two courses (8 units) from the following:
   - HIST 3005
   - HIST 3017
   - HIST 3123
   - HIST 3223
   - HIST 3224
   - HIST 3230
   - HIST 3801

C. Asian History
Four courses (16 units) from the following:
- HIST 3302
- HIST 3303
- HIST 3305
- HIST 3307
- HIST 3312
- HIST 3313
- HIST 3325
- HIST 3340
- HIST 3345
- HIST 3803

D. Latin American History
Four courses (16 units) from the following:
- HIST 3600
- HIST 3605
- HIST 3622
- HIST 3632
- HIST 3804

E. History of California and the American West
1. HIST 3500, 3511 (8)
2. Two courses (8 units) from the following:
   - HIST 3503
   - HIST 3505
   - HIST 3515
   - HIST 3517
   - HIST 3530
   - HIST 4032

III. Electives (16 units)
Four upper division courses (16 units) in History. These must include at least one course from each of at least two different option areas outside the student's option. HIST 3400 may not be counted towards the major.

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.
Minor Requirements

The minor consists of 32 units. HIST 3400 may not be counted towards the minor.

I. Lower Division (16 units)
   - HIST 1014 World Civilizations I (or 1017) (4)
   - HIST 1015 World Civilizations II (4)
   - HIST 1016 World Civilizations III (4)
   - HIST 2010 Introduction to History (4)

II. Upper Division (16 units)
   A. HIST 3010 Historical Writing (4) (prerequisite: HIST 2010)
   B. Area Requirements
      A minimum of four units of upper division History courses in each of the following areas: (1) Europe, (2) United States, and (3) Latin America or Asia (12)

Certificate in Public History

The certificate consists of 28 units.

A. Prerequisites:
   HIST 2010 Introduction to History and HIST 3010 Historical Writing (Note: may be waived with permission of the Public History and Internship Coordinator).

B. Core Courses (12 units)
   - HIST 3503 History of San Francisco Bay Area (4)
   - HIST 4010 Internship (4)
   - HIST 4032 Introduction to Public History (4)

C. Electives (16 units)
   (Substitutions may be made with permission of the Public History and Internship Coordinator)
   - HIST 3500 California History (4); or HIST 3511 The American West (4)*
   - HIST 3505 California Environmental History (4); or HIST 3535 American Indian History (4); or HIST 3538 American Indians in the 20th Century (4)
   - Skills Course in Community Studies or Landscape Studies (4), as recommended by the Public History and Internship Coordinator.
   - Skills Course in Practical Application (4), as recommended by the Public History and Internship Coordinator.

*Students preferring to focus outside the Bay Area may substitute other electives for HIST 3500/3511 with the permission of the Public History and Internship Coordinator.

Undergraduate Courses

Lower Division Courses (Course prefix: HIST)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>1014</td>
<td>World Civilizations I (4)</td>
</tr>
<tr>
<td>1015</td>
<td>World Civilizations II (4)</td>
</tr>
<tr>
<td>1016</td>
<td>World Civilizations III (4)</td>
</tr>
<tr>
<td>1017</td>
<td>Ancient World Civilizations (4)</td>
</tr>
<tr>
<td></td>
<td>An overview of ancient world civilizations throughout the medieval period. Egypt, Mesopotamia, India, China. Ancient Hebrews. Hellenic, Hellenistic, and Roman civilizations and the emergence and spread of Christianity and Islam. Not open to students with credit for HIST 1014.</td>
</tr>
<tr>
<td>1101</td>
<td>History of the United States to 1877 (4)</td>
</tr>
<tr>
<td></td>
<td>A survey of the development of the American nation from colonial times to the close of Reconstruction. This course, when combined with credit for History 1102, meets statutory requirements in U.S. History, U.S. Constitution, and California State and Local Government.</td>
</tr>
<tr>
<td>1102</td>
<td>History of the United States Since 1877 (4)</td>
</tr>
<tr>
<td></td>
<td>A survey of American history from Reconstruction to the present. This course, when combined with credit for History 1101, meets statutory requirements in U.S. History, U.S. Constitution, and California State and Local Government.</td>
</tr>
<tr>
<td>2010</td>
<td>Introduction to History (4)</td>
</tr>
<tr>
<td></td>
<td>Seminar on historical study as academic discipline. Focus on historical argument, interpretation of evidence and sources, source citation, and oral expression. Introduction to historical writing, historiography, and library and Internet research. Not open to</td>
</tr>
</tbody>
</table>
### Upper Division Courses (Course prefix: HIST)

#### Europe

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 3005          | Frankenstein: The Making of a Myth (4)  
Mary Shelley's classic tale Frankenstein against the background of the Romantic movement. The Frankenstein story in literature, film, and other forms of popular culture as a critical insight into modern science and technology. |
| 3017          | History of Ancient Greece (4)  
From the Bronze Age to Alexander the Great. The Homeric World; the development of the city-state; classical thought and culture; the Persian and Peloponnesian Wars; the rise of Macedon. |
| 3018          | History of Ancient Rome (4)  
Politics and society in Rome from foundation to AD 565. Etruscans; Republic and Punic Wars; Julius Caesar; Age of Augustus, and the pax Romana; paganism and Christianity; barbarian incursions; decline of empire in the West. Not open to students with credit for HIST 3109 or 3110. |
| 3123          | History of Medieval Christianity (4)  
The Christian faith and its institutions from ca. 500 to ca. 1500: development of church hierarchy, monasticism, conflicts between secular and ecclesiastical authority, the medieval university, theology, maintaining an orthodox faith, and Christianity as perceived and practiced by ordinary Christians. |
| 3125          | Women in Medieval and Early Modern Europe (4)  
Women's political, economic, religious, domestic, and educational spheres in medieval and early modern Europe. Includes primary sources and emphasis on historical interpretation. |
| 3127          | Europe in the Early Middle Ages (4)  
European society and politics, 300-1150. Fall of Rome; Germanic kingdoms; Benedictine monasticism; rise of the papacy; pagans and conversion; Carolingian Renaissance; Viking invasions; Gregorian Reform. |
| 3128          | Europe in the Later Middle Ages (4)  
European society and politics, 1150-1400. Popular religion; the Crusades; heresy and the Inquisition; kings and law; growth of towns and trade; bubonic plague and dissolution of the medieval order. |
| 3130          | Renaissance and Reformation Europe (4)  
Europe, 1350-1550. Politics, economics, arts, humanism, and science in the Renaissance; the Protestant and Catholic Reformations. Not open to students with credit for HIST 3131. |
| 3150          | Early Modern Europe, 1550-1789 (4)  
Wars of religion, constitutional and absolutist struggles and the resulting political philosophies; age of exploration and discovery; intellectual and technological effects of the scientific revolution; age of Enlightenment. |
| 3160          | Europe in the 19th Century (4)  
The Revolutionary and Napoleonic legacy; Romanticism, Liberalism, and Socialism; the Revolutions of 1830 and 1848; Nationalism and the consolidation of states; Darwinism and its social ramifications; European imperialism and the First World War. |
| 3170          | Europe in the 20th Century (4)  
Europe's tumultuous century. Two World Wars; rise and fall of fascism and Communism; decolonization; changing attitudes toward social class, sexuality, and the family. |
| 3172          | History of the Soviet Union (4)  
The revolutionary movement in Russia, Marxism-Leninism, the Provisional Government and the Bolshevik coup, domestic and foreign affairs under Lenin and his successors. |
| 3224          | The Cold War (4)  
History of the Cold War from 1939 to the fall of the Berlin Wall in 1989. |
| 3230          | Science and Medicine to 1700 (4)  
Major developments in Western science, medicine, and natural history from antiquity through the seventeenth century. Examines early attempts by philosophers, mathematicians, and physicians to understand nature and the human body. Origins of the scientific method. |
| 3240          | Science and Medicine From 1700 to the Present (4)  
Major developments in Western science and medicine from the Enlightenment. Examines major scientific advances in historical context emphasizing their effects on modern society: (1) Darwin to the discovery of DNA structure; (2) atomic physics to the bomb; (3) germ theory to genetic therapy. Not open to students with credit for HIST 3331. |
| 3801          | Topics in European History (4)  
Reading, discussion, and research on selected topics in European history. Repeatable for credit when content is different. |

#### Asia

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 3302          | Modern East Asia Through Film (4)  
Individualism, gender relations, family life, nationalism, and imperialism in 19th and 20th century China, Japan, and Korea through films produced in East Asia and elsewhere. |
| 3303          | Precolonial India (4)  

Ancient and medieval South Asia (Indian subcontinent) from Indus Valley Civilization to 18th century. Hinduism and Buddhism; introduction of Islam and formation of Indo-Muslim society; religious and ethnic communities; creation of states and empires; arrival of Europeans.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3305</td>
<td>Modern South Asia (4)</td>
<td>History, culture and political economy of the Indian subcontinent from the seventeenth century to present. Decline of Mughal empire, British colonial conquest, anti-colonial resistance, nationalism and religious identity, Gandhi, independence, post-colonial India, Pakistan, and Bangladesh.</td>
</tr>
<tr>
<td>3307</td>
<td>Modern India through Film (4)</td>
<td>The history of nation, class, caste, gender, sexuality, community, and diaspora as documented in Indian film. Special focus on Bollywood. Weekly readings and discussions.</td>
</tr>
<tr>
<td>3311</td>
<td>Traditional China (4)</td>
<td>China from classical antiquity to the 19th century; intellectual trends, political developments, and social changes.</td>
</tr>
<tr>
<td>3312</td>
<td>Modern China (4)</td>
<td>China from the Opium War to 1949. The collapse of imperial China, Western incursions, the emergence of modern culture, and the roots of the Communist revolution.</td>
</tr>
<tr>
<td>3313</td>
<td>People's Republic of China (4)</td>
<td>The socialist experience in China from 1949 to the present: the leadership of Mao Zedong, the Cultural Revolution, and changes in urban and rural areas in the post-Mao era.</td>
</tr>
<tr>
<td>3322</td>
<td>Early Japan (4)</td>
<td>Cultural, social, and political history of Japan to 1800. The aristocracy, the samurai, and the impact of Asian continental culture.</td>
</tr>
<tr>
<td>3325</td>
<td>Postwar Japan (4)</td>
<td>The political, social, and cultural dimensions of Japan's transformation from defeated nation in 1945 to world economic power today.</td>
</tr>
<tr>
<td>3340</td>
<td>The Middle East and Rise of Islamic Societies (4)</td>
<td>Middle East from 600 to 1750. Beginnings of Islam; establishment of Muslim rule from Spain to Central Asia; emergence of Islamic civilization and contributions by non-Muslims; religious, political, and intellectual debates; contacts with Europe and Asia; establishment of Turkish power.</td>
</tr>
<tr>
<td>3345</td>
<td>The Modern Middle East (4)</td>
<td>Emergence of states and societies of the modern Middle East. Disintegration of pre-modern empires and evolution of traditional societies into modern nation-states of the Arab world, Turkey, and Iran; response to Western colonialism; socio-religious reform; Islam and nationalism; pan-Arabism; militant Islam.</td>
</tr>
<tr>
<td>3383</td>
<td>Topics in Asian History (4)</td>
<td>Reading, discussion, and research on selected topics in Asian history. May be repeated for credit when content varies.</td>
</tr>
</tbody>
</table>

**Upper Division Courses (Course prefix: HIST)**

**United States**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400</td>
<td>America to 1900 (4)</td>
<td>Survey from colonial times to 1900. For partial fulfillment of subject matter preparation in history and social science for the multiple-subject teaching credential. Not for history major credit.</td>
</tr>
<tr>
<td>3411</td>
<td>Colonial America (4)</td>
<td>Development of the British mainland colonies from frontier societies to the Age of the American Revolution. Topics include Native American background, European expansion, regional variation, mercantilism, slavery, cultural diversity, and the rise of colonial political institutions.</td>
</tr>
<tr>
<td>3412</td>
<td>The American Revolution (4)</td>
<td>The creation of the American republic, 1783-1800. Imperial politics, loyalty, and the war; postwar changes in constitutions, politics, slavery, gender relations, and the frontier.</td>
</tr>
<tr>
<td>3413</td>
<td>The New Republic (4)</td>
<td>The expansion of the new republic, 1800-1850. Democratic politics, early industrialization, the Cotton South, reform movements, the Mexican-American War, and California.</td>
</tr>
<tr>
<td>3415</td>
<td>America in the Age of Empire (4)</td>
<td>The rise of imperial America, 1877-1920. Industrialism, mass immigration, urbanization, populism, progressivism, foreign expansion, and World War I.</td>
</tr>
<tr>
<td>3416</td>
<td>The Great Depression and World War II (4)</td>
<td>The modernization of the United States, 1920-1945. The modernist 1920s, origins and impact of the Great Depression, the New Deal, mass culture, World War II and mass mobilization.</td>
</tr>
<tr>
<td>3500</td>
<td>History of California (4)</td>
<td>California history from early days to the present, emphasizing the influence of geography, natural resources, and a growing population. Satisfies requirement in California state and local government.</td>
</tr>
<tr>
<td>3503</td>
<td>History of the San Francisco Bay Area (4)</td>
<td>The settlement of the Bay Area from the Indian period through the twentieth century, stressing the influence of natural environment, population growth, ethnic assimilation, transportation, urbanization, and economic development on the evolution of a regional</td>
</tr>
<tr>
<td>Course Number</td>
<td>Course Information</td>
<td></td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>
| 3505          | California Environmental History (4)  
California environmental history from the Indian period to the present. Varying interactions between human societies and the natural environment, the deterioration and exhaustion of natural resources, and recent efforts to promote greater environmental balance. |
| 3511          | The American West (4)  
Westward expansion of the United States from 1763 to 1900; development of western states and effect on the history of the nation. |
| 3515          | Mexican Americans and the West (4)  
The historical evolution of northern Mexico. Acquisition of the Southwest by the United States. Social, economic, and political development of region, with emphasis on the role and social condition of the Mexican-American people. |
| 3517          | The Immigrants' West (4)  
The movement and interaction of diverse ethno-racial groups within the American West, focusing on the 19th and 20th centuries. Indigenous peoples, Hispanic-Anglo frontier, trans-Pacific migration, exclusion and restriction, Depression-era migrants, inter-racial mixing, the new western immigration. |
| 3530          | The Shaping of North America, 1492-1859 (4)  
Major topics in the formation of North American societies, including Native American peoples, impact of European expansion, Africans in the West Indies, environmental transformation, creation of U.S. and California. Visual documentation of North American cultures. |
| 3535          | American Indian History (4)  
Pre-contact to the present. The diversity of native life in North America; engagement and conflict with Europe; responses to the territorial expansion of the United States; the persistence of Indian communities; political and legal issues in Indian Country. |
| 3538          | American Indians in the 20th Century (4)  
1890 to the present. American Indian life at the turn of the 20th century; colonization and responses; political relationship to the United States government; cultural and political resurgence; the development of the legal and political doctrine of tribal sovereignty. |
| 3547          | The United States and Modern War (4)  
The experience of United States men and women in modern war from 1861 to the present. Why people go to war, soldiers' daily life, combat experiences, technology of warfare, life on the home front, and war in literature and film. |
| 3550          | The History of U.S. Foreign Relations (4)  
Selected problems of American foreign relations, including the American Revolution, expansion and conflict, isolationism and internationalism, the Cold War and terrorism. Consideration of the State Department and of diplomatic practice in their historical context. |
| 3553          | Modern American Thought and Culture (4)  
Intellectual, political, and cultural ideas, ideologies, and movements in twentieth-century United States. Focus on Progressivism, Pragmatism, the Romantic Left, Socialism, Utopianism, Liberalism, the New Left, and Conservatism. |
| 3567          | African American History (4)  
| 3570          | The Family and Sexuality in American History (4)  
Development and diversity of family life in U.S. from pre-colonial beginnings to present. Regional and racial family patterns; responses to urbanization and industrialization; African American families during and after slavery; development of companionate family; changing role of families. |
| 3571          | Women in American History (4)  
Survey of female gender roles and women's contributions to and place in the social, economic, and political life of the nation from colonial times to the present across ethnicity, race, and class. |
| 3572          | American Women in the Twentieth Century (4)  
A multicultural exploration of the revolutionary changes in female gender roles and women's lives. Topics include the ballot box, social movements, the workplace, family and sexuality, the military, and popular culture, with attention to continued inequalities. |
| 3575          | Baseball in America (4)  
The history of baseball and its role in American Society. Nineteenth century origins of the game, the major and minor leagues, amateur baseball from universities to prisons, the Negro leagues and integration, labor relations and cultural influences. |
| 3580          | Lincoln and His Times (4)  
Lincoln and his personality in the context of antebellum and Civil War America. |
| 3802          | Topics in United States History (4)  
Reading, discussion, and research on selected topics in United States history. May be repeated for credit when content varies. |

**Upper Division Courses (Course prefix: HIST)**

<table>
<thead>
<tr>
<th>Course Number</th>
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</tr>
</thead>
</table>
| 3600          | Colonial Latin America (4)  
Relations among the colonists, Crown, Church, and Indians during and after the Spanish conquest. The catastrophic fall in the Indian population, the rise of the great estate, and the decline of Iberian power in the New World at the end of the eighteenth century. |
| 3605          | Modern Latin America (4)  
| 3622          | Mexico Since 1810 (4)  
The development of Mexico from the wars of independence; evolution of political, economic, and social institutions. |
### Upper Division Courses (Course prefix: HIST)

#### General

<table>
<thead>
<tr>
<th>Course Number</th>
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</thead>
</table>
| 3010 | Historical Writing (4)  
Seminar on writing and revision of reviews, essays, and research papers through study of selected historical topics. Emphasis on form, argument, organization, source citation, and oral presentation. Prerequisite: HIST 2010. |
| 3017 | The Twentieth Century (4)  
World history from WWI to Soviet collapse, focusing on diplomacy, economics, and political/social trends. The world wars, Russian revolution and Stalinism, fascism and Nazism, Chinese Revolution, Cold War, decolonization and end of Western hegemony, globalization of world economy. |
| 3898 | Cooperative Education (1-4)  
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity. A maximum of 5 units will be accepted toward the History major. May be repeated for credit for a maximum of 5 units. |
| 3999 | Issues in History (4)  
Readings, discussion, and research on contemporary and/or significant issues in history. May be repeated for credit when content varies, for a maximum of 8 units. |
| 4010 | History Internship (4)  
Supervised work that integrates academic learning and field experience. Introduces students to various career tracks in the historical profession. Prerequisites: HIST 3010; 3.5 major g.p.a.; consent of instructor and partnering agency. May be repeated once for credit with consent of instructor, for a maximum of 8 units. CR/NC grading only. |
| 4030 | Historiography (4)  
Development of historical writing from antiquity to present. Emphasis on Herodotus, Thucydides, St. Augustine, Vico, Hegel, Marx, and 20th century historians. Survey of other significant historians. Prerequisite: senior standing and HIST 1014-15-16, 2010, and 3010 or consent of instructor. |
| 4031 | Historical Research Methods (4)  
Seminar on advanced historical research through preparation of research paper based on primary sources. Prerequisites: senior standing; HIST 1014-15-16, 2010, and 3010 or consent of instructor. |
| 4032 | Introduction to Public History (4)  
The use of historical theory and method in non-academic settings, including museums, archives, consulting organizations, historical societies, government agencies, business, and historical preservation projects. Field trips to selected non-academic settings. |
| 4500 | The California History/Social Science Framework (1)  
Content review of California K-12 History-Social Science Framework for prospective teachers. Enrollment only in final quarter of Subject Matter Preparation Program in Social Science. Not for credit in History major or minor. |
| 4710 | History and Trends in Nursing (4)  
Survey of the development of modern nursing. Emphasis on social trends that have influenced the development of nursing; the Judeo-Christian tradition; the military heritage; the women's movement; developments in health care delivery. |
| 4900 | Independent Study (1-4)  
Supervised study. Prerequisite: consent of instructor. May be repeated for credit with consent of instructor, for a maximum of 12 units. |

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Hospitality and Tourism

Department Information

Department of Hospitality, Recreation and Tourism
College of Education and Allied Studies
Office: Kinesiology and Physical Education Bldg. 130
Phone: (510) 885-3043

Professors
Melany Spielman (Chair), Ph.D. University of Oregon
Doris D. Yates, Ph.D. Michigan State University

Associate Professor
Mary F. Fortune, Ed.D. University of San Francisco
Zaher Hallab, Ph.D. Virginia Polytechnic Institute and State University

Assistant Professors
Christopher Chamberlain, D.M. University of Phoenix
Richard O. B. Makopondo, Ph.D. University of Illinois at Urbana-Champaign
Nancy B. White, Ph.D. University of New Mexico

Program Description

The Department of Hospitality, Recreation and Tourism prepares students to become professionals in our dynamic, growing and exciting industry. Travel and tourism has become available to more of the world's population and the demand for hospitality managers is exploding. A degree in Hospitality and Tourism provides our students with the knowledge they need about the industry, people, and management. Combined with work experience, this preparation will provide many opportunities in companies around the world. The industry is looking for smart, dedicated people to help lead their growth in this booming environment.

This program focuses on the people skills, problem solving skills, and creativity needed to be an excellent hospitality professional. Understanding why people are seeking "the good life" is critical to delivering superior services that bring the guest back for return visits. We want to instill that "can do attitude" employers are seeking. This major is great for anyone seeking a non-routine career that features variety, complexity and excitement.

This career provides opportunities to grow and improve your life while improving the experiences of the people you serve. Many jobs offer varied responsibilities where life is exciting, interesting and every day is different through meeting and serving people from all over the world. The Hospitality, Leisure, and Tourism sector is the world's largest employer and employment opportunities abound all over the globe.

Student Learning Outcomes

Students graduating with a B.S. in Hospitality and Tourism from Cal State East Bay will:

1. know the structure, function and complexity of the hospitality and tourism industry including the economic, cultural and environmental impacts, and how professional services can improve the lives of the people they serve.
2. demonstrate significant knowledge of innovative and creative leadership, management, and evaluation of service quality and consumer needs.
3. be able to clearly articulate (speak and write), ethical, philosophical, historical, current best practices and administrative foundations of our profession.
4. be able to conduct a simple research study in the profession, including a literature review, data collection and analysis, conclusions based on evidence, and providing accurate referencing for all sources.
5. be able to treat all people with dignity and respect while promoting and encouraging individuals, communities and organizations to achieve the highest quality of life.
6. demonstrate awareness of technological advancements and their incorporation in the field of hospitality.

Career Possibilities

- Food and Beverage Manager
- Convention Manager
- Guest Relations Manager
- Hospitality Sales and Marketing Manager
- Rooms Division Manager
- Front Desk Manager
- Executive Housekeeper
- Event Manager
- Meetings and Conference Manager
Our student-centered department has programs designed for both on campus and online students. Our courses are offered in three formats: hybrid (one day a week in-class instruction with the remainder online), all instruction online, or in-class instruction on the weekends and between quarters. We are dedicated to helping you realize your dreams even if you work full-time. Our friendly, accessible faculty will advise you so that you can meet all requirements in the most efficient manner. We have excellent industry contacts and can help connect you with professional part-time jobs to build your resume while in school. All our faculty have been Leisure and Hospitality industry professionals.

**B.S. in Hospitality and Tourism**

Consult an advisor in your major department for clarification and interpretation of your major requirements at least three times a year. Students must complete 1000 hours of paid or volunteer experience before doing their internship. The major in Hospitality and Tourism consists of 98 units. The B.S. in Hospitality and Tourism requires 180 units.

**Department Core Requirements (40 units)**
- REC 1000 Introduction to Recreation (4)
- HOS 1100 Introduction to Hospitality and Tourism (4)
- REC 2050 Computers in Hospitality, Recreation and Tourism (2)
- REC 3000 Philosophy of Leisure (4)
- REC 3010 Service Learning in Hospitality, Recreation and Tourism (4)
- REC 3300 Leadership in Hospitality, Recreation and Tourism (4)
- REC 3701 Evaluation and Research in Hospitality, Recreation and Tourism (4)
- REC 4050 Social Justice in Hospitality, Recreation and Tourism (4)
- REC 4100 Professional Issues in Hospitality, Recreation and Tourism (2)
- REC 4501 Special Events Management (4)
- HOS 4502 Special Events Management (4)

**Hospitality and Tourism Core Requirements (54 units)**
- HOS 4505 Hospitality Information Technology (4)
- HOS 4510 Lodging Management (4)
- HOS 4520 Promotion of Leisure, Hospitality and Tourism (4)
- HOS 4530 Principles in Meetings, Conventions and Special Events (4)
- HOS 4540 Fiscal Leadership for Operational Managers (4)
- HOS 4560 Food and Beverage Management (4)
- HOS 4570 Dimensions of Tourism (4)
- HOS 4590 Hospitality Law (4)
- HOS 4901 Hospitality Internship Placement (2)
- HOS 4912 Hospitality Internship and Senior Project (4-12); must complete 12 units
- MKTG 3495 Business Communication (4)
- REC 3510 Management and Supervision in Hospitality, Recreation and Tourism (4)

**Electives (4 units)**
- HOS 3999 Issues in Hospitality and Tourism (1-4)
- HOS 4550 Global Tourism (4)
- ACCT 2701 Legal Environment of Business (4)
- MGMT 3600 Theories of Management (4)
- MGMT 3610 Human Resource Management (4)
- MGMT 3614 Organizational Behavior (4)
- MGMT 4500 Business, Government, and Society (4)
- MKTG 3401 Marketing Principles (4)
- PSYC 1000 Introduction to Psychology (5)
- PSYC 3520 Interpersonal Processes (4)
- PSYC 3540 Groups and Organizations (4)
- PSYC 3550 Social Influence and Change (4)
- REC 2100 Leadership Principles in Action (4)
- REC 2500 Service Learning in Leadership, Hospitality and Leisure (1-4)
- REC 3200 Wellness Through Leisure (4)
- REC 3202 Women and Leisure (4)
- REC 3305 Outdoor Living Skills (4)
- REC 3401 Leadership of Small Groups (4)
- REC 3999 Issues in Hospitality and Leisure Services (1-4)
Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor in Hospitality and Tourism

The minor consists of 32 units.

I. Required (24 units)
- HOS 4510 Lodging Management (4)
- HOS 4520 Promotion of Leisure and Hospitality (4)
- HOS 4540 Fiscal Leadership for Operational Managers (4)
- HOS 4560 Food and Beverage Management (4)
- HOS 4570 Dimensions in Tourism (4)
- HOS 4590 Hospitality Law (4)

II. Electives (8 units)
Select two courses from the following:
- HOS 4505 Hospitality Information Technology (4)
- HOS 4530 Principles in Meetings, Conventions and Special Events (4)
- ACCT 2701 Legal Environment of Business (4)
- MGMT 3600 Theories of Management (4)
- MGMT 3610 Human Resource Management (4)
- MGMT 3614 Organizational Behavior (4)
- MKTG 3495 Business Communication (4)

Undergraduate Courses

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<tr>
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<td>1100</td>
<td>Introduction to Hospitality and Tourism (4)</td>
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<td>3999</td>
<td>Issues in Hospitality and Tourism (4)</td>
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<tr>
<td>4502</td>
<td>Special Events Management 2 (4)</td>
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<td>Hospitality Information Technology (4)</td>
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<td>Lodging Management (4)</td>
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<td>Principles of Meetings, Conventions and Special Events (4)</td>
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<td>4540</td>
<td>Fiscal Leadership for Operational Managers (4)</td>
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<tr>
<td>4550</td>
<td>Global Tourism (4)</td>
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<tr>
<td>4560</td>
<td>Food and Beverage Management (4)</td>
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<tr>
<td>4570</td>
<td>Dimensions in Tourism (4)</td>
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<td>4590</td>
<td>Hospitality Law (4)</td>
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<tr>
<td>4901</td>
<td>Hospitality Internship Placement (2)</td>
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<tr>
<td>4912</td>
<td>Hospitality Internship and Senior Project (4-12)</td>
</tr>
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</table>
Human Development

Department Information
Department of Human Development and Women's Studies
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 3069
Phone: (510) 885-3076
Website: http://class.csueastbay.edu/humandev

Professors
Rainer Bauer, Ph.D. Stanford University
Jiansheng Guo, Ph.D. University of California, Berkeley
Patricia Guthrie (Chair), Ph.D. University of Rochester

Associate Professors
Lynn Comerford, Ph.D. State University of New York at Albany
Keri K. O'Neal, Ph.D. Texas Tech University

Assistant Professors
Steve Borish, Ph.D. Stanford University
Christina Chin-Newman, Ph.D. University of California, Santa Cruz
E. Maxwell Davis, Ph.D. University of Southern California
Patricia Drew, Ph.D. University of California, Santa Barbara
D. Xeno Rasmusson, Ph.D. University of Georgia

Program Description
Human Development is an interdisciplinary program that integrates theory and methodology from disciplines such as anthropology, biology, linguistics, psychology, and sociology. The program explores the processes and mechanisms underlying developmental change and stability across the lifespan and the socio-cultural and historical contexts in which development takes place.

The Program's curriculum aims to develop in students a basic understanding of major research findings and core concepts in human development, the ability to analyze and evaluate theoretical and practical issues in the field, and the skills to apply learning to diverse communities outside the University. The Program strives to create an optimal learning community that values and fosters collaborative learning and dialogue between and among students and faculty from diverse backgrounds.

Student Learning Outcomes
Students graduating with a B.A. in Human Development from will be able to:

1. demonstrate core knowledge in biological, behavioral/psychological, and contextual aspects of human development;
2. demonstrate critical thinking ability to identify similarities, differences, and connections among human development perspectives;
3. reflect critically about new and diverse human development concerns outside the University context and apply problem-solving skills to these concerns;
4. access information, design and carry out individual and group research projects, and present them clearly, logically and persuasively;
5. show ability to understand themselves reflectively and others empathetically and apply these skills to both academic and nonacademic contexts.

Career Opportunities
The interdisciplinary approach of the Human Development Program provides students with excellent preparation for graduate study in a wide range of disciplines, including anthropology, education, social work, sociology, medicine, public administration, law, criminal justice, psychology, and counseling. It also prepares students to work with people of all age groups from diverse racial, cultural, ethnic, socioeconomic, religious backgrounds, and sexual orientations. Students majoring in Human Development find a variety of career options in areas such as education, social work, health care, counseling, law and law enforcement, and human resource and organizational work in community or corporate settings.

Features
Human Development faculty members come from a wide range of academic disciplines, including anthropology, biology, human development, linguistics, neuropsychology, psychology, and sociology.

Students select one of five Options: Early Childhood Development, Childhood Development, Adolescent Development, Adult Development and Gerontology, or Women's Development.
Minors in Human Development and Women's Studies (please see Women's Studies chapter of the catalog) are also offered.

Students have the opportunity to pursue internships that integrate academic learning and field experience, and promote the development of professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

As part of its commitment to educational access, the Program incorporates a broad range of educational formats, including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The major is offered at both the Hayward and Concord campuses.

The program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact the P.A.C.E. office for further information.

Major Requirements (B.A.)

The major consists of 80 units; the B.A. degree in Human Development requires a total of 180 units.

I. Lower Division (12 units)
   Select three 4-unit courses from the following categories, with no more than one course from each category.
   A. Anthropology (cultural or social)
   B. Psychology
   C. Sociology
   D. Human biology or physical anthropology
   E. Human or child development
   F. Ethnic or area studies
   G. Additional categories (e.g., statistics, gerontology, developmental disabilities) may be approved by the department

II. Upper Division (68 units)
   A. Junior Foundation Courses (24 units)
      (Prerequisite: Upper Division Standing)
      - HDEV 3101 Lifespan Physical and Cognitive Development (4)
      - HDEV 3102 Lifespan Social and Emotional Development (4)
      - HDEV 3103 Social and Cultural Dynamics of Human Development (4)
      - HDEV 3201 Theories of Human Development (4)
      - HDEV 3202 Research Methods in Human Development (4)
      - HDEV 3203 Applying Theory and Methods of Human Development (4)
   B. Lifespan Survey Courses (16 units)
      (Prerequisite: Upper Division Standing)
      - HDEV 3301 Child Development (4)
      - HDEV 3302 Foundational Aspects of Adolescent Development (4)
      - HDEV 3303 Adult Development and Aging (4)
      - HDEV 3304 Girls and Women Across the Lifespan (4)
   C. Senior Option Courses (20 units)
      (Prerequisite: Upper Division Standing)
      Choose one of the following five Options:
      1. Early Childhood Development Option (20 units)
         The Early Childhood Development Option covers the years from birth to age 5. It consists of 20 units of required and elective courses that focus on infancy to preschool years from biological, psychological, and social perspectives.
         - Required Courses (16 units)
           - HDEV 4010 Early Childhood Cognitive Development (4)
           - HDEV 4030 Early Childhood Social Development (4)
           - HDEV 4140 Theories of Childhood (4)
           - HDEV 4150 Children in Families and Communities (4)
         - Elective Courses (4 units)
           Select 4 units from the following:
           - HDEV 4120 Child Language Development (4)
           - TED 4070 Early Childhood Education: Language and Literacy Development (4)
      2. Childhood Development Option (20 units)
         The Childhood Development Option covers the years from birth to age 12. It consists of 20 units of required and elective courses that focus on infancy to early adolescence from biological, psychological, and social perspectives.
         - Required Courses (8 units)
           - HDEV 4140 Theories of Childhood (4)
           - HDEV 4150 Children in Families and Communities (4)
         - Elective Courses (12 units)
           Select 12 units from the following:
           - HDEV 4110 Child Cognitive Development (4)
           - HDEV 4120 Child Language Development (4)
           - HDEV 4130 The Social Development of Children (4)
           - WOST 3520 Mothers, Daughters, & Sons (4)
      3. Adolescent Development Option (20 units)
         The Adolescent Development Option covers the teenage years. It consists of 20 units of required and elective courses that focus on issues arising during the pre-pubescent to pre-adult years from biological, psychological, and social perspectives.
Select 20 units from the following, with at least 16 units of courses with the HDEV prefix:

- HDEV 3800 Human Development and Interaction (4)
- HDEV 4150 Children in Families and Communities (4)
- HDEV 4220 Contemporary Research Topics in Adolescent Development (4)
- HDEV 4230 Prevention and Intervention in Adolescent Development (4)
- HDEV 4430 Intimate Relationships Throughout the Lifespan (4)
- HDEV 4440 Lesbian and Gay Lifespan Development (4)
- WOST 3520 Mothers, Daughters, & Sons (4)
- WOST 3530 Women and Their Bodies (4)

4. Adult Development and Gerontology Option (20 units)
The Adult Development and Gerontology Option consists of 20 units of required and elective courses that focus on early, middle, and late adulthood from biological, psychological, and social perspectives. By choosing from the elective courses, students may decide to focus on adulthood, or aging, or both.

Select 20 units from the following, with at least 16 units of courses with the HDEV prefix:

- HDEV 3600 Development of Religious and Secular World Views (4)
- HDEV 4310 Human Development in the Changing Workplace (4)
- HDEV 4361 Current Issues in Aging (4)
- HDEV 4362 Aging and Diversity (4)
- HDEV 4363 Cognitive Aging (4)
- HDEV 4430 Intimate Relationships Throughout the Lifespan (4)
- HDEV 4440 Lesbian and Gay Lifespan Development (4)
- WOST 3400 Women and Careers (4)
- WOST 3530 Women and Their Bodies (4)
- WOST 3545 Women's Health and Health Care (4)
- WOST 3550 Women, Work, and Family Life (4)
- WOST 4130 Women in Midlife Transitions (4)
- WOST 4160 Women and Aging (4)

5. Women's Development Option (20 units)
The Women's Development Option consists of 20 units of required and elective courses that focus on women's biological, psychological, and social development.

- **Required Courses (8 units)**
  - WOST 4130 Women in Midlife Transitions (4)
  - WOST 4160 Women and Aging (4)

- **Elective Courses (12 units)**
  - Select 4 units from the following:
    - HDEV 4310 Human Development in the Changing Workplace (4)
    - HDEV 4430 Intimate Relationships Throughout the Lifespan (4)
    - HDEV 4440 Lesbian and Gay Lifespan Development (4)
  - Select 8 units from the following:
    - ES/WOST 3030 Immigrant and Refugee Women (4)
    - WOST 3050 Feminist Theory (4)
    - WOST 3100 Seminar in Women's Studies (4)
    - WOST 3400 Women and Careers (4)
    - WOST/ES 3420 Minority Women in America (4)
    - WOST 3520 Mothers, Daughters and Sons (4)
    - WOST 3530 Women and Their Bodies (4)
    - WOST 3545 Women's Health and Health Care (4)
    - WOST 3550 Women, Work, and Family Life (4)

D. Senior Capstone Courses (8 units)
(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)
(Students must enroll in two consecutive quarters for these two courses.)

- HDEV 4811 Senior Research Seminar in Human Development I (4)
- HDEV 4812 Senior Research Seminar in Human Development II (4)

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Online Degree Programs

Bachelor of Arts, Online Options in Early Childhood Development, Adult Development and Gerontology, or Women's Development

The On-line Human Development Degree Program for entering third year students is identical to the existing Human Development Program, with the exception that the degree is attained entirely on-line. Students participating in the On-line Degree Program may choose from three options: Early Childhood Development, Adult Development and Gerontology, and Women's Development.

The Online major consists of 80 units; the B.A. degree requires a total of 180 units, which includes 12 lower-division units from among three different categories.

II. Upper Division (68 units)

A. Junior Foundation Online Courses (24 units)
(Prerequisite: Upper Division Standing)

- HDEV 3101 Lifespan Physical and Cognitive Development (4)
- HDEV 3102 Lifespan Social and Emotional Development (4)
- HDEV 3103 Social and Cultural Dynamics of Human Development (4)
- HDEV 3201 Theories of Human Development (4)
B. Lifespan Survey Online Courses (16 units)
(Prerequisite: Upper Division Standing)
- HDEV 3301 Child Development (4)
- HDEV 3302 Foundational Aspects of Adolescent Development (4)
- HDEV 3303 Adult Development and Aging (4)
- HDEV 3304 Girls and Women Across the Lifespan (4)

C. Senior Option Courses (20 units)
(Prerequisite: Upper Division Standing)
Choose ONE of the following two online Options:

1. Adult Development and Gerontology Online Option (20 units)
The Online Adult Development and Gerontology Option consists of 20 units of required and elective courses that focus on biological, psychological, and social aspects of early, middle, and late adulthood. By choosing from the elective courses, students may decide to focus on adulthood, or aging, or both.

Select 20 units from the following, with at least 16 units of courses with the HDEV prefix:
- HDEV 3600 Development of Religious and Secular World Views (4)
- HDEV 4310 Human Development in the Changing Workplace (4)
- HDEV 4361 Current Issues in Aging (4)
- HDEV 4362 Aging and Diversity (4)
- HDEV 4363 Cognitive Aging (4)
- HDEV 4430 Intimate Relationships Throughout the Lifespan (4)
- HDEV 4440 Lesbian and Gay Lifespan Development (4)
- WOST 3400 Women and Careers (4)
- WOST 3530 Women and Their Bodies (4)
- WOST 3545 Women's Health and Health Care (4)
- WOST 3550 Women, Work, and Family Life (4)
- WOST 4130 Women in Midlife Transitions (4)
- WOST 4160 Women and Aging (4)

2. Women's Development Online Option (20 units)
The Online Women's Development Option consists of 20 units of required and elective courses that focus on women's biological, psychological, and social development

Required courses (8 units)
- WOST 4130 Women in Midlife Transitions (4)
- WOST 4160 Women and Aging (4)

Elective Courses (12 units)
Select 4 units from the following:
- HDEV 4310 Human Development in the Changing Workplace (4)
- HDEV 4430 Intimate Relationships Throughout the Lifespan (4)
- HDEV 4440 Lesbian and Gay Lifespan Development (4)
Select 8 units from the following:
- ES/WOST 3030 Immigrant and Refugee Women (4)
- WOST 3050 Feminist Theory (4)
- WOST 3100 Seminar in Women's Studies (4)
- WOST 3400 Women and Careers (4)
- WOST/ES 3420 Minority Women in America (4)
- WOST 3520 Mothers, Daughters and Sons (4)
- WOST 3530 Women and Their Bodies (4)
- WOST 3545 Women's Health and Health Care (4)
- WOST 3550 Women, Work, and Family Life (4)

3. Early Childhood Development Option (20 units)
The Early Childhood Development Option covers the years from birth to age 5. It consists of 20 units of required and elective courses that focus on infancy to preschool years from biological, psychological, and social perspectives.

Required Courses (16 units)
- HDEV 4010 Early Childhood Cognitive Development (4)
- HDEV 4030 Early Childhood Social Development (4)
- HDEV 4140 Theories of Childhood (4)
- HDEV 4150 Children in Families and Communities (4)

Elective Courses (4 units)
Select 4 units from the following:
- HDEV 4120 Child Language Development (4)
- TED 4070 Early Childhood Education: Language and Literacy Development (4)

D. Senior Capstone Online Courses (8 units)
(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)
(Students must enroll in two consecutive quarters for these two courses.)
- HDEV 4811 Senior Research Seminar in Human Development I (4)
- HDEV 4812 Senior Research Seminar in Human Development II (4)
Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

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Minor Requirements

MINOR IN HUMAN DEVELOPMENT

The minor is designed for students who are interested in the study of human development over the lifespan. The minor consists of 24 units. Select 24 units from any 3000 or 4000 level human development courses.

MINOR IN WOMEN’S STUDIES

See Women’s Studies Chapter.

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Certificate in Early Childhood Development

Completion of the Early Childhood Development Certificate Program enables students to complete the required Early Childhood Education or Child Development coursework for the first 3 levels of Child Development Permits (the Assistant Permit, the Associate Teacher Permit, and the Teacher Permit), specified by the California Commission on Teacher Credentialing. These permits are required for teaching at early childhood care and education settings for children from birth to 5 years of age. Most of the courses for the Certificate can be applied to the Human Development Major with Early Childhood Development Option, if students wish to continue to obtain a BA.

1. Associate Teacher Permit Track (20 units)
   Required:
   - HDEV 3301 Child Development (4)
   - HDEV 4150 Children in Families and Communities (4)
   Electives (Choose 3 of the following):
   - HDEV 4010 Early Childhood Cognitive Development (4)
   - HDEV 4030 Early Childhood Social Development (4)
   - HDEV 4120 Child Language Development (4)
   - HDEV 4140 Theories of Childhood (4)

2. Teacher Permit Track (36 units)
   - HDEV 3301 Child Development (4)
   - HDEV 4150 Children in Families and Communities (4)
   - HDEV 4010 Early Childhood Cognitive Development (4)
   - HDEV 4030 Early Childhood Social Development (4)
   - HDEV 4120 Child Language Development (4)
   - HDEV 4140 Theories of Childhood (4)
   - DANC 3235 Dance for Children (4)
   - THEA 3610 Interpretation of Children’s Literature and Storytelling (4)
   - THEA 3650 Dramatic Activities for Children (4)

(All courses taken for the Associate Teacher Permit Track may be applied to the Teacher Permit Track.)

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Undergraduate Courses

HUMAN DEVELOPMENT COURSES (Course prefix: HDEV)

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<td>The Human Condition (4)</td>
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<tr>
<td>2010</td>
<td>Introduction to Early Childhood (4)</td>
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<tr>
<td>3101</td>
<td>Lifespan Physical and Cognitive Development (4)</td>
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<tr>
<td>3102</td>
<td>Lifespan Social and Emotional Development (4)</td>
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<tr>
<td>3103</td>
<td>Social and Cultural Dynamics of Human Development (4)</td>
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<tr>
<td>3201</td>
<td>Theories of Human Development (4)</td>
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<tr>
<td>3301</td>
<td>Child Development (4)</td>
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<td>Foundational Aspects of Adolescent Development (4)</td>
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<td>3303</td>
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<tr>
<td>3304</td>
<td>Girls and Women Across the Lifespan (4)</td>
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<td>3800</td>
<td>Human Development and Interaction (4)</td>
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<td>3999</td>
<td>Issues in Human Development (4)</td>
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<td>4010</td>
<td>Early Childhood Cognitive Development (4)</td>
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<td>4030</td>
<td>Early Childhood Social Development (4)</td>
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<td>Child Cognitive Development (4)</td>
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<td>4140</td>
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<td>4150</td>
<td>Children in Families and Communities (4)</td>
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<td>4220</td>
<td>Contemporary Research Topics in Adolescent Development (4)</td>
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<td>4230</td>
<td>Prevention and Intervention in Adolescent Development (4)</td>
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<tr>
<td>4302</td>
<td>Research Methods in Human Development (4)</td>
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<td>4303</td>
<td>Applying Theory and Methods of Human Development (4)</td>
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<td>4301</td>
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<td>Adult Development and Aging (4)</td>
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<td>4304</td>
<td>Girls and Women Across the Lifespan (4)</td>
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<tr>
<td>4310</td>
<td>Human Development in the Changing Workplace (4)</td>
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<td>4351</td>
<td>Current Issues in Aging (4)</td>
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<td>4352</td>
<td>Aging and Diversity (4)</td>
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<td>4353</td>
<td>Cognitive Aging (4)</td>
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<td>4440</td>
<td>Lesbian and Gay Lifespan Development (4)</td>
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<td>4811</td>
<td>Senior Research Seminar in Human Development I (4)</td>
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<td>4812</td>
<td>Senior Research Seminar in Human Development II (4)</td>
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<td>4860</td>
<td>Internship in Human Development (1-4)</td>
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<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>
Humanities

- Department Information
- Program Information
- Undergraduate Courses

Department Information

College of Letters, Arts, and Social Sciences
Office: Music and Business Building 1501
Phone: (510) 885-3105

Program Information

The College of Letters, Arts, and Social Sciences offers survey courses which are designed to provide students with a broad introduction to the humanities and to the study of Western Civilization.

Undergraduate Courses

(Course prefix: HUM)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001</td>
<td>Humanities I (4)</td>
</tr>
<tr>
<td></td>
<td>Dawn of Western Civilization: Survey of major ideas, achievements, and failures of Greco-Roman antiquity and the Middle Ages examined from an historical perspective and based upon readings in literature and philosophy. Selections from Iliad, Aeneid, Oedipus Rex, Bible, Divine Comedy, Canterbury Tales, etc.</td>
</tr>
<tr>
<td>3000</td>
<td>Literature of the Holocaust (4)</td>
</tr>
<tr>
<td></td>
<td>Study of literary works originating from personal experience and reflections concerning the Holocaust: the mass murder of the Jews of Europe during World War II. Authors include Primo Levi, Giuliana Tedeschi, and Elie Wiesel.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Humanities (4)</td>
</tr>
<tr>
<td></td>
<td>Readings, discussion, and research on contemporary and/or significant issues in humanities. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
</tbody>
</table>
Interdisciplinary Studies and Special Certificates

Program Description

The purpose of the Interdisciplinary Studies Major and the Special Certificate programs is to allow students, with the advice and approval of knowledgeable faculty and administrators, to design their own academic programs tailored to their unique needs and interests.

At least two separate degree-granting programs must be involved. An undergraduate Interdisciplinary Studies Major must be approved no later than the time when the student has 60 quarter units of work remaining to complete the degree, including at least 40 units in the Interdisciplinary Studies Major. This is to ensure that a significant portion of the program is planned in advance by the student and his/her faculty advisors. The diploma will read Interdisciplinary Studies Major In (program title).

The Interdisciplinary Studies Major program should not be seen as a device to avoid certain requirements of a regular major, nor as a means to gain admission to an impacted program. Likewise, an Interdisciplinary Studies Major cannot be developed in areas such as architecture, agriculture, and home economics where the campus currently lacks the necessary faculty expertise and physical facilities. Finally, an Interdisciplinary Studies Major is not a self-study, independent study, or external degree program.

Student Learning Outcomes

Because Interdisciplinary Studies Majors are individualized courses of study, student learning outcomes will be individually created for each student by the student's Interdisciplinary Studies Major Committee. The following student learning outcome, however, is common for all undergraduate Interdisciplinary Studies Majors:

- an Interdisciplinary Studies Major student will learn how to approach an issue or problem from at least two disciplinary perspectives.

Major Requirements (B.A./B.S.)

The university offers both the B.A. and B.S. degrees with an Interdisciplinary Studies Major. There are no clearly defined differences between the two degrees, although B.S. degrees tend to be applied programs, while the B.A. is usually considered a liberal arts and social sciences degree. Normally, the type of degree awarded for an Interdisciplinary Studies Major reflects the degrees offered by the involved departments. To be eligible for an Interdisciplinary Studies Major, a student must have a cumulative GPA of at least 2.30. An Interdisciplinary Studies Major must be a coherent program organized around a sound academic theme. The title of an Interdisciplinary Studies Major should be short (three to five words) and should describe the central academic theme of the program, not the student's career objectives unless the two coincide.

An Interdisciplinary Studies Major must be fully approved before the student has fewer than 40 quarter units to complete the major and 60 for the degree. An Interdisciplinary Studies Major must contain at least 52 quarter units for the B.A. or 54 quarter units for the B.S. degree. The maximum number of quarter units for the Interdisciplinary Studies Major is 93 units for either the B.A. or the B.S., of which at least 36 are upper division (junior/senior level). Coursework in at least two different disciplines is required. The B.A. and B.S. degrees with an Interdisciplinary Studies Major require a total of at least 180 units.

Courses in the Interdisciplinary Studies Major are not applicable to the General Education-Breadth Requirements. (However, previously completed transfer evaluations will not be reevaluated). A student can take courses for G.E. purposes in departments involved in the major. However, any individual course used for G.E. cannot also be used in the major, except for courses which are exempt under the G.E. policy. (See the B.A./B.S. Degree Requirements chapter.). Only one course from a department involved in the major can be applied to G.E.

Procedure

A student who contemplates developing an Interdisciplinary Studies Major must have an overall and CSUEB grade point average of at least 2.30 ("C+", Satisfactory). Forethought and planning will need to precede any formal action. You may make an appointment to discuss all the necessary steps for getting your Interdisciplinary Studies major approved by emailing the Interdisciplinary Studies Coordinator at rosanne.harris@csueastbay.edu.

The prospective Interdisciplinary Studies Major student must prepare a one page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular major, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the major and the degree, and other pertinent information. A sample prospectus for a hypothetical Interdisciplinary Studies Major will be given to the student by the Interdisciplinary Studies Coordinator when they meet at the information appointment, which starts the process towards an approved Interdisciplinary Studies major. The student must also contact three faculty advisors in the involved departments, secure their support, and nominate them as his/her Interdisciplinary Studies Major committee. (One of these faculty advisors should be designated as chair of the committee.)
The prospectus, including the names of the three faculty advisors (and their departments), must be submitted to the Interdisciplinary Studies Major Coordinator in the Office of Academic Programs and Graduate Studies before the student has fewer than 40 units left to complete in the proposed major and 60 units in the degree.

If the proposal is found academically sound and logistically feasible by the Associate Vice President, the Academic Programs and Graduate Studies Interdisciplinary Studies Major Coordinator will forward copies of it to the proposed faculty committee members along with an explanation of the Interdisciplinary Studies Major policies and procedures, copies of the student's transcripts, and a form for development and approval of the specific program of courses.

The three-person committee and the student must meet at a mutually acceptable time to design the program (i.e. to prepare the list of required and elective courses). When this is done, the form is completed, signatures of approval are affixed, and it is returned to the Interdisciplinary Studies Major Coordinator by the chair of the student's faculty committee. The Interdisciplinary Studies Major Coordinator circulates the proposal to the deans of the involved colleges for commentary. After reviewing any comments, the Associate Vice President will act on the proposal. If it is approved, a final copy is prepared and the coordinator and the student sign it. When the student comes in to sign and receive a copy, a "Change of Major/Minor/Option" form must also be signed. The student will also be informed of the college from which he/she will graduate.

General Education
All students must also complete the general education-breadth and other graduation requirements for the baccalaureate degree. Normally, courses used for the Interdisciplinary Studies Major cannot be used for G.E., but transfer G.E. evaluations will not be redone. Check your catalog or see an advisor at the University Advisement Center for more information.

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Special Certificate
The purpose of a Special Certificate is to give the student an opportunity to design in advance, with university approval, a program that will be certified upon completion. To obtain an undergraduate Special Certificate, an undergraduate or graduate student must complete a program of at least 20 quarter-units in upper-division courses with a GPA of 2.00. The program must provide a logical and coherent pattern of preparation for a limited objective. The title of the proposed certificate should carry no connotation of meeting a licensing requirement for professional practice. The student's proposed program must be developed with, and approved by, a faculty member knowledgeable in the field being certified.

Note: To obtain a graduate Special Certificate, a graduate student must possess a bachelor's degree from an accredited institution and complete at least 20 quarter units, of which at least half must be at the graduate 6000-level, with a minimum GPA of 3.00. See the Interdisciplinary Studies Majors and Certificates chapter in the graduate section of this catalog for additional information.

Procedure
The student develops a proposed program with the advice and approval of a faculty member knowledgeable in the field of study. The completed "Undergraduate/Graduate Special Certificate Proposal" (found at Certificate Information Sheet), with advisor and student approval, is forwarded by the advisor to the dean of the college in which the preponderance of courses will be taken. If the dean approves, he or she signs and sends the proposal to the Interdisciplinary Studies Major Coordinator in the Office of Academic Programs and Graduate Studies. The Interdisciplinary Studies Major Coordinator then sends a copy of the proposal to each of the other three college deans. The deans have 10 working days to enter an objection. If none is received and the Associate Vice President, Academic Programs and Graduate Studies, judges the proposal to be sound, the program will be approved. If any college dean objects, he or she must file written objections with the Interdisciplinary Studies Major Coordinator within the 10 days. These will be considered by the Associate Vice President in deciding whether or not to approve the program. The student is notified in writing by the Interdisciplinary Studies Major Coordinator about the final action on his/her proposal. A copy of an approved program is filed in the student's online file and in the Interdisciplinary Studies Major Coordinator's office. Upon completion of the Special Certificate program, the student applies to the Registrar and pays the fee to receive the certificate.
International Business

Program Description

The International Business minor is designed to provide you with a foundation in:

1. general business administration;
2. a specialty within business in finance, marketing, or personnel administration/industrial relations;
3. international business; and
4. international studies including languages and cultural and political background.

Coursework required for the minor has been combined into three modules: (A) Business Administration, (B) Specialty/International Business, and (C) International Studies. Students in Business Administration will have satisfied Module A as part of their Business Administration major and need only Modules B and C (a total of 40-48 units) to complete an International Business minor. Students in the College of Letters, Arts, and Social Sciences with a major or minor in the Department of Modern Languages and Literatures, can easily have at least 24 units of Module C satisfied as part of their major or minor program, leaving them with Modules A and B, and possibly 8 units of C (a total of 40-48 units) to complete for an International Business minor.

International Business Minor

All three modules must be satisfied. Business Administration majors substituting the minor for an option must take all coursework in the minor for a letter grade. Note that units taken to satisfy the requirements of a minor can be applied to General Education requirements wherever applicable as long as the units are outside the prefixes of the student’s major. (Note: ACCT, ENTR, FIN, ITM, MGMT, and MKTG are prefixes in the Business Administration major.)

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

Module A, Business Administration (24 units)

Please consult the College of Business and Economics Student Services for Module A advising.

- ACCT 2251 Introduction to Financial Accounting (4)
- ECON 2301 Principles of Microeconomics (4)
- ECON 2302 Principles of Macroeconomics (4)
- ECON 3107 Global Economic Analysis (4)
  or MGMT 4670 Multinational Business (4)
- MGMT 3600 Theories of Management (4)
- MKTG 3401 Marketing Principles (4)

Module B, Specialty/International Business (16 units)

Please consult the College of Business and Economics Student Services for Module B advising

1. Complete one of the three following specialty areas (8 units):
   A. Finance
      (Business Administration majors selecting the Finance specialty should choose FIN 4310 and 4320 since they will be completing FIN 3300 as part of the upper division Business Administration core requirements.)
      Required (4 units):
      - FIN 3300 Financial Management (4)
      Choice of one (4 units):
      - FIN 4310 Investment Analysis (4),
      - 4320 Problems in Corporate Finance (4)
   B. Marketing
      Required (8 units):
      - MKTG 3410 Advertising Management (4)
MKTG 3445 Marketing Research (4)

C. Human Resources Management (HRM)
(Business Administration majors selecting the HRM specialty should choose either MGMT 3610 and 4615 or MGMT 4680 and 4683.)
Choice of one set (8 units):
1. MGMT 3610 Human Resources Management (4), and either 3680 Employee and Labor Relations (4), or 4615 Compensation and Benefits (4);
2. MGMT 3680 Employee and Labor Relations (4), and another upper-division MGMT course covering collective bargaining, labor law, and/or labor relations, with consent of advisor (4)

II. Select two courses from the following list, with one of the two courses being in the student's chosen specialty area (8 units):
- ECON 3107 Global Economic Analysis (4)
- ECON 4700 International Trade (4)
- ECON 4705 International Finance (4) (Finance specialty)
- FIN 4375 International Business Finance (4)
- MGMT 4675 International Human Resources Management (4) (HRM specialty)
- MKTG 4470 International Marketing (4) (Marketing specialty)

Module C, International Studies (24-32 units)
(All of the courses taken to satisfy items C II and C III in this module must have their content reaching primarily beyond the student's native culture and geographic region. A student's choices of language and area studies courses must relate to the same geographic region. Students whose native language is other than English may choose English as their second language, if their native language is determined by the committee administering the minor to have sufficient significance as a language of commerce. Students using English as their second language may make either U.S./Canada or Great Britain (not both) the focus of their C III coursework.)

Please consult Dr. Norman A. Bowen (Political Science) for Module C advising.

I. Choice of one of the following (4 units):
- COMM 4830 Intercultural Communication (4)
- HIST 3550 The History of U.S. Foreign Relations (4)
- INTS 3100 Global Systems (4)
- POSC 3520 International Relations (4)
- SOC 3431 Seminar in World Development (4)

II. Intermediate level competency in a modern language including a course in business terminology if available (0-24 units)
(Competency must be certified by the Cal State East Bay Department of Modern Languages and Literatures. Competency-certified language units based on other than regular classroom transcript coursework or based on courses challenged for CR/NC will not count as part of the minimum 24 units required for Module C.)

III. A minimum of 4 units in area studies
- e.g., Latin America, Middle East, Northern Europe, Southeast Asia, with sufficient additional units in C III to bring the total acceptable credit units for Module C to a minimum of 24 units (4-20 units). (Courses for C III must be approved by the assigned International Business Minor advisor.)

A maximum of 48 units outside a Business Administration or Modern Language major is required.

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Developing intercultural communication skills and international understanding among its students is a vital mission of The California State University (CSU). Since its inception in 1963, the CSU International Programs has contributed to this effort by providing qualified students an affordable opportunity to continue their studies abroad for a full academic year. More than 15,000 CSU students have taken advantage of this unique study option.

International Programs participants earn resident academic credit at their CSU campuses while they pursue full-time study at a host university or special study center abroad. The International Programs serves the needs of students in over 100 designated academic majors. Affiliated with more than 70 recognized universities and institutions of higher education in 19 countries, the International Programs also offers a wide selection of study locales and learning environments.

**Australia**
Griffith University, Macquarie University, Queensland University of Technology, University of Queensland, University of Western Sydney, Victoria University

**Canada**
Concordia University (Montréal), McGill University (Montréal), Université Laval (Québec City)

**Chile**
Pontificia Universidad Católica de Chile (Santiago)

**China**
Peking University (Beijing), Shanghai Jiao Tong University (Shanghai)

**Denmark**
Danish Institute for Study Abroad (international education affiliate of the University of Copenhagen)

**France**

**Germany**
University of Tübingen and a number of institutions of higher education in the Federal state of Baden-Württemberg

**Ghana**
University of Ghana, Legon

**Israel**
Tel Aviv University, The Hebrew University of Jerusalem, University of Haifa

**Italy**
CSU Study Center (Florence), Università degli Studi di Firenze, Accademia di Belle Arti Firenze

**Japan**
Waseda University (Tokyo)

**Korea**
Yonsei University (Seoul)

**Mexico**
Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Querétaro

**New Zealand**
Lincoln University (Christchurch), Massey University (Palmerston North)

**South Africa**
Nelson Mandela Metropolitan University, Port Elizabeth

**Spain**
International Programs pays all tuition and administrative costs for participating California resident students to the same extent that such funds would be expended to support similar costs in California. Participants are responsible for all tuition and program fees, personal costs, such as transportation, room and board, and living expenses. Financial aid, with the exception of Federal Work-Study, is available to qualified students.

To qualify for admission to the International Programs, in most programs students must have upper division or graduate standing at a CSU campus by the time of departure. Students at the sophomore level may, however, participate in the intensive language acquisition programs in Canada, China, France, Germany, Korea, Mexico, Sweden and Taiwan. California Community Colleges transfer students are eligible to apply directly from their community colleges. Students must also possess a current cumulative grade point average of 2.75 or 3.0, depending on the program for which they apply. Some programs also have language study and/or other coursework prerequisites.

Additional information and application materials may be obtained from:

Center for International Education
Library Complex 2550
Phone: (510) 885-2880
E-mail: cie@csueastbay.edu

You may also write to:
The California State University International Programs
401 Golden Shore, Sixth Floor
Long Beach, California 90802-4210
www.calstate.edu/ip

Applications for the academic year overseas must be submitted by the preceding February 1. (Note: The deadline for programs in Australia, New Zealand and South Africa is May 1.)

Graduate Study
Please see “Credit for Transferred Courses” in the Graduate Degree Information chapter.

Other Programs
Please see “Study Abroad,” in the Student Services chapter.

Courses
Courses taken by students enrolled in the International Programs are shown on the Cal State East Bay transcripts in terms of Cal State East Bay catalog designations. In the absence of equivalents, courses are shown on Cal State East Bay transcripts as follows:

- (Dept.) 9100 IP (course title) Lower Division
- (Dept.) 9300 IP (course title) Upper Division
- (Dept.) 9500 IP (course title) Graduate
International Studies

- Department Information
- Program Description
- Features
- Career Opportunities
- Major Requirements (B.A.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses

Department Information
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4092
Phone: (510) 885-3221

Professor
Norman A. Bowen (Political Science), Ph.D. State University of New York at Albany
L. Ilana Holtbrook (Modern Languages and Literatures), Ph.D. University of California, Davis
David J. Larson (Geography and Environmental Studies), Ph.D. University of California, Berkeley
Laurie Price (Anthropology), Ph.D. University of North Carolina, Chapel Hill

Associate Professor
Vahid Fozdar (History), Ph.D. University of California, Berkeley

Director: Norman A. Bowen

Program Description
The International Studies major consists of an integrated group of courses reflecting international aspects of various disciplines. It is designed to provide the student with a broad base of understanding of the interrelationship of the world community, while at the same time providing the opportunity to specialize in an area of interest. A minor in International Studies is also offered.

The International Studies major consists of a lower division requirement of twelve (12) units in Economics and Geography/Environmental Studies and, optionally, Anthropology, plus a foreign language requirement. The upper division requirements include a methods course, a twentieth century History course, and three INTS courses (an introductory upper division course, a senior seminar, and an international field experience). The student will complete the major with sixteen (16) units of international coursework with a particular emphasis and twelve (12) units selected from a list of electives.

Student Learning Outcomes
Students graduating with a B.A. in International Studies from Cal State East Bay will have achieved the following:

1. comprehension of the interrelationships among the political, economic, cultural and geographic dimensions of international affairs; demonstration of conceptual growth;
2. ability to speak clearly and easily about international affairs in general and about topics of specialized study in particular; demonstration of sustained excellence or improvement during the program;
3. strong undergraduate writing and research skills on relevant international topics; demonstration of sustained excellence or growth during the program;
4. the ability to function effectively in a multicultural and international setting in an educational, private sector, or non-profit organization

Features
The university encourages firsthand experience abroad. INTS 4100 (International Field Work) is designed to afford such an opportunity. Optimally the student will elect to complete the internship, either paid or voluntary, in a foreign country. The University recognizes that this may not always be possible and therefore accepts the completion of the internship locally if a substantial portion of the work experience is internationally related. The student may also elect to fulfill the international work experience requirement by completing a course of study through the CSU International Programs or a recognized quarter, semester, or summer program abroad. Any such activity must be approved by an International Studies advisor before being undertaken.

Career Opportunities
- International Business
- International Organizations
- Federal Government
- Diplomacy
- Tourism
- Teaching
- Education and Cultural Exchange Programs
- Journalism
- Law
- Translation
- Local services to foreign language speakers
Major Requirements (B.A.)

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 58-85 units; the B.A. degree requires a total of 180 units.

I. Lower Division (12-36 units)
Select one course from each group

A. ANTH 1300 Introduction to Cultural Anthropology (4)
   or GEOG 2300 Cultural Geography (4)
B. ECON 1000 Economics of Public Issues (4)
   or ECON 2301 Principles of Microeconomics (4)
   or ECON 2302 Principles of Macroeconomics (4)
C. GEOG 2310 Economic Geography (4)
D. Modern Language Requirement (0-24 units)
   Oral and written proficiency in a modern foreign language equivalent to two full years of university-level studies. The requirement can be fulfilled by the recent completion of the third quarter of intermediate language at Cal State East Bay or by an examination offered by the Department of Modern Languages and Literatures measuring oral and written proficiency at that level.

II. Upper Division Core (14-16 units)
A. INTS 3100 Global Systems (4), INTS 4500 Senior Seminar (4), and HIST 3017 Twentieth Century History (4)
B. International Field Experience (minimum 2 units) through one of the following: INTS 4100 International Field Work (2-4)
   or an approved course of study in a foreign country.

Note: In order to fulfill this requirement, any experiential activity or course of study must be pre-approved by an International Studies advisor.

III. Methods Course (4-5 units)
One methods course selected from the following list:
- ANTH 4310 Field Course in Ethnography (5)
- COMM 3200 Introduction to Research Methods in Communication (4)
- ECON 4400 Introduction to Econometrics (4)
- HIST 3010 Historical Writing (4)
- MGMT 3100 Decision Science (4)
- PHIL 3321 Philosophy of the Human Sciences (4)
- POSC 3300 Voting and Public Opinion
- PSYC 2020 Methods of Investigation in Psychology (4)
- SOC 3000 Introduction to Sociological Research (4)
- SOC 4111 Methods of Sociological Research (4)
- STAT 3010 Statistical Methods in the Social Sciences (4)
- STAT 4610 Introduction to Nonparametric Statistical Methods (4)

IV. Area of Emphasis (16 units)
Emphasis courses: 4 courses (16 units) to be chosen with the approval of an advisor in either
  1. a discipline area (example: Anthropology, Economics, History);
  2. a regional area (example: Asia, Europe, Latin America, Middle East); or
  3. a topic area (example: international business, international organizations and law, arms control, economic development, environmental issues, cross-cultural studies, migration). All courses selected should be internationally relevant.

V. Upper Division Electives (12 units) Select from the following with no more than 2 courses in any one discipline
- ANTH 3000 Anthropology in the Modern World (4)
  or any upper division anthropology course with primarily international content.
- COMM 4110 International Communication (4)
- COMM 4830 Intercultural Communication (4)
- ECON: Any upper division International Economics course
- FIN 4375 International Financial Management (4)
- MLL: Any upper division modern language course not primarily devoted to literature.
- GEOG/ENVT: Any geography or environmental studies course with primarily international content.
- HIST: Any upper division modern history course with primarily international content.
- INTS: Any upper division international studies course.
- MGMT 4670 Multinational Business (4)
- MKTG 4470 International Marketing (4)
- POSC: Any upper division political science course devoted to comparative government or international relations.
- SOC 3431 Seminar in World Development (4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history; U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 28-40 units.
I. Lower Division (8-20 units)
   A. Twelve (12) units of a modern foreign language or the equivalent as determined by examination. The language, when possible,
   should be coordinated with the student's other coursework in the minor. It is strongly recommended that a student achieve a higher
   level of proficiency in a foreign language through courses in language, culture, or literature.
   B. Eight (8) units selected from:
      1. ANTH 1300 Introduction to Cultural Anthropology (4)
         or GEOG 2300 Cultural Geography (4)
      2. ENVT 2000 Introduction to Environmental Studies (4)
         or GEOG 2310 Economic and Resource Geography (4)
      3. POSC 1500 Conflict in World Politics (4)
      4. ECON 1000 Economics of Public Issues (4)
         or ECON 2301 Principles of Microeconomics (4)
         or ECON 2302 Principles of Macroeconomics (4)

II. Upper Division (20 units)
   A. INTS 3100 Global Systems (4)
   B. Sixteen (16) units of upper division international course work from the College of Letters, Arts, and Social Sciences (CLASS) or the
      College of Business and Economics, selected with the approval of an International Studies Minor advisor. No more than eight (8)
      units may be taken in any one department; a minimum of eight (8) units must be taken in CLASS.

Undergraduate Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3100</td>
<td>Global Systems (4)</td>
</tr>
<tr>
<td></td>
<td>The wide range of global systems which have evolved to provide a framework for international transactions and problem-solving. Focus on global systems in the areas of politics, economics, mass media, science/technology, and basic human needs. The origins, objectives, and institutional capabilities of existing global systems in each area.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in International Studies (4)</td>
</tr>
<tr>
<td></td>
<td>Readings, discussion, and research on contemporary and/or significant issues in international studies. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4100</td>
<td>International Field Work (2-4)</td>
</tr>
<tr>
<td></td>
<td>Supervised field placement with a company, non-profit organization or government agency in which a substantial portion of the work experience is internationally related. Foreign placements are encouraged. May be repeated once for credit for a maximum of 8 units. CR/NC grading only.</td>
</tr>
<tr>
<td>4500</td>
<td>Senior Seminar (4)</td>
</tr>
<tr>
<td></td>
<td>Advanced analysis and evaluation of global systems. Study of theoretical models. Prerequisite: INTS 3100.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>

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Kinesiology

Department Information

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Single Subject Matter Preparation Program

Undergraduate Courses

Errata (Note: Please see Errata page for corrections to this content.)

Department Information

Department of Kinesiology
College of Education and Allied Studies
Office: Physical Education Bldg. 130
Phone: (510) 885-3061
Website: [www20.csueastbay.edu/ceas/departments/kin/index.html](http://www20.csueastbay.edu/ceas/departments/kin/index.html)

Professors
Rita M. Liberti, Ph.D. University of Iowa
Penny McCullagh (Chair), Ph.D. University of Wisconsin
Donald T. Sawyer, Ed.D. University of San Francisco

Associate Professors
Rebecca Beal, Ed.D. University of Northern Colorado
Catherine Imouye, Ed.D. University of Northern Colorado
Jeffery P. Simons, Ph.D. University of Illinois, Urbana-Champaign

Assistant Professors
ZähNean D. McClain, Ph.D. Oregon State University
Susan J. Rodearmel, Ed.D. University of Northern Colorado

Program Description

Kinesiology is the disciplinary study of humans as they participate in physical activity. Professional applications offered by the department include Pre-Athletic Training, Exercise Nutrition and Wellness, Physical Education Teaching, and Pre-Physical Therapy.

The purposes of the Department of Kinesiology are (1) to provide an opportunity for students to study the discipline of Kinesiology; and (2) to provide opportunities for learning and participation in a wide variety of motor activities. Such study includes an investigation into the nature of motor performance, how it is assessed, what its effects are upon the rest of human bodily systems, and how motor performance is learned. It also involves an investigation of the historical, cultural, philosophical, psychological, and social factors which result from and influence play, games, and sports.

The department's program also offers courses appropriate to the general education curriculum of the university in the humanities, social sciences, sciences, and life-long learning. It provides the necessary foundation for students who wish to continue their own personal lifelong activities.

Student Learning Outcomes

Students graduating with a B.S. in Kinesiology from Cal State East Bay will attempt to achieve the following learning outcomes:

- **Content Knowledge.** Students will demonstrate foundational knowledge and skills related to physical activity, exercise, and sport and have the ability to integrate perspectives from humanities and social, behavioral, and life sciences.
- **Practical Assessment.** Students will be able to apply content knowledge to design and evaluate within disciplinary practice.
- **Critical Thinking and Communication Skills.** Students will demonstrate critical thinking, writing, reading, oral communication, and information management skills to physical activity related questions.
- **Professionalism and Ethics.** Students will demonstrate professional dispositions and will be committed to social justice for physical activity participants.
- **Commitment to Life-Long Physical Activity.** Students will be able to articulate the importance of a commitment to life-long physical activity.

Career Opportunities

- Athletic Trainer
- Activities Director
- Coach
- Community College Teacher
- Community Fitness Agency Director
- Exercise/Nutrition Counselor
- Physical Education Teacher
- Physical Therapist
Features

Many of the physical education facilities are open to the campus community when not being used for classes. These may include swimming pools, tennis courts, handball courts, fitness center, the gymnasium, and outdoor fields.

Students enrolled in the intercollegiate athletic programs have the opportunity to engage in numerous field trips throughout California and, in some cases, in neighboring states. The intercollegiate athletic program includes: basketball, cross country, golf, soccer, and track for men and women; baseball for men; and softball, swimming, volleyball, and water polo for women.

There is one scholarship housed within the Department of Kinesiology. Recipients of the Joe Morgan Scholarship, named for the Hall of Fame baseball player who is a Cal State East Bay graduate, are identified each Winter with the award(s) applying to the subsequent year. The amount of the Joe Morgan award varies and multiple awards may be given.

Major Requirements (B.S.)

Consult your advisor for clarification and interpretation of major requirements. The major consists of 90-124 units; the B.S. degree requires a total of 180-187 units.

I. Lower Division

The lower division requirements vary depending on the option. Each student must complete one of the following options: Pre-Athletic Training, Exercise Nutrition and Wellness, Physical Education Teaching, Pre-Physical Therapy, Special Studies. The lower division requirements are listed within the option requirements.

II. Upper Division Core (45 units)

- KIN 3300 Measurement and Evaluation (5)
- KIN 3305 Structural Kinesiology (4)
- KIN 3310 Biomechanics (5)
- KIN 3320 Exercise Physiology (5)
- KIN 3330 Motor Learning and Control (5)
- KIN 3340 Motor Development (4)
- KIN 3700 History of Sport and Physical Education (4)
- KIN 3740 Philosophical Foundations of Kinesiology (4)
- KIN 3750 Sport in Contemporary Society (4)
- KIN 4410 Sport and Exercise Psychology (5)

III. Option Requirements

(In addition to the upper division Core requirements listed above, students must complete one of the following options.)

A. Pre-Athletic Training Option (39 units)

The Pre-Athletic Training option provides an opportunity to specialize in prevention, management and rehabilitation of athletic injuries. The program is not accredited by the National Athletic Trainers Association so students will need to complete additional coursework to become certified. The major with this option totals 90-94 units.

1. Lower Division (20 units)

- BIOL 1001 (or 1005), 1002 (or 1004 or 1005) Introduction to Biology, Lab (5)
- BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
- KIN 1625 Nutrition and Performance (4)
- KIN 2600 Prevention and Care of Athletic Injuries (4)
- KIN 2650 CPR and First Aid (2)

2. Upper Division (19 units)

- KIN 3600 Evaluation and Care of Athletic Injuries (5)
- KIN 3601 Athletic Training: Modalities and Rehabilitation (4)
- KIN 4030 Professional Field Experience (2)
- KIN 4600 Athletic Training Practicum (2, 2)
- KIN 4610 Exercise Prescription (4)

B. Exercise Nutrition and Wellness Option (52 units)

The Exercise Nutrition and Wellness option explores the relationship between nutrition and exercise. Both metabolic and behavioral implications are investigated. The major with this option totals 103-107 units.

1. Lower Division (28 units)

- BIOL 1001 (or 1005), 1002 (or 1004 or 1005) Introduction to Biology, Lab (5)
- BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
- BIOL 2020 Human Physiology and Anatomy II (5)
- CHEM 1100 Introduction to College Chemistry (5), or equivalent.
- KIN 1625 Nutrition and Performance (4)
- KIN 2600 Prevention and Care of Athletic Injuries (4)

2. Upper Division (24 units)

- KIN 4005 Exercise Nutrition and Metabolism (4)
- KIN 4010 Contemporary Perspectives in Exercise Nutrition (4)
- KIN 4030/4031 Professional Field Experience (4)
- KIN 4330 Clinical Exercise Physiology (4)
- KIN 4610 Exercise Prescription (4)
- KIN 4615 Exercise and Stress (4)
C. Pre-Physical Therapy Option (68-69 units)
The Pre-Physical Therapy option satisfies the majority of, if not all, prerequisite coursework needed to gain admission to various California Schools of Physical Therapy. The major with this option totals 119-124 units.

1. Lower Division (51 units)
   - BIOL 1401 Molecular and Cellular Biology (5)
   - BIOL 1403 Animal Biology (5)
   - BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
   - BIOL 2020 Human Physiology and Anatomy II (5)
   - CHEM 1101, 1102, 1103 General Chemistry (15)
   - PHYS 2701 Force, Mass and Motion (4)
   - PHYS 2702 Heat, Sound, Electricity and Magnetism (4)
   - PHYS 2703 Light, and Modern Physics (4)
   - KIN 2600 Prevention and Care of Athletic Injuries (4)

2. Upper Division (13 units)
   - KIN 3600 Evaluation and Care of Athletic Injuries (5)
   - KIN 4030/4031 Professional Field Experience (4)
   - PSYC 4410 Abnormal Psychology (4)

3. Elective (4-5 Units)
   - BIOL 2025 Introduction to Microbiology (5)
   - BIOL 4160 Medical Physiology (4)
   - CHEM 2301 Survey of Organic Chemistry (4)
   - KIN 4330 Clinical Exercise Physiology (4)
   - KIN 4615 Exercise and Stress (4)
   - PSYC 4420 Developmental Psychology (4)
   - STAT 1000 Elements of Probability and Statistics (5)
   - STAT 3031 Statistical Methods in Biology (4)

D. Physical Education Teaching Option (47 units)
Note: Due to policy changes from the California Commission on Teacher Credentialing and the Federal No Child Left Behind mandate, the Physical Education Option is periodically reviewed and changed to meet current state and federal standards. Consult a Physical Education Option Advisor for details and course requirements once they are available.

This option is designed to prepare students for teaching physical education in grades K-12 in public and private schools. The approved curriculum meets the Standard Requirements by the California Commission on Teacher Credentialing. The major with this option totals 94-98 units.

1. Lower Division Requirements (7 units)
   - BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
   - KIN 2650 CPR and First Aid (2)

2. Upper Division Requirements (36 units)
   - Theory-Analysis-Practice Courses (16 units)
     - DANC 3235 Dance for Children (4)
     - KIN 3072 Individual and Dual Sports (3)
     - KIN 3075 Aquatic and Outdoor Education (3)
     - KIN 3079 Combatives and Fitness Activities (3)
     - KIN 3080 Team Sports and Field Sports (3)
   - Foundation Course (4 units)
     - KIN 4008 Adapted Physical Activity (4)
   - Pedagogical Courses (12 units)
     - EDUI 5090 Computer Application in Educational Settings (4)
     - KIN 4004 Elementary School Physical Education (4)
     - KIN 4006 Secondary School Physical Education (4)

3. Field Experience (4 units)
   - KIN 4031 Professional Field Experience (2, 2)
   (Must be taken concurrently with KIN 4004 and 4006)

E. Special Studies Option (41 units minimum)
The Special Studies option provides students the opportunity to design an individualized course of study which focuses upon interdisciplinary topics or themes related to Kinesiology. A unique aspect of this option is the requirement of coursework outside the department which is related to sport and exercise phenomena (e.g., mass communication and sport, business management and fitness programs). The major with this option totals 92 units minimum.

1. Lower Division (5 units)
   - BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)

2. Upper Division (32 units minimum)
   - Students may design an individualized option consisting of a minimum of 32 units. Five courses (20 units) must be taken from those listed for the Exercise Nutrition and Wellness option, the Athletic Training option, and/or the Physical Education Teaching option. In addition, a minimum of three related courses (12 units) must be taken outside the department. All Special Studies option programs must receive approval from the department chair before coursework is initiated.
   - Field Experience (4 units)
     - KIN 4030 Professional Field Experience (1-4) and/or KIN 4031 Professional Field Experience (1-4)

IV. Performance Requirements (6-10 units)
The skill proficiency requirement for all major students in Kinesiology, regardless of option, involves satisfactory completion of one (1) activity course, at the beginning level, in each of five categories: Swimming, Combatives, Team Sports, Individual or Dual Sports, and
Fitness Activities. Therefore, the student must have completed a minimum of five different activities. The student must repeat an activity, at the intermediate level, to complete the minimum six (6) unit requirement.

Students possessing demonstrable skill and knowledge of sport may obtain credit in that activity by successfully challenging the appropriate course. In special circumstances, students may petition the department chair for a waiver. Students may not challenge Fitness Activities.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor in Kinesiology consists of 39 units.

The minor in Kinesiology serves students who wish to acquire knowledge of Kinesiology as a secondary academic focus. It also enables students who have a degree in another field to meet the prerequisite coursework requirements for the Master of Science degree in Kinesiology.

1. Lower Division Prerequisite (5 units)
   BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)

2. Upper Division Core (9 units)
   - KIN 3300 Measurement and Evaluation (5)
   - KIN 3305 Structural Kinesiology (4)

3. Upper Division Electives (18 units)
   - Complete two of the following:
     - KIN 3310 Biomechanics (5)
     - KIN 3320 Exercise Physiology (5)
     - KIN 3330 Motor Learning and Control (5)
   - Complete two of the following:
     - KIN 3700 History of Sport and Physical Education (4)
     - KIN 3740 Philosophical Foundations of Kinesiology (4)
     - KIN 3750 Sport in Contemporary Society (4)

4. Field Experience (4 units)
   KIN 4030 Professional Field Experience I (1-4) and/or KIN 4031 Professional Field Experience II (1-4)

5. Performance Requirements (3 units)
   Complete at least one proficiency in at least three of the designated categories: aquatics, team sports, individual or dual sports, combatives, and fitness activities.

Certificate Program

Pre-Physical Therapy Certificate
See description of this program in the Pre-Professional Programs chapter of this catalog.

Single Subject Matter Preparation Program
See the Single Subject Matter Preparation Program chapter in the undergraduate section of this catalog for a description of the Single Subject Matter Preparation Program in Physical Education.

Undergraduate Courses

Lower Division Courses (Course prefix: KIN)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000-1055</td>
<td>Beginning Activities (1 each)</td>
</tr>
<tr>
<td></td>
<td>May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.</td>
</tr>
<tr>
<td>00</td>
<td>Badminton</td>
</tr>
<tr>
<td>01</td>
<td>Basketball</td>
</tr>
<tr>
<td>06</td>
<td>Softball</td>
</tr>
<tr>
<td>07</td>
<td>Swimming</td>
</tr>
<tr>
<td>09</td>
<td>Volleyball</td>
</tr>
<tr>
<td>10</td>
<td>Weight Training</td>
</tr>
<tr>
<td>12</td>
<td>Fitness Training</td>
</tr>
<tr>
<td>13</td>
<td>Judo</td>
</tr>
<tr>
<td>16</td>
<td>Taekwondo Karate</td>
</tr>
<tr>
<td>17</td>
<td>Soccer</td>
</tr>
<tr>
<td>18</td>
<td>Self Defense--Women</td>
</tr>
<tr>
<td>21</td>
<td>Golf</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>1011</td>
<td>Beginning Circuit Training (1)</td>
</tr>
<tr>
<td>1015</td>
<td>Hapkido Self Defense (1)</td>
</tr>
<tr>
<td>1039</td>
<td>Beginning Capoeira (1)</td>
</tr>
<tr>
<td>1043</td>
<td>Beginning Pilates (1)</td>
</tr>
<tr>
<td>1044</td>
<td>Beginning Boot Camp Fitness (1)</td>
</tr>
<tr>
<td>1054</td>
<td>Beginning Flag Football (1)</td>
</tr>
<tr>
<td>1055</td>
<td>Beginning Table Tennis (1)</td>
</tr>
<tr>
<td>1610</td>
<td>Introduction to Kinesiology (4)</td>
</tr>
<tr>
<td>1625</td>
<td>Nutrition and Performance (4)</td>
</tr>
<tr>
<td>1626</td>
<td>Nutrition and Performance for Bodies at Play (4)</td>
</tr>
<tr>
<td>1888</td>
<td>Women and Sport in Our World (4)</td>
</tr>
<tr>
<td>2000-2047</td>
<td>Intermediate Activities (1 each)</td>
</tr>
</tbody>
</table>

- 00 Badminton
- 01 Basketball
- 06 Softball
- 07 Swimming
- 09 Volleyball
- 10 Weight Training
- 12 Fitness Training
- 16 Taekwondo
- 17 Soccer
- 21 Golf
- 24 Tennis
- 35 Tai Chi
- 38 Kick Boxing
- 39 Capoeira
- 40 Varied Activities
- 41 Aerobic Conditioning
- 45 Firm and Tone
- 47 Indoor Soccer

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>Intermediate Circuit Training (1)</td>
<td>Aerobic conditioning and resistance training for increased toning and overall body conditioning. Proper warm-up and cool down. Heart rate monitoring. Circuit changes throughout the quarter. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.</td>
</tr>
</tbody>
</table>
### Upper Division Courses (Course prefix: KIN)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 2034          | Intermediate Yoga (1)  
Introduction to more variations of well-known Yoga positions, emphasizing a balanced approach to Yoga that embraces relaxation, flexibility, strength and cardiovascular training. Students are encouraged to develop a unique individual practice appropriate for their fitness level and goals. Prerequisite: Previous course in Yoga or consent of instructor. May be repeated once for credit, for a maximum of 2 units. Two hrs. act. |
| 2043          | Intermediate Pilates (1)  
A more advanced and challenging approach to the concepts and exercises learned in Beginning Pilates. Building endurance of the muscle groups will be the focus of this course. It is designed to retrain the core muscles and limbs through repetition. The results of this practice will ultimately lead to the most efficient movement possible. May be repeated once for credit, for a maximum of 2 units. Two hrs. act. |
| 2044          | Intermediate Flag Football (1)  
Emphasis on intermediate skills, strategies, safety, and sportsmanship involved in playing both competitively and recreationally. Prerequisite: Beginning or intermediate level flag football course or consent of instructor. May be repeated once for credit, for a maximum of 2 units. Two hrs. act. |
| 2054          | Intermediate Table Tennis (1)  
Emphasis on more advanced and challenging skill development, rules, strategies, safety, and etiquette necessary to play both competitively and recreationally. May be repeated once for credit, for a maximum of 2 units. Two hrs. act. |
| 2300          | Nutrition for Healthy Bodies (4)  
Basic concepts of personal nutrition and fitness in relationship to a healthy lifestyle; physical and psycho-social factors; various mind-body options. Develop individualized programs for lifelong wellness and the maintaining of healthy minds and bodies. Lecture, team, and class discussions, media aids, and active participation. |
| 2330          | Prevention and Care of Athletic Injuries (4)  
Beginning course in the recognition, management, reconditioning, and prevention of injuries occurring in physical activity. Recommended preparation: BIOL 2010 or equivalent. |
| 2350          | CPR and First Aid (2)  
Principles and procedures of adult and pediatric CPR and First Aid to maintain life in emergency situations. Meets qualifications for Red Cross first aid and CPR certification. Not open to students with credit for KIN 4650 or KIN 4651. A-F grading only. 4 hrs. act. |
| 2700          | Women and Sport (4)  
Examination of the cultural dynamics of females and sport from a sociological and historical perspective. Not open to students with credit for KIN 1888. |
| 3008          | Stretch for Strength (2)  
Fitness instruction in range of motion and strengthening aspects of exercise. Includes principles of Yoga and Pilates to improve core strength and flexibility. May be repeated once for credit, for a maximum of 4 units. Four hrs. act. |
| 3072          | Individual and Dual Sports (3)  
Theory, analysis, and practice of the skills, techniques, and knowledge necessary for the teaching of individual and dual sports. Participation required. Prerequisites: one college-level course in individual sports and one in dual sports, or consent of the instructor. Two hrs. lect., 2 hrs. act. |
| 3075          | Aquatics and Outdoor Education (3)  
Theory, analysis, and practice of the skills, techniques, and knowledge necessary for the teaching of aquatics and outdoor education. Participation required. Prerequisites: one college-level course in aquatics and one in an outdoor education activity, or consent of the instructor. Two hrs. lect., 2 hrs. act. |
| 3079          | Combatives and Fitness Activities (3)  
Theory, analysis, and practice of the skills, techniques, and knowledge necessary for the teaching of combatives and fitness activities. Participation required. Prerequisites: one college-level course in combative skills and one in fitness activities, or consent of the instructor. Two hrs. lect., 2 hrs. act. |
| 3080          | Team Sports and Field Sports (3)  
Theory, analysis, and practice of the skills, techniques and knowledge necessary for the teaching of team sports and field sports. Participation required. Prerequisites: one college-level course in team sports and one in field sports, or consent of the instructor. Two hrs. lect., 2 hrs. act. |
| 3200          | Sport in Film: Cultural Perspectives (4)  
Societal values, politics, mores, and individual and group behavior related to sport participation as illustrated in film. |
| 3250          | Kinesiological Foundations of Physical Education (4)  
Kinesiological concepts of physical performance and physical education. Anaerobic and aerobic activities; health concepts in relation to cardiovascular and other diseases; exercise and diet; principles of motor learning and development; and psychosocial dynamics of activity. Not for credit in KIN major. |
| 3251          | Physical Education for the Classroom Teacher: Physical Considerations (4)  
Examination of activity participation of children; particular emphasis on physical variables. Relationship of exercise physiology, biomechanics, and growth and development to physical activity. Integration of physical activity with classroom activities, in the physical and health sciences. |
| 3252          | Physical Education for the Classroom Teacher: Psycho-Social Considerations (4)  
Examination of activity participation of children with emphasis on psycho-social variables. Topics from the sport and exercise psychology and sport humanities literature as it relates to physical teaching. Integration of physical activity with other classroom activities emphasized. |
| 3255          | Fitness and Wellness for a Lifetime (4)  
A comprehensive overview of health education. Focus on the core dimensions of wellness. 4 hrs. act. |
Physical and psycho-social factors that contribute to lifelong wellness. Exercise, nutrition, stress and related issues from both conceptual and practical (movement and relaxation techniques) perspectives.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3300</td>
<td>Measurement and Evaluation (5)</td>
<td>Theory and application of measurement and assessment procedures related to physical activity. STAT 1000 highly recommended.</td>
<td>Four hrs. lect., 3 hrs. lab.</td>
</tr>
<tr>
<td>3310</td>
<td>Biomechanics (5)</td>
<td>Biomechanics of human movement and the mechanical and muscular analysis of movement patterns. Prerequisites: BIOL 2010 (or 2011); KIN 3300, KIN 3305. Miscellaneous course fee. See quarterly Class Schedule for current fee. Four hrs. lect., 3 hrs. lab.</td>
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</tr>
<tr>
<td>3320</td>
<td>Exercise Physiology (5)</td>
<td>The physiological parameters and mechanisms that determine adaptations of the physiological systems of human beings in response to exercise. Prerequisites: BIOL 2010 (or 2011); KIN 3300, KIN 3305. Miscellaneous course fee. See quarterly Class Schedule for current fee. Four hrs. lect., 3 hrs. lab.</td>
<td></td>
</tr>
<tr>
<td>3330</td>
<td>Motor Learning and Control (5)</td>
<td>The nature of sensorimotor skills. Analysis of the motor systems and mechanisms of basic sensorimotor integration. An overview of skill acquisition related primarily to sport and exercise. Prerequisites: BIOL 2010 (or 2011); KIN 3300, KIN 3305. Miscellaneous course fee. See quarterly Class Schedule for current fee. Four hrs. lect., 3 hrs. lab.</td>
<td></td>
</tr>
<tr>
<td>3340</td>
<td>Motor Development (4)</td>
<td>Theoretical perspectives relevant in motor development research. Physical growth and maturation process from infancy to old age, including development and aging effects of specific body systems. Relevant social, cultural, psychosocial, and cognitive influences on human movement across the life span. Prerequisites: KIN 3300 and KIN 3305. Not open to students with credit for KIN 4340. A-F grading only.</td>
<td></td>
</tr>
<tr>
<td>3350</td>
<td>Sport and Exercise Psychology (5)</td>
<td>Theoretical and practical application of psychological factors in sport, exercise, rehabilitation and other physical activity settings. Topics include: motivation, anxiety, observational, learning, imagery, exercise adherence, injury and youth sport participation. Prerequisite: KIN 3300 with at least a grade of C. Not open to students with credit for KIN 4410. A-F grading only. Four hrs. lect., 3 hrs. lab.</td>
<td></td>
</tr>
<tr>
<td>3500-3553</td>
<td>Advanced Activities (2 each)</td>
<td>Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 4 units. Four hrs. act.</td>
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</tr>
<tr>
<td>3500</td>
<td>00 Badminton</td>
<td></td>
<td></td>
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<tr>
<td>3500</td>
<td>01 Basketball</td>
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<td></td>
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<tr>
<td>3500</td>
<td>06 Softball</td>
<td></td>
<td></td>
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<tr>
<td>3500</td>
<td>07 Aquatics</td>
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<tr>
<td>3500</td>
<td>10 Weight Training</td>
<td></td>
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<tr>
<td>3500</td>
<td>16 Taekwondo</td>
<td></td>
<td></td>
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<tr>
<td>3500</td>
<td>17 Soccer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3500</td>
<td>21 Golf</td>
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<tr>
<td>3500</td>
<td>25 Water Polo</td>
<td></td>
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<tr>
<td>3500</td>
<td>28 Jogging</td>
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<tr>
<td>3500</td>
<td>40 Club Sports</td>
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<tr>
<td>3500</td>
<td>41 Aerobic Conditioning</td>
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<tr>
<td>3500</td>
<td>47 Indoor Soccer</td>
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<tr>
<td>3500</td>
<td>52 Track and Field</td>
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<tr>
<td>3500</td>
<td>53 Baseball</td>
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<tr>
<td>3542</td>
<td>Aerobic Instructor Training (2)</td>
<td>Skills and knowledge necessary to teach music-based aerobics classes. Fitness assessment, choreography, routines, and music selection. Students gain experience teaching an aerobics class. Prerequisite: advanced level aerobic skills. Four hrs. act.</td>
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<tr>
<td>3545</td>
<td>Competition Conditioning (2)</td>
<td>Fitness instruction and activities in preparation for athletic competition. Designed for individuals who are at advanced levels of physical conditioning. Consent of instructor required. Four hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3555</td>
<td>Tournament Volleyball (2)</td>
<td>Instruction and competitive play for skilled performers. Prerequisite: advanced volleyball proficiency. May be repeated once for credit, for a maximum of 4 units. CR/NC grading only. Four hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3560</td>
<td>Lifeguard Training (4)</td>
<td>Development of skills and knowledge necessary to keep patrons of aquatic facilities safe in and around the water. This course includes training with aquatic specific first aid, cardiopulmonary resuscitation (CPR) and Automated External Defibrillator (AED) training. Prerequisites: advanced swimming proficiency. Two hrs. lect., 4 hrs. act.</td>
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<tr>
<td>3561</td>
<td>Water Safety Instructor (2)</td>
<td>Development of skills and knowledge leading to American Red Cross Water Safety Instructor certification. Prerequisites: Advanced swimming proficiency, American Red Cross Community First Aid and Safety certification or equivalent. Four hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3600</td>
<td>Evaluation and Care of Athletic Injuries (5)</td>
<td>Application of kinesiology in the recognition, management, reconditioning, and prevention of athletic injuries. Prerequisites: BIOL 2010 or equivalent, KIN 2600, and 3305. Four hrs. lect., 3 hrs. lab.</td>
<td></td>
</tr>
<tr>
<td>3601</td>
<td>Athletic Training: Modalities and Rehabilitation (4)</td>
<td>Theory and application of therapeutic modalities; design of sports related injury rehabilitation programs. Prerequisite: KIN 2600 and 3600.</td>
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</tr>
<tr>
<td>3700</td>
<td>History of Sport and Physical Education (4)</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Prerequisites/Notes</td>
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<tr>
<td>3735</td>
<td>Sport, Racism, and Ethnicity (4)</td>
<td>Examination of the history of sport and physical education in the United States from the early 19th century to the present with emphasis on the interplay between sport, social institutions and identity. Prerequisite: junior standing.</td>
<td></td>
</tr>
<tr>
<td>3740</td>
<td>Philosophical Foundations of Kinesiology (4)</td>
<td>Examination of the various ontological, epistemological, and axiological issues in sport with particular attention given to how conceptualizations of embodiment and ethical issues impact sport, physical education, and movement.</td>
<td></td>
</tr>
<tr>
<td>3750</td>
<td>Sport in Contemporary Society (4)</td>
<td>Examination of sport as a significant social and cultural institution that impacts and is impacted by the larger society. It analyzes past and contemporary issues and controversies through various sociological frameworks. Recommended preparation: SOC 1000 (or one of 1001, 1002, 2001, or 2002).</td>
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</tr>
<tr>
<td>3755</td>
<td>Issues in Kinesiology and Physical Education (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in kinesiology and physical education. May be repeated for credit when content varies, for a maximum of 8 units.</td>
<td></td>
</tr>
<tr>
<td>3760</td>
<td>Adapted Physical Activity (4)</td>
<td>Neurophysiological and functional aspects of psychomotor disabilities. Planning, teaching and evaluating modified physical education activities to meet the needs of exceptional students found in general physical education classes. Participation in laboratory setting required. Prerequisite: KIN 4340.</td>
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</tr>
<tr>
<td>3765</td>
<td>Secondary School Physical Education (4)</td>
<td>Planning, development, implementation and evaluation of physical education programs in culturally diverse settings in grades K-5. Emphasis on games, sports, fundamental rhythms, and dance movements as delineated for instruction by the California State Physical Education Framework.</td>
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<tr>
<td>3770</td>
<td>Elementary School Physical Education (4)</td>
<td>Planning, development, implementation and evaluation of physical education programs in culturally diverse settings in grades 6-12 as delineated by the California State Physical Education Framework. Emphasis on games, sports, dance, fitness activities and outdoor education as delineated for instruction by the California State Physical Education Framework.</td>
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<tr>
<td>3780</td>
<td>Exercise Nutrition and Metabolism (4)</td>
<td>Kinesiological discussion of nutrients and ergogenic aids and their interaction within metabolic pathways. Emphasis upon the role of nutrients in bioenergetics and how manipulation of nutrient intake alters energy production during exercise. Prerequisites: CHEM 1011 or equivalent, KIN 3320.</td>
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<tr>
<td>3790</td>
<td>Secondary School Physical Education (4)</td>
<td>Study and application of current issues in exercise nutrition. Emphases on health and fitness program design and lifestyle management. Prerequisites: KIN 1625, 2600, 4005, 4616. Miscellaneous course fee. See quarterly Class Schedule for current fee.</td>
<td></td>
</tr>
<tr>
<td>3800</td>
<td>Professional Field Experience I (1-4)</td>
<td>Instruction in and practice of professional technique and methodology through supervised field work. Prerequisites: completion of skill requirements for the major or minor.</td>
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<tr>
<td></td>
<td>Professional Field Experience II (1-4)</td>
<td>Off campus field experience related to degree options. May be repeated for credit toward degree/certificate, as follows: Single-Option Majors: a maximum of 4 units credit; Double-Option Majors: each option, a maximum of 4 units credit (8 units total credit). CR/NC grading only.</td>
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<tr>
<td>3805-</td>
<td>Intercollegiate Sports (1 each)</td>
<td>May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.</td>
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</tr>
<tr>
<td>3815</td>
<td>Medical Applications of Exercise Physiology (1)</td>
<td>Study and practice of techniques for administering and evaluating the results of graded exercise stress tests. Analysis of normal and abnormal cardiopulmonary response to exercise. Emphasis on exercise electrocardiography. Prerequisite: KIN 3320 or equivalent.</td>
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<tr>
<td>3820</td>
<td>Motor Development (4)</td>
<td>Physical growth, body build and motor development through childhood, adolescence and the adult stage. Age and sex differences in typical motor performances. Prerequisite: BIOL 2010 (or 2011) or equivalent.</td>
<td></td>
</tr>
<tr>
<td>3830</td>
<td>Senior Seminar (4)</td>
<td>Seminar on special topics selected from current kinesiological research literature. Prerequisites: Senior standing or consent of instructor. May be repeated once for credit when content varies, for the maximum of 8 units.</td>
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<tr>
<td>4004</td>
<td>Computer Application in Kinesiology (4)</td>
<td>Using computers as an adaptive, interactive, and exploratory tool for understanding different applications in physical education settings. Word processing, database, spread sheet, multimedia, and internet applications. Prerequisite: Junior standing.</td>
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<tr>
<td>4005</td>
<td>Clinical Exercise Physiology (4)</td>
<td>Study and practice of techniques for administering and evaluating the results of graded exercise stress tests. Analysis of normal and abnormal cardiopulmonary response to exercise. Emphasis on exercise electrocardiography. Prerequisite: KIN 3320 or equivalent.</td>
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<tr>
<td>4010</td>
<td>Motor Development (4)</td>
<td>Physical growth, body build and motor development through childhood, adolescence and the adult stage. Age and sex differences in typical motor performances. Prerequisite: BIOL 2010 (or 2011) or equivalent.</td>
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</tr>
<tr>
<td>4030</td>
<td>Senior Seminar (4)</td>
<td>Seminar on special topics selected from current kinesiological research literature. Prerequisites: Senior standing or consent of instructor. May be repeated once for credit when content varies, for the maximum of 8 units.</td>
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</tr>
<tr>
<td>4030</td>
<td>Exercise Nutrition and Metabolism (4)</td>
<td>Kinesiological discussion of nutrients and ergogenic aids and their interaction within metabolic pathways. Emphasis upon the role of nutrients in bioenergetics and how manipulation of nutrient intake alters energy production during exercise. Prerequisites: CHEM 1011 or equivalent, KIN 3320.</td>
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</tr>
<tr>
<td>4040</td>
<td>Adapted Physical Activity (4)</td>
<td>Neurophysiological and functional aspects of psychomotor disabilities. Planning, teaching and evaluating modified physical education activities to meet the needs of exceptional students found in general physical education classes. Participation in laboratory setting required. Prerequisite: KIN 4340.</td>
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</tr>
<tr>
<td>4045</td>
<td>Contemporary Perspectives in Exercise Nutrition (4)</td>
<td>Study and application of current issues in exercise nutrition. Emphases on health and fitness program design and lifestyle management. Prerequisites: KIN 1625, 2600, 4005, 4616. Miscellaneous course fee. See quarterly Class Schedule for current fee.</td>
<td></td>
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<tr>
<td>4050</td>
<td>Professional Field Experience I (1-4)</td>
<td>Instruction in and practice of professional technique and methodology through supervised field work. Prerequisites: completion of skill requirements for the major or minor.</td>
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<tr>
<td>4060</td>
<td>Professional Field Experience II (1-4)</td>
<td>Off campus field experience related to degree options. May be repeated for credit toward degree/certificate, as follows: Single-Option Majors: a maximum of 4 units credit; Double-Option Majors: each option, a maximum of 4 units credit (8 units total credit). CR/NC grading only.</td>
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<tr>
<td>4070</td>
<td>Intercollegiate Sports (1 each)</td>
<td>May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.</td>
<td></td>
</tr>
<tr>
<td>4080</td>
<td>Medical Applications of Exercise Physiology (1)</td>
<td>Study and practice of techniques for administering and evaluating the results of graded exercise stress tests. Analysis of normal and abnormal cardiopulmonary response to exercise. Emphasis on exercise electrocardiography. Prerequisite: KIN 3320 or equivalent.</td>
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</tr>
<tr>
<td>4090</td>
<td>Computer Application in Kinesiology (4)</td>
<td>Using computers as an adaptive, interactive, and exploratory tool for understanding different applications in physical education settings. Word processing, database, spread sheet, multimedia, and internet applications. Prerequisite: Junior standing.</td>
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<tr>
<td>4100</td>
<td>Clinical Exercise Physiology (4)</td>
<td>Study and practice of techniques for administering and evaluating the results of graded exercise stress tests. Analysis of normal and abnormal cardiopulmonary response to exercise. Emphasis on exercise electrocardiography. Prerequisite: KIN 3320 or equivalent.</td>
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<tr>
<td>4110</td>
<td>Motor Development (4)</td>
<td>Physical growth, body build and motor development through childhood, adolescence and the adult stage. Age and sex differences in typical motor performances. Prerequisite: BIOL 2010 (or 2011) or equivalent.</td>
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<tr>
<td>4120</td>
<td>Senior Seminar (4)</td>
<td>Seminar on special topics selected from current kinesiological research literature. Prerequisites: Senior standing or consent of instructor. May be repeated once for credit when content varies, for the maximum of 8 units.</td>
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<tr>
<td>4130</td>
<td>Exercise Nutrition and Metabolism (4)</td>
<td>Kinesiological discussion of nutrients and ergogenic aids and their interaction within metabolic pathways. Emphasis upon the role of nutrients in bioenergetics and how manipulation of nutrient intake alters energy production during exercise. Prerequisites: CHEM 1011 or equivalent, KIN 3320.</td>
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<tr>
<td>4140</td>
<td>Adapted Physical Activity (4)</td>
<td>Neurophysiological and functional aspects of psychomotor disabilities. Planning, teaching and evaluating modified physical education activities to meet the needs of exceptional students found in general physical education classes. Participation in laboratory setting required. Prerequisite: KIN 4340.</td>
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<tr>
<td>4150</td>
<td>Contemporary Perspectives in Exercise Nutrition (4)</td>
<td>Study and application of current issues in exercise nutrition. Emphases on health and fitness program design and lifestyle management. Prerequisites: KIN 1625, 2600, 4005, 4616. Miscellaneous course fee. See quarterly Class Schedule for current fee.</td>
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<tr>
<td>4160</td>
<td>Professional Field Experience I (1-4)</td>
<td>Instruction in and practice of professional technique and methodology through supervised field work. Prerequisites: completion of skill requirements for the major or minor.</td>
<td></td>
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<tr>
<td>4170</td>
<td>Professional Field Experience II (1-4)</td>
<td>Off campus field experience related to degree options. May be repeated for credit toward degree/certificate, as follows: Single-Option Majors: a maximum of 4 units credit; Double-Option Majors: each option, a maximum of 4 units credit (8 units total credit). CR/NC grading only.</td>
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<tr>
<td>4180</td>
<td>Intercollegiate Sports (1 each)</td>
<td>May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.</td>
<td></td>
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<tr>
<td>4190</td>
<td>Medical Applications of Exercise Physiology (1)</td>
<td>Study and practice of techniques for administering and evaluating the results of graded exercise stress tests. Analysis of normal and abnormal cardiopulmonary response to exercise. Emphasis on exercise electrocardiography. Prerequisite: KIN 3320 or equivalent.</td>
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<tr>
<td>4200</td>
<td>Computer Application in Kinesiology (4)</td>
<td>Using computers as an adaptive, interactive, and exploratory tool for understanding different applications in physical education settings. Word processing, database, spread sheet, multimedia, and internet applications. Prerequisite: Junior standing.</td>
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<tr>
<td>4210</td>
<td>Clinical Exercise Physiology (4)</td>
<td>Study and practice of techniques for administering and evaluating the results of graded exercise stress tests. Analysis of normal and abnormal cardiopulmonary response to exercise. Emphasis on exercise electrocardiography. Prerequisite: KIN 3320 or equivalent.</td>
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<tr>
<td>4220</td>
<td>Motor Development (4)</td>
<td>Physical growth, body build and motor development through childhood, adolescence and the adult stage. Age and sex differences in typical motor performances. Prerequisite: BIOL 2010 (or 2011) or equivalent.</td>
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<tr>
<td>4230</td>
<td>Senior Seminar (4)</td>
<td>Seminar on special topics selected from current kinesiological research literature. Prerequisites: Senior standing or consent of instructor. May be repeated once for credit when content varies, for the maximum of 8 units.</td>
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<tr>
<td>4240</td>
<td>Exercise Nutrition and Metabolism (4)</td>
<td>Kinesiological discussion of nutrients and ergogenic aids and their interaction within metabolic pathways. Emphasis upon the role of nutrients in bioenergetics and how manipulation of nutrient intake alters energy production during exercise. Prerequisites: CHEM 1011 or equivalent, KIN 3320.</td>
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<td>Course Code</td>
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<tr>
<td>4600</td>
<td>Athletic Training Practicum (2)</td>
<td>Supervised clinical experience in techniques of athletic training. Prerequisite: KIN 2600 or concurrent. Open only to students in departmental option in athletic training/clinical exercise. May be repeated two times for credit, for a maximum of 6 units.</td>
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</tr>
<tr>
<td>4610</td>
<td>Exercise Prescription (4)</td>
<td>Application of kinesiological principles to methods of physical conditioning. Systems of progressive resistance exercise, physical fitness and training. Exercise programs for special conditions and effects. Prerequisite: KIN 3320. Three hrs. lect., 3 hrs. lab.</td>
<td></td>
</tr>
<tr>
<td>4614</td>
<td>Exercise and Well-Being (4)</td>
<td>The nature of physical activity in relationship to fitness, health, and well-being. Understanding stress and the prevention of diseases related to stress and inactive lifestyles. Prerequisite: Upper division standing. Not for KIN major or minor credit.</td>
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</tr>
<tr>
<td>4615</td>
<td>Exercise and Stress (4)</td>
<td>The nature of stress and its relationship to exercise. The physiology of the stress response, its role in disease, and immediate and long term interactions of exercise and stress. Prerequisite: PSYC 1000 highly recommended.</td>
<td></td>
</tr>
<tr>
<td>4650</td>
<td>First Aid and Safety (4)</td>
<td>Principles and procedures of first aid to maintain life in emergency situations. Meets qualifications for Red Cross and cardiopulmonary resuscitation certification. A-F grading only. One hr. lect., 2 hrs. act. (Please see Errata page for correction to this content.)</td>
<td></td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
<td></td>
</tr>
</tbody>
</table>
Department Information

Department of Ethnic Studies
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4099
Phone: (510) 885-3255, FAX: (510) 885-4786

Professor Emeritus
George R. Miller (Anthropology), Ph.D. University of California, Berkeley

Professors
Richard A. García (History), Ph.D. University of California, Irvine
L. Ilana Holbrook (Modern Languages and Literatures), Ph.D. University of California, Davis
Michael Lee (Geography and Environmental Studies), Ph.D. London School of Economics (England)
Amy Oakland (Art), Ph.D. University of Texas at Austin

Associate Professors
Luz Calvo (Ethnic Studies), Ph.D. University of California, Santa Cruz
Jesús Díaz-Caballero (Modern Languages and Literatures), Ph.D. University of Pittsburgh
Marcelo Paz (Modern Languages and Literatures), Ph.D. University of Cincinnati

Assistant Professors
Carlos Salomon (Ethnic Studies), Ph.D. University of New Mexico

Director: Carlos Salomon

Program Description

Latin America, with its rich Indigenous, African, and Iberian heritage, is a unique and extraordinarily varied region of the world about which North Americans are often very poorly informed. Yet the relationship between Latin America and the U.S. is necessarily a close one: we are bound together by history, by geography, by long-standing financial and commercial relationships, by the often-disappointed expectation on the part of the U.S. that Latin America is our natural political and military ally, and finally, by the growing number of men and women of Latin American origin and culture living in the U.S.

The Latin American Studies major draws on courses taught in the Departments of Anthropology, Art, Economics, Ethnic Studies, Geography and Environmental Studies, History, and Modern Languages and Literatures, Philosophy and Political Science; as well as courses taught from time to time in other departments. It provides the student with an opportunity to acquire a broad and deep understanding of the richness of Latin American and Iberian civilizations. The major in Latin American Studies is a liberal arts program which is of particular interest to students planning to enter careers related to the Latin American region (teaching, business, government, or other agency service, for example.)

A minor, double major, or Liberal Studies option in Latin American Studies is appropriate for students who wish to enrich their career prospects by establishing expertise not only in their major fields and in Spanish or Portuguese, but also in Latin American culture and history. It is also desirable for students with majors in the liberal arts disciplines represented in the Latin American Studies major for whom a regional specialization adds another dimension to the mastery of the themes and methodologies of their major fields.

Student Learning Outcomes

Students graduating with a B.A. in Latin American Studies from Cal State East Bay should have:

1. developed a basic knowledge of Latin American history, including a grasp of major events, details, and timelines as well as an interpretive approach to understanding Latin America's past;
2. developed an understanding of the geographic diversity of Mexico, Central America, the Caribbean Islands, and South America, including a background in the geographic dimensions of the physical and human environments, natural resources, their distribution, exploitation, and consumption in Latin America today;
3. developed an understanding of the diverse cultural, anthropological, and/or sociological background of Latin America;
4. developed an understanding and appreciation of the rich and diverse cultural heritage and life of Latin America, especially in literature, theater, and the plastic and performing arts; and
5. integrated their geographical, historical, economical, social, political, and cultural knowledge of Latin America in an interdisciplinary and comparative way.

Features

A unique feature of the program is the possibility of concentrating on Spanish or Portuguese speaking areas of Latin American and the Iberian Peninsula.

Cal State East Bay has established study abroad and exchange programs with the Instituto Tecnológico y de Estudios Superiores de Monterrey,
Queretaro Campus. Credit can be arranged for numerous other summer and academic-year programs. Majors are encouraged to spend at least one quarter studying in Latin America.

Majors may also do research on Latin America as an intern at one of the many agencies of the Bay Area which need volunteers and the occasional paid employee. Interns will help evaluate proposals for grants-in-aid submitted by Latin American communities to work with recent Latin American migrants. The Program Director maintains a file on study abroad and internship opportunities.

LAS students are expected to develop a close relationship with their advisor because of the importance placed on "extra-campus" activities and the special needs of coordination required in an interdisciplinary major. This relationship can be one of the strongest features recommending the program.

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**Major Requirements (B.A.)**

The Latin American Studies major consists of 60–84 units; the B.A. degree requires a total of 180 units.

I. **Lower Division Requirements (12–36 units)**
   
   Select one course from each group:
   
   A. ANTH 1000 Introduction to Anthropology (4), or ANTH 1300 Introduction to Cultural Anthropology (4), or SOC 1000 Introduction to Sociology (4), or ES 1001 Introduction to Ethnic Studies (4)
   
   B. ECON 1000 Economics in Public Issues (4), or ECON 2301 Principles of Microeconomics (4)
   
   C. GEOG 2300 Cultural Geography (4), or GEOG 2310 Economic and Resource Geography (4)
   
   D. Modern Language Requirement
   
   Demonstrate proficiency in Spanish or Portuguese by completion of the third quarter of intermediate language at CSUEB, or by an examination administered by the Latin American Studies Program.

II. **Upper Division Core Courses (16 units)**

   Select four courses from the following:
   
   - LAST 3000 The Latin American World (4)
   - LAST 3260 Latin American Women and Globalization (4)
   - LAST 3370 Latin American Social Movements (4)
   - HIST 3605 Modern Latin America (4)
   - INTS 3100 Global Systems (4)

III. **Distribution Requirements (24 units)**

   A. **Art and Literature (8 units)**
   
   Select two courses from two different disciplines:
   
   - ART 3010 Latin American Art (4)
   - ART 3055 Ancient American Art (4)
   - ES 3147 The Fictional Africa (4)
   - MLL 3461 Introduction to Spanish-American Literature: 1492-1900 (4)
   - MLL 3463 Introduction to Spanish-American Literature: 1900 to the Present (4)
   - MLL 3495 Spanish-American Culture and Civilization (4)
   - MLL 4495 A Single Movement, Country or Theme: Spanish-American Literature (4)

   B. **Society and Environments (8 units)**
   
   Select one course in Geography and another in either Anthropology or Ethnic Studies:
   
   - ANTH 3250 Precolombian America: Aztec, Inca, Maya (4)
   - ES 3800 Peoples of Central America (4)
   - GEOG 3510 Geography of Mexico, Central America, and the Caribbean Islands (4)
   - GEOG 3515 Geography of South America (4)

   C. **History and Contemporary Politics (4 units)**
   
   Select at least one course:
   
   - ES 3103 The African Diaspora (4)
   - ES 3230 Oral Traditions (4)
   - ES 3130 Slavery in the Americas (4)
   - HIST 3138 Imperial Spain (4)
   - HIST 3600 Colonial Latin America (4)
   - HIST 3622 Mexico since 1810 (4)
   - HIST 3632 Film and Society in Latin America (4)
   - POSC 3280 Political Systems of Latin America (4)

   D. **Latino Experience in U.S. (4 units)**
   
   Select at least one course:
   
   - ES 3202 Latina/o Writers (4)
   - ES 3210 Latinas in the United States (4)
   - ES 3805 Latin American Immigration (4)
   - HIST 3515 Mexican-Americans and the American Southwest (4)
   - SOC 3416 Sociology of the Mexican American Family (4)

IV. **Electives (8 units)**
Any other course certified by the LAS Director to have suitable content for the program.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 24 units; at least 18 must be outside major department. Students must complete 8 units of college-level Spanish or pass a program-administered examination. (0-8 units)

A. Required Courses (8 units)

- LAST 3000 The Latin American World (4)
- LAST 3370 Latin American Social Movements (4)

B. Complete four additional courses (16 units) from the following lists. At least two disciplines must be represented.

- ANTH 3250 Pre-Columbian America: Aztec, Inca, Maya (4)
- ART 3010 Latin American Art (4)
- ART 3055 Ancient American Art (4)
- ES 3103 The African Diaspora (4)
- ES 3130 Slavery in the Americas (4)
- ES 3147 The Fictional Africa (4)
- ES 3202 Latino/a Writers (4)
- ES 3210 Latinas in the United States (4)
- ES 3230 Oral Traditions (4)
- ES 3800 Peoples of Central America (4)
- ES 3805 Latin American Immigration (4)
- GEOG 3510 Geography of Mexico, Central America, and the Caribbean Islands (4)
- GEOG 3515 Geography of South America (4)
- HIST 3138 Imperial Spain (4)
- HIST 3515 The Mexican American and the American Southwest (4)
- HIST 3600 Colonial Latin America (4)
- HIST 3605 Modern Latin America (4)
- HIST 3622 Mexico since 1810 (4)
- HIST 3632 Film and Society in Latin America (4)
- LAST 3260 Latin American Women and Globalization (4)
- MLL 3461 Introduction to Spanish-American Literature: 1492-1900 (4)
- MLL 3463 Introduction to Spanish-American Literature: 1900 to the Present (4)
- MLL 3495 Spanish-American Culture and Civilization (4)
- MLL 4495 A Single Movement, Country or Theme: Spanish American Literature (4)
- POSC 3280 Political Systems of Latin America (4)

Undergraduate Courses

Latin American Studies (Course prefix: LAST)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3000</td>
<td>The Latin American World (4)</td>
</tr>
<tr>
<td></td>
<td>Interdisciplinary survey of Latin American civilization from pre-Columbian times to the present. Focus on social and political evolution, literature, material culture, and physical environments. Some attention to the Latino experience in the U.S.</td>
</tr>
<tr>
<td>3260</td>
<td>Latin American Women and Globalization (4)</td>
</tr>
<tr>
<td></td>
<td>Interdisciplinary examination of Latin American women. Focus on migration patterns, border economies, &quot;maquiladora&quot; factories, femicide, sex trade, neo-liberal economic policies, and autonomous women's organizations.</td>
</tr>
<tr>
<td>3370</td>
<td>Latin American Social Movements (4)</td>
</tr>
<tr>
<td></td>
<td>Interdisciplinary examination of the effects of global capitalism on Latin American women. Focus on migration patterns, border economies, &quot;maquiladora&quot; factories, femicide, sex trade, neo-liberal economic policies, and autonomous women's organizations.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Latin American Studies (4)</td>
</tr>
<tr>
<td></td>
<td>Interdisciplinary examination of contemporary political, artistic, and social movements in Latin America. Focus on revolution, labor, artistic and intellectual current issues, and human rights.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>

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Program Description

The Liberal Studies Major aims to provide a rich educational experience through coursework in a broad range of academic disciplines. The student is guaranteed a breadth of academic experience, as well as depth in a single field. The Bachelors Plus Early Pathway (BPEP) Liberal Studies/Credential Program offers selected students interested in a teaching career an opportunity for concurrent subject matter and professional preparation. See the "Bachelors Plus Early Pathway Liberal Studies/Credential Program" section later in this chapter.

The broad-based, interdisciplinary nature of Liberal Studies provides a knowledge base and the communication and analytical skills appropriate to many careers and occupations. Hence, the Liberal Studies major is excellent preparation not only for teaching, but for graduate work, for law school, and for employment in business and government.

Student Learning Outcomes

Students graduating with a B.A. in Liberal Studies from Cal State East Bay should:

- demonstrate understanding of issues of self, society and nature as an educated generalist, through application of deep knowledge in at least one subject area or discipline, and broad knowledge integrating multiple disciplines.
- demonstrate articulate communication (written and oral) skills.
- practice independent thinking tempered by respect for others and the environment; to become an informed, responsible, active citizen.

Career Opportunities

- Administrator
- Business Executive
- Civil Servant
- Customer Service Representative
- Foreign Service Officer
- Human Resources Administrator
- Journalist
- Law
- Manager
- Personnel Representative
- Salesperson
- Stockbroker
- Teacher (K-6)
- Travel Agent
- Writer

Features

The primary function of the Liberal Studies Office is to provide proper advising for completing the major. Friendly, experienced office staff, including two full-time academic advisors, are available to help at every step. Advising is available through individual appointments and on a "drop-in" basis.

Although the Liberal Studies Teacher Preparation Degree Pathway is a multiple subject matter preparation program, there is no longer an exemption from the multiple subject test, which is now the CSET or "California Subject Exam for Teachers" (no longer the MSAT). The Liberal Studies Teacher Preparation Degree Pathway is aligned with Content Standards for K-6 curriculum and the CSET, and is, therefore, the best preparation for future K-6 teachers.

The Liberal Studies major is offered both day and evening, and on both the Hayward and Concord Campuses. However, Concord Campus and evening-only students may not find a full range of courses and options available to them.
Major Requirements (B.A.)

The major with the Liberal Arts pathway consists of 92 units. The major with the Teacher Preparation pathway consists of a minimum of 144 units. The B.A. degree requires a minimum of 180 units. The Core Curriculum includes upper-division GE requirements in Areas C4 and D4. Students must be certain to meet with a GE advisor to select courses satisfying all other GE breadth requirements.

I. Core Curriculum (20 units)
All Liberal Studies students must complete the following courses. The Liberal Studies Core Curriculum satisfies Upper Division GE requirements in Humanities, Area C4 and Social Sciences, Area D4.

- ANTH 3000 Anthropology in the Modern World (4) (Area D4)
- ENGL 3020 Advanced Expository Writing (4)
  - or ENGL 3025 Introduction to Technical and Professional Writing (4)
- HDEV 4110 Child Cognitive Development (4)
  - or HDEV 4130 Social Development of Children (4)
- HIST 3400 America to 1900 (4)
  - or HIST 3017 The Twentieth Century (4) (Area C4)
- MUS 3002 What to Listen for in Music (4) (Area C4)
  - or THEA 3225 Theater Today (4) (Area C1 or C4)

II. Degree Pathway Requirements

The Liberal Studies Major offers two different pathways to degree completion. Majors must choose either the Teacher Preparation pathway or the Liberal Arts pathway.

A. Teacher Preparation Degree Pathway (124 units minimum)

Students selecting the Teacher Preparation Degree Pathway must complete the following two components:

1. Required Courses (106-107 units)
   
   Note: As some of these courses may also be used to satisfy GE requirements, please consult with a Liberal Studies Advisor when selecting courses to ensure the most efficient progress toward degree completion.

   - ART 1020 The Creative Process (4)
   - BIOL 1000 Basic Concepts in Biology (5)
   - CHEM 1100 Introduction to College Chemistry (5)
   - DANC 3021 Cultural Dance Forms (3)
     - or DANC 3235 Dance For Children (4)
   - ENGL 3010 Modern English Grammar (4)
     - or ENGL 2005 Grammar for Writers (4)
   - One of the following:
     - ENGL 2030 Introduction to Critical Writing on Fiction (4)
     - ENGL 2040 Introduction to Critical Writing on Poetry (4)
     - ENGL 2050 Introduction to Critical Writing on Drama (4)
   - Any Upper Division English Literature (4)
   - GEOG 2300 Cultural Geography (4)
     - or GEOG 3505 Geography of California (4) (Area D4)
   - GEOL 1000 Earth Systems Science (5)
   - HDEV 4120 Childhood Language Development (4)
     - or ANTH 3800 Language and Culture (4) (Area D4)
   - HDEV 4150 The Child in the Family and in the Community (4)
     - or HDEV 3301 Childhood Development (4)
   - HIST 1014 World Civilizations I (4)
   - HIST 1015 World Civilizations II (4)
   - HIST 3500 History of California (4)
   - HSC 1100 Health: Maintenance of Wellness (4)
   - KIN 3251 Physical Education for the Classroom Teacher: Physical Considerations (4)
   - KIN 3252 Physical Education for the Classroom Teacher: Psycho-Social Considerations (4)
   - MATH 2011 Number Systems (4)
   - MATH 4012 Geometry and Measurement (4)
   - MATH 4013 Statistics, Data Analysis, and Probability (4)
   - MATH 4014 Algebra and Functions (4)
   - PHYS 1700 Elementary Physics (4)
   - PHYS 1780 Elementary Physics Lab (1)
   - POSC 1000 Introduction to Political Science (4)
     - or Upper Division POSC focusing on regional/international political systems (4)
   - SOC 1000 Introduction to Sociology (4)
     - or any SOC course not used in minor (4)
   - TED 3001 Exploring Education (3)
   - THEA 3650 Dramatic Activities for Children (4)
     - or MUS 3002 What to Listen for in Music (4)

2. Depth of Study (18 units minimum)
   
   This requirement may be satisfied by completing one of the methods listed below. In each of the following options, at least 18 units must be unique to the Depth of Study and may not be counted in any other areas of the Liberal Studies Major:

   a. Complete any Minor offered by the university
   b. Complete one of the following approved options:
      i. Childhood Studies (18-20 units, see below)
      ii. Special Education (26-29 units, see below)
      iii. Studies in Education (For BPEP students only) (20 units, see below)
c. With the approval of the Liberal Studies Director, students may create a special option (18 unit minimum)

B. Liberal Arts Degree Pathway (72 unit minimum)
Students selecting the Liberal Arts Degree Pathway must complete the following two components:

1. Liberal Studies Area Electives (48 units)
   Through consultation with Liberal Studies advisors, select 12 units of electives from each of the four areas listed below. At least 32 of the 48 Area Elective units must be from upper division courses numbered 3000 or higher. Courses used to satisfy Liberal Studies Area Electives MUST be approved by a Liberal Studies Advisor. No more than two courses from a single discipline may be taken within a single area:
   - Area 1: Social Sciences (Anthropology, Communications, Criminal Justice Administration, Geography, History, Political Science, Sociology)
   - Area 2: Natural Sciences/Mathematics (Biology, Chemistry, Geology, Math, Physics, Psychology, Statistics)
   - Area 3: Humanities (Art, English, Modern Languages, Music, Philosophy, Theater/Dance)

2. Depth of Study (24 units)
   This requirement may be satisfied by one of the methods below:
   a. Students may complete any Minor program offered by the university;
   b. Students may complete one of the following options:
      i. Organizational Leadership (28 units, see below)
      ii. Special Education (26-29 units, see below)
   c. With the approval of the Liberal Studies Director, students may create a Special Option of at least 24 units.

III. Approved Options for the Liberal Studies Major
A. Childhood Studies Option (18-20 units):
   - HDEV 3301 Child Development (4)
     or HDEV 4150 The Child in the Family and Community (4)
   - HDEV 4110 Child Cognitive Development (4)
     or HDEV 4130 Social Development of Children (4)
   - One of the following (4 units):
     DANC 3235 Dance for Children (4)
     or ENGL 4740 History of Children's Literature (4)
     or TED 4320 Art Skills for Teachers (4)
     or THEA 3650 Dramatic Activities for Children (4)
   - One of the following (3 or 4 units):
     ANTH 3740 Cross Cultural Studies in Child Rearing (4)
     or HDEV 4140 Theories of Childhood (4)
     or SOC 3410 Sociology of the Family (4)
     or TED 5021 Child Growth and Development (3)
   - One of the following (3 or 4 units):
     KIN 4100 Elementary School Physical Education (4)
     or PHIL 3701 Philosophy of Education (4)
     or PSYC 4440 Child Psychopathology (4)
     or TED 5351 Psychological Foundations of Education (4)

B. Organizational Leadership Option (28 units):
1. Required (12 units)
   - MGMT 3600 Theories of Management (4)
   - MGMT 3614 Organizational Behavior (4)
     or PUAD 4830 Organizational Theory and Human Behavior (4)
   - MGMT 4500 Business, Government, and Society (4)
     or POSC 3419 Labor Policy & Law (4)

2. Electives (16 units)
   - Group I (4 units)
     Select one from the following:
     - COMM 3530 Interviewing Principles and Practices (4)
     - MKTG 3495 Business Communication (4)
     Group II (12 units, at least 8 units must be upper division)
     Please consult with your advisor for a current list of acceptable courses.

C. Special Education Option (26-29 units):
   - EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)
   - EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4)
   - EPSY 5126 Special Education Law and Program Design (4)
   - EPSY 5136 Educational Practices: Moderate-Severe Disabilities (4)

   Select 10-13 units from at least two of the following groups (10-13 units)
   - Group 2: DANC 3235 Dance for Children (4), KIN 3305 Structural Kinesiology (4) (Prerequisite: BIOL 2010 or 2011), 4008 Adapted Physical Activity (4), REC 4600 Recreation Therapy Documentation and Assessment (4), 4601 Recreation Therapy Treatment and Programming (4)
TED 3001 (3) or 30 hours of documented experience in a special education setting.

D. Studies in Education Option (20 units, for BPEP Students only):
- TED 3005 Intermediate Field Experience in the Elementary School A (1)
- TED 3006 Intermediate Field Experience in the Elementary School B (1)
- TED 5110 Computer Based Technology in the Classroom (3)
- TED 5351 Psychological Foundations of Education (3)
- TED 5355 Equity and Diversity (4)
- TED 5366 Preparation to Teach English Learners in the Multiple Subject Classroom (4)
- TED 5378 Teaching Special Populations in General Education Settings (4)

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Bachelors Plus: Early Pathway Liberal Studies/Credential Program
The BPEP Liberal Studies/Credential Program combines, with minor changes, two outstanding programs on the Hayward and Concord campuses designed for future elementary school teachers: the Liberal Studies B.A. major and the Multiple Subject Credential Program in Teacher Education. The BPEP Program meets the requirements set by the California Commission on Teacher Credentialing for subject matter and professional preparation. A student who completes this program will be granted a B.A. degree major in Liberal Studies and, upon passage of the CSET Multiple Subject Examination and RICA examination, a Level I (Preliminary) Multiple Subject teaching credential.

The BPEP Program is an alternative to the traditional sequence of four years of undergraduate work and one year of post-baccalaureate work in the Teacher Education Department. That degree/credential path continues to exist and is chosen by most of our students. The BPEP Program is an intensive, accelerated program that combines subject matter coursework with training in educational methods and experience in the elementary school classroom.

The BPEP Program is a full-time commitment for two years including the intervening summer between the junior and senior years. During those years, students are required to take 16 to 22 units a quarter. As a result of this concentrated work-load, most students find it difficult to hold down a job during their time in the program. Final admission requirements for the Credential Program must be completed during the junior year. During the senior year, students are members of a Multiple Subject Credential Team. Members of the Team take their courses together and finish together. Thus, students are unable to move through the program at their own pace.

Admission
Students must declare Liberal Studies as their major and then contact the Liberal Studies office to apply for admission to the BPEP Program. Admission is a two stage process: (1) provisional admission during the summer prior to the student's junior year, and (2) final admission at the end of the junior year.

Provisional admission requirements are: a minimum GPA of 2.90; completion of TED 3001 or an equivalent course which requires a minimum of 20 hours of field experience in an elementary school classroom; and three letters of recommendation, including one from a teacher or principal verifying experience in a K-6 classroom. (One letter may be from the instructor in TED 3001 or equivalent course.) Final admission requirements are: passage of the CBEST examination; completion of 80% of the Liberal Studies major; a minimum GPA of 2.90 in coursework taken during the junior year; and an admission interview by the Multiple Subject Credential Team Leader.

Please contact the Liberal Studies office for information concerning admission forms, admission deadlines, and for the specific courses required during the junior and senior years.
Mission and Goals

University Library Mission Statement

The mission of the University Library at Cal State East Bay is to provide user-focused quality services and collections in support of undergraduate and graduate programs, faculty research, and the general information needs of the diverse community. The University Library provides access to recorded knowledge in all formats regardless of ownership. Consistent with the teaching mission of the university, the library assists students in becoming information competent, critical thinkers, and life-long learners. The University Library provides physical facilities to foster individual and collaborative teaching and learning and to encourage the exchange of ideas.

The Library's mission is accomplished through the following goals:

Goals

- Identify, acquire, organize, preserve, and provide access to pertinent recorded knowledge to support teaching, research, and creative activities.
- Develop and promote a comprehensive information literacy program.
- Provide an easily accessible, user-friendly and safe environment that fosters teaching and learning.
- Engage in outreach to the campus and wider communities to inform them about library resources and services, identify needed resources and services, and promote partnerships.
- Aspire to be a forward thinking, dynamic organization that is responsive and flexible in order to achieve its mission and goals.
- Continue to improve the library's effectiveness through systematic, on-going outcome assessment.

Information Literacy Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>1210</td>
<td>Introduction to Information Literacy (2)</td>
</tr>
<tr>
<td></td>
<td>Basic information literacy concepts. Research strategies and appropriate techniques for effectively identifying, acquiring, evaluating, using, and communicating information in various formats. Sections tailored to articulate with courses in first year thematic G. E. sequences in Areas B, C, and D. Prerequisite: enrollment in the First Year Cluster or permission of instructor. Not open to students with credit for 1551. A-F grading only.</td>
</tr>
</tbody>
</table>

| 1551          | Information Skills in the Electronic Age (2) |
|               | Instruction and practice in accessing information through print, electronic, and other non-print formats. Includes examination of the Library's collections as well as information available remotely through electronic means. Not open to students with credit for 1210. CR/NC grading only. |
### Marine Science

**Moss Landing Marine Laboratories**

Cal State East Bay does not offer an undergraduate degree in Marine Science. These undergraduate courses may fulfill major requirements for qualified upper division and graduate students. Please consult your major department. Such students can plan their academic schedules to provide for one or more terms at the Moss Landing Marine Laboratories and will be considered as in-residence at Cal State East Bay. Because Moss Landing Marine Laboratories operates on the semester system, careful planning is required for scheduling these semester unit courses. Students may also take one or two all-day courses at Moss Landing to supplement their on-campus schedule. (The Admissions Office has information for concurrent registration.)

For additional information on the Marine Sciences program at Moss Landing Marine Laboratories, see Marine Science in the Graduate section of this catalog.

**Undergraduate Courses**

Units are given in quarter units; hours are hours per week for a semester.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>4013</td>
<td>Marine Ecology (6) A field oriented introduction to the interrelationships between marine and estuarine organisms and their environment with emphasis on quantitative data collection and analysis. Prerequisites: BIOL 1110, STAT 3031 or equivalent and consent of instructor. Two hrs. lect., 6 hrs. lab/field.</td>
</tr>
<tr>
<td>4014</td>
<td>Quantitative Marine Science (6) Mathematical methods for analysis of biological, chemical, and physical data from the marine environment; experimental design, parametric and non-parametric statistics; computers and programming techniques. Prerequisites: Basic college math. Not for Biological Science B.S. degree credit or for Marine Science M.S. degree credit. Three hrs. lect., 3 hrs. lab.</td>
</tr>
<tr>
<td>4015</td>
<td>Marine Science Diving (4.5) Scientific SCUBA diving course. Diving physics, physiology, dive planning, research diving techniques, marine life identification, and diver rescue. Open water diver training includes navigation, search and light salvage, scientific methods, small boat diving, photography and videography, and night diving. Prerequisites: certified SCUBA diver (or equivalency as determined by instructor), upper division science major status, thorough physical examination, ability to pass swimming test, instructor's consent. One hr. lect., 6 hrs. lab.</td>
</tr>
<tr>
<td>4012</td>
<td>Marine Birds and Mammals (6) Systematics, morphology, ecology, and biology of birds and mammals. MSC 4013 recommended as prerequisite. Prerequisites: BIOL 3560. Two hrs. lect., 6 hrs. lab/field.</td>
</tr>
<tr>
<td>4113</td>
<td>Marine Ichthyology (6) The taxonomy, morphology and ecology of marine fishes. Prerequisites: BIOL 1403 or BIOL 3580. Not open to students with credit for BIOL 4570. Two hrs. lect., 6 hrs. lab/field.</td>
</tr>
<tr>
<td>4124</td>
<td>Marine Invertebrate Zoology I (6) A field oriented introduction to the structure, systematics, evolution and life histories of the major and minor marine phyla. MSC 4103 recommended as prerequisite. Prerequisites: college zoology or consent of instructor. Not open to students with credit for BIOL 3521-22. Two hrs. lect., 6 hrs. lab/field.</td>
</tr>
<tr>
<td>4125</td>
<td>Intertidal Invertebrates of California (4.5) A field oriented introduction to the structure, systematics, evolution and life histories of the minor marine invertebrate phyla. MSC 4103 and 4124 recommended as prerequisite. Prerequisites: BIOL 140. Not open to students with credit for BIOL 3521-22. One hr. lect., 6 hrs. lab/field.</td>
</tr>
<tr>
<td>4131</td>
<td>Marine Botany (6) Introduction to the plants of the sea, marshes, and dunes, with emphasis on the morphology, taxonomy and natural history of seaweeds and vascular plants. MSC 4103 recommended as prerequisite. Two hrs. lect., 6 hrs. lab/field.</td>
</tr>
<tr>
<td>4135</td>
<td>Physiological Ecology of Marine Algae (6) Biology of seaweeds and phytoplankton, modern methods in algae physiological research including respiration, enzyme activity, biochemical composition. Modern methods in algae physiological research, hands-on experience in basic electronic instrumentation, chemical separations, optical measurements, culturing methods, radiotracer techniques. Prerequisites: MSC 4103, 4131, 4144, or consent of instructor. Two hrs. lect., 6 hrs. lab/field.</td>
</tr>
<tr>
<td>4144</td>
<td>Biological Oceanography (6) The ocean as an ecological system. Emphasis on the complexity of organismal-environmental interaction of the plankton, the transfer of organic matter between trophic levels and nutrients cycles. Laboratory sessions will include methods in sampling, shipboard techniques, identification of the plankton, and current analytical techniques. Prerequisites: general biology, general chemistry. Two hrs. lect., 6 hrs. lab.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1.5-6) May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
<tr>
<td>Course Number</td>
<td>Course Information</td>
</tr>
<tr>
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</tr>
</tbody>
</table>
| 4141          | Geological Oceanography (6)  
A study of the structures, physiography and sediments of the sea bottom and shoreline. Recommended: any course in general oceanography (concurrent registration satisfactory). One field trip. Prerequisite: GEOL 3702. Not open to students with credit for GEOL 4141. Three hrs. lect., 3 hrs. lab. |
| 4142          | Physical Oceanography (6)  
An introduction to the nature and causes of various oceanic motions including currents, waves, tides, and mixing and the physical properties of seawater. Limited use of calculus. Recommended: college physics. Prerequisite: college algebra; Three hrs. lect., 3 hrs. lab. |
| 4143          | Chemical Oceanography (6)  
An introduction to the theoretical and practical aspects of the chemistry of the oceans, including major salts, dissolved gases, nutrient ions, carbonate system, transient tracers, and shipboard sampling techniques. Prerequisites: One year college chemistry. Two hrs. lect., 6 hrs. lab. |
| 4900          | Independent Study (1.5-6)  
May be repeated for credit with consent of instructor, for a maximum of 12 units. |

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Modern technological society has many fields that need specialists in mathematics. The Department of Mathematics and Computer Science offers a variety of courses intended for those who want to pursue a career in mathematics as well as those who wish to develop quantitative and problem-solving skills for use in other fields.

Students choose to major in mathematics for a number of reasons. Some intend to become high school, community college, or university teachers. Others seek careers in business, industry, or government, where mathematically trained people are in demand. An undergraduate major in mathematics is one of the best preparations not only for studying advanced Mathematics, but also for graduate work in Computer Science, Statistics, Operations Research, Actuarial Science, and the Natural Sciences. Most law schools are pleased to accept students with rigorous and logical training in Mathematics.

Many students combine their study of mathematics with the study of computer science. A popular option is to obtain a double major in Mathematics and Computer Science. Or students may earn a major in one of these fields and minor in the other.
The major requires seven lower division courses and eleven upper division mathematics courses. The requirements are flexible enough that a student can choose one of several options according to his/her interest.

Each student is assigned a faculty advisor when (s)he declares a major and should consult this advisor regularly. A booklet containing a number of sample schedules, as well as further information about the mathematics major, is available in the Mathematics/Computer Science Student Service Center (North Science 337) or see the departmental website.

Although it is not a requirement, mathematics majors are urged to take as many courses as possible in an area such as Biology, Chemistry, Economics, Management Sciences, Physics, or Statistics. These are all fields where Mathematics plays a significant role, and it is important for a mathematics major to appreciate the relevance of the subject in applications. Study of one or more foreign languages is also recommended, especially for those students anticipating graduate study.

**Student Learning Outcomes**

Students graduating with a B.S. in Mathematics from Cal State East Bay will:

1. possess technical competence including uses of calculus, linear systems, differential equations; understanding of axiomatic systems; have the ability to read and create proofs;
2. possess a fundamental understanding of Mathematics theory including:
   a. applications of calculus, linear systems,
   b. relations of algebraic systems and classical problems, and
   c. roles of definitions and proofs in algebra and analysis;
3. be able to work effectively as a team member;
4. have an understanding of their professional and ethical responsibilities and appreciate the impact of mathematics in the societal context;
5. communicate effectively, both in written and oral form.

**Career Opportunities**

- Actuary
- Computer Analyst
- Cryptologist
- Economist
- Engineer
- Engineering Analyst
- Financial Analyst
- Market Researcher
- Mathematician
- Numerical Analyst
- Operations Research Analyst
- Personnel Representative
- Programmer
- Professor/Teacher
- Publisher Representative
- Statistician
- Stockbroker
- Technical Writer

**Features**

Cal State East Bay students can participate in the Mathematics Club, which features lectures by students and faculty and offers a variety of social activities.

Each year the department awards a number of scholarships covering a portion of fees for the subsequent year. Scholarship applications may be obtained from the department student service center office during the Winter quarter.

Qualified upper division and graduate students may be employed as graders for classes.

Students who intend to earn a high school teaching credential after graduation may apply most of their mathematics major courses to meet the standards of California's Single Subject Matter Preparation Program for a Single Subject Credential in Mathematics.

Math majors who continue on to earn a master's degree in mathematics may pursue a career as a community college mathematics teacher.

**Preparation**

For Advanced Placement course equivalencies, see Registration chapter.

**Major Requirements (B.S.)**

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72 units; the BS degree requires a total of 180 units.

I. Lower Division Requirements (28 units)

This requirement consists of the following seven courses:

- MATH 1304, 1305, 2304, 2305 The Calculus sequence
- CS 1160 Introduction to Computer Science I
- MATH 2101 Elements of Linear Algebra
• MATH 2150 Discrete Structures
  (Mathematics majors may substitute MATH 3151 or MATH 4151 for MATH 2150.)

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to begin with should call the department office. Students may not enroll in any baccalaureate level mathematics or computer science courses unless they have met the Entry Level Mathematics (ELM) requirement, or are exempt from it. Contact the Testing Office 885-3661 for more information.

II. Upper Division Requirements (44 units)

Every Mathematics major is required to complete one of the following options:

Option A (44 units)

Required courses:
- MATH 3000 Introduction to Abstract Mathematics and Proofs (4) (Mathematics majors are encouraged to take MATH 3000 as early as possible.)
- MATH 3100 Linear Algebra (4)
- MATH 3331 Differential Equations (4)

The following two sequences:
- MATH 3121-3122 Abstract Algebra I and II (4, 4)
- MATH 3300-3301 Analysis I and II (4, 4)

One sequence from the following five:
- MATH 3151-4151 Combinatorial Mathematics (4, 4)
- MATH 3215-4215 Geometry (4, 4)
- MATH 3361-4361 Differential Equations (4, 4)
- MATH 3750-4750 Numerical Analysis (4, 4)
- MATH 3841-4841 Optimization (4, 4)

Electives: Two upper division courses (8 units), which may include any upper division mathematics courses not already taken for the major or STAT 3401, 3402, 3502, 3503, 3601, 4401, 4515, 4601 or CS 4170, 4245 (but not MATH 4012, 4013, 4014).

Option B - Applied Mathematics (44 units)

Required courses:
- MATH 3000 Introduction to Abstract Mathematics and Proofs (4) (Mathematics majors are encouraged to take MATH 3000 as early as possible.)
- MATH 3100 Linear Algebra (4)
- MATH 3331 Differential Equations (4)

Three out of the four courses from the following two sequences:
- MATH 3121-3122 Abstract Algebra I and II (4, 4)
- MATH 3300-3301 Analysis I and II (4, 4)

Two sequences from the following four:
- MATH 3151-4151 Combinatorial Mathematics (4, 4)
- MATH 3215-4215 Geometry (4, 4)
- MATH 3361-4361 Differential Equations (4, 4)
- MATH 3750-4750 Numerical Analysis (4, 4)
- MATH 3841-4841 Optimization (4, 4)

Electives: One upper division course (4 units), which may include any upper division mathematics course not already taken for the major or STAT 3401, 3402, 3502, 3503, 3601, 4401, 4515, 4601 or CS 4170, 4245 (but not MATH 4012, 4013, 4014).

Option C - Mathematics Teaching (44 units)

Required courses:
- MATH 3000 Introduction to Abstract Mathematics and Proofs (4) (Mathematics majors are encouraged to take MATH 3000 as early as possible.)
- MATH 3121 Abstract Algebra I (4)
- MATH 3100 Linear Algebra (4)
- MATH 3215 Geometry I (4)
- MATH 3300 Analysis I (4)
- MATH 3331 Differential Equations (4)
- MATH 3600 Number Theory (4)
- MATH 4040 History of Mathematics (4)
- STAT 3401 Introduction to Probability Theory I (4)

One from the following three courses:
- MATH 3122 Abstract Algebra II (4)
- MATH 3301 Analysis II (4)
- MATH 4215 Topics in Geometry (4)

Electives: One upper division course (4 units), which may include any upper division mathematics courses not already taken for the major or STAT 3401, 3402, 3502, 3503, 3601, 4401, 4515, 4601 or CS 4170, 4245 (but not MATH 4012, 4013, 4014).

A student who completes Option C can satisfy rather easily the requirements for the State-approved Single Subject Matter Preparation Program in Mathematics, a program of courses designed to prepare the student for entry into the Credential Program in Mathematics, provided that
judicious choices of mathematics elective courses and general education courses are made. To accomplish this, the student who completes Option C must:

1. Choose MATH 4901 Senior Seminar (4) in the mathematics elective category;
2. Complete STAT 3502 Statistical Inference (4); and
3. Complete TED 3001 Exploring Education (3) and/or other field experience approved by the Mathematics Subject Matter Preparation Adviser: At least 45 hours of classroom experience in an instructional capacity is required.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 28 units.

Required courses:
- MATH 1304 Calculus I (4)
- MATH 1305 Calculus II (4)
- MATH 2101 Elements of Linear Algebra (4)
- MATH 2304 Calculus III (4)
- MATH 3000 Introduction to Abstract Mathematics and Proofs (4)

One course from the following list:
- MATH 3100 Linear Algebra (4)
- MATH 3121 Abstract Algebra I (4)
- MATH 3215 Geometry I (4)
- MATH 3300 Analysis I (4)
- MATH 3331 Differential Equations (4)

One 4-unit course which may include any upper division mathematics courses not already taken for the minor or STAT 3401, 3502 or CS 4170, 4245 (but not MATH 4012, 4013, 4014).

Minor in Computer Science

The complete description of this minor may be found in the Computer Science chapter in the undergraduate section of this catalog. It is relatively easy for a Mathematics major to complete a minor in Computer Science. To do this, the student should take the following courses in addition to those required for the mathematics major.

- CS 2360 Introduction to Computer Science II (4)
- CS 2430 Computer Organization and Assembly Language Programming (4)

Three upper division courses as follows:

A. Two courses from the following list:
- CS 3120 Programming Language Concepts (4)
- CS 3240 Data Structures and Algorithms (4)
- CS 3430 Computer Architecture (4)
- CS 4560 Operating Systems (4)

B. One upper division Computer Science elective. This may be a third course from (A) or any course from category IV of the requirements for the major in Computer Science.

Single Subject Matter Preparation Program

See the Single Subject Matter Preparation Program chapter in the undergraduate section of this catalog for a description of the Single Subject Matter Preparation Program in Mathematics.

Certificate in Foundational Mathematics Teaching

The Foundational Mathematics certificate program is designed for students who would like to teach middle school math or would like to become K-5 math specialists. Credentialed teachers who complete this program and pass the Math CSET I and II exams qualify for the Foundational-level Added Authorization in Mathematics.

Candidate for this program should have or plan to obtain their Multiple Subjects teaching credential or a Single Subject teaching credential in a subject other than mathematics. Students who complete this program will be well prepared to teach mathematics at the K-8 level, will have completed the State required Methods Courses in Single Subject Mathematics and will have the content knowledge required to pass the Math CSET I and II exams.

The certificate consists of 21 units.

Prerequisite:
MATH 2011 Number Systems (4)

Required Courses (21 units):

- MATH 1130 College Algebra (4)
- MATH 4012 Geometry and Measurement (4)
- MATH 4013 Statistics, Data Analysis, and Probability (4)
- MATH 4030 Advanced Study of School Mathematics (4)
- TED 5390 Instructional Methods for the Single Subject Classroom I (3)
- TED 5391 Instructional Methods for the Single Subject Classroom II (2)

Note: Students who complete the Foundational Mathematics Teaching Certificate program will still need to pass the first two math CSET exams to establish subject matter competency for the credential.

Basic Skills Courses

Mathematics (Course prefix: MATH)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>0801, 0802</td>
<td>Elementary Algebra A and B (4 each)</td>
</tr>
<tr>
<td></td>
<td>A two-quarter sequence in basic mathematics and elementary algebra. On successful completion of this sequence, students should register for MATH 0950. Prerequisites: MATH 0801- appropriate ELM score (ranges available from the Testing Office or at <a href="http://www.csueastbay.edu/ge/remedialinfo/scores.htm">http://www.csueastbay.edu/ge/remedialinfo/scores.htm</a>); MATH 0802 - Grade of CR in MATH 0801. Not for credit toward baccalaureate degree. A/B/C/NC grading only.</td>
</tr>
<tr>
<td>0899</td>
<td>Elementary and Intermediate Algebra Self-Paced (4)</td>
</tr>
<tr>
<td></td>
<td>Topics from basic mathematics, elementary and intermediate algebra. Self-paced, offered Summer only. Variable required on-campus hours to be arranged. Students will re-take the ELM for placement at the end of the course. Units will not count toward the baccalaureate degree. Prerequisite: Entering Freshman status; appropriate ELM score (ranges available from the Testing Office or at <a href="http://www.csueastbay.edu/ge/remedialinfo/scores.htm">http://www.csueastbay.edu/ge/remedialinfo/scores.htm</a>). A/B/C/NC grading only.</td>
</tr>
<tr>
<td>0900</td>
<td>Elementary Algebra (4)</td>
</tr>
<tr>
<td></td>
<td>A one quarter course in elementary algebra. On successful completion of this course, students should register for MATH 0950. Prerequisite: appropriate ELM score (ranges available from the Testing Office or at <a href="http://www.csueastbay.edu/ge/remedialinfo/scores.htm">http://www.csueastbay.edu/ge/remedialinfo/scores.htm</a>). Not open to students with credit for MATH 0802. Not for credit toward baccalaureate degree. A/B/C/NC grading only.</td>
</tr>
<tr>
<td>0911</td>
<td>Algebra Lab (2)</td>
</tr>
<tr>
<td></td>
<td>Supplemental study, discussion, and practice in the theory, problems, and applications of elementary and intermediate algebra. Corequisite: enrollment in MATH 0801, 0802, 0900, or 0950. Not for credit toward baccalaureate degree. May be repeated once for credit (non-baccalaureate), with permission of the Math/CS Department, for a maximum of 4 units. A/B/C/NC grading only.</td>
</tr>
<tr>
<td>0950</td>
<td>Intermediate Algebra (4)</td>
</tr>
<tr>
<td></td>
<td>Operations with algebraic expressions, exponents and radicals; linear and quadratic equations; systems of equations and inequalities; linear and quadratic functions and their graphs; elementary conic sections; word problems. Prerequisite: Grade of CR in MATH 0802 or MATH 0900; or an appropriate ELM score (ranges available from the Testing Office or at <a href="http://www.csueastbay.edu/ge/remedialinfo/scores.htm">http://www.csueastbay.edu/ge/remedialinfo/scores.htm</a>). Not for credit toward baccalaureate degree. A/B/C/NC grading only.</td>
</tr>
</tbody>
</table>

Undergraduate Courses

Computer Science courses offered by the Department of Mathematics and Computer Science are fully described in the Computer Science chapter in the undergraduate section of this catalog.

A student who has recently taken a pre-calculus course in high school should be prepared to enter calculus. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Such students, and others who are unsure about what mathematics course to begin with, should call the Mathematics and Computer Science Department for advice. Also, the Testing Office (885-3661) offers placement tests that can assist students in finding the appropriate starting class.

Mathematics (Course prefix: MATH)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>1110</td>
<td>The Nature of Mathematics (4)</td>
</tr>
<tr>
<td></td>
<td>This course is designed to introduce the student to mathematics as an art and mathematics as a tool, emphasizing the place of mathematics in today's world. Will satisfy the general education requirement for non-majors. Prerequisite: satisfactory completion of Entry-Level Mathematics requirement. Must complete course with a grade of &quot;C-&quot; or better in order to earn General Education, Area B4, credit.</td>
</tr>
<tr>
<td>1130</td>
<td>College Algebra (4)</td>
</tr>
<tr>
<td></td>
<td>Functions and graphs: polynomials, rational functions, exponential and logarithmic functions. See note at beginning of course listings. Prerequisite: satisfactory completion of Entry-Level Mathematics requirement. Must complete course with a grade of &quot;C-&quot; or better in order to earn General Education, Area B4, credit.</td>
</tr>
<tr>
<td>1300</td>
<td>Trigonometry and Analytic Geometry (4)</td>
</tr>
<tr>
<td></td>
<td>Definitions, properties and graphs of the trigonometric functions. Applications. Analytic geometry of conic sections. A preparatory course for calculus. See note at beginning of course listings. Prerequisites: MATH 1130 or departmental permission. Must complete course with a grade of &quot;C-&quot; or better in order to earn General Education, Area B4, credit.</td>
</tr>
<tr>
<td>1304</td>
<td>Calculus I (4)</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3100</td>
<td>Linear Algebra (4)</td>
<td>Abstract vector spaces, linear transformations, matrices and determinants. Dual spaces and inner product spaces. Eigenvalues and eigenvectors. Prerequisites: MATH 2101 and either 2150 or 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3100.)</td>
<td></td>
</tr>
<tr>
<td>3121</td>
<td>Abstract Algebra I (4)</td>
<td>Homomorphisms and isomorphisms. An introduction to Rings, Polynomial Rings, and Factorization. Selected topics as time permits. Prerequisites: MATH 2101 and either 2150 or 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3121.)</td>
<td></td>
</tr>
<tr>
<td>3122</td>
<td>Abstract Algebra II (4)</td>
<td>Rings and fields: integral domains, ideals, quotient rings, polynomial rings, roots of polynomials, algebraic extensions and finite fields. Selected topics as time permits. Prerequisites: MATH 2101 and either 2150 or 3000.</td>
<td></td>
</tr>
<tr>
<td>3151</td>
<td>Combinatorics (4)</td>
<td>Theory of counting, including partitions, Stirling numbers, generating functions. Applications of Burnside's lemma from multiple transitivity to the Polya-Redfield Theorem. Ferrers diagrams, symmetric functions, and majorization. Prerequisites: MATH 2101 and either 2150 or 3000.</td>
<td></td>
</tr>
<tr>
<td>3215</td>
<td>Geometry I (4)</td>
<td>A rigorous, axiomatic approach to neutral and Euclidean geometry from an advanced standpoint. An introduction to non-Euclidean Geometries. Topics in Euclidean geometry to include congruence, area, parallelism, similarity, properties of circles and triangles, constructions, analytic and transformational geometry. Prerequisites: MATH 2101 and either 2150 or 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3215.)</td>
<td></td>
</tr>
<tr>
<td>3300</td>
<td>Analysis I (4)</td>
<td>Field properties of the real and complex numbers. Sequences of real numbers, Bolzano-Weierstrass theorem. Topology of R^n, metric spaces, connected and compact sets. Limits, continuity, intermediate and extreme value theorems. Other topics as time permits. Prerequisites: MATH 2101, 2304, and either 2150 or 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3300.)</td>
<td></td>
</tr>
<tr>
<td>3301</td>
<td>Analysis II (4)</td>
<td>Continuity, uniform continuity. Sequences and series of functions. Differentiation, chain rule, implicit and inverse function theorems. Introduction to Riemann Integration. Prerequisite: MATH 3300.</td>
<td></td>
</tr>
<tr>
<td>3320</td>
<td>Calculus of Vector Functions (4)</td>
<td>Differentiation and integration of vector valued functions; gradient, divergence, and curl; cylindrical and spherical coordinates; theorems of Green and Stokes. Prerequisite: MATH 2304 and MATH 2101 (2101 may be taken concurrently).</td>
<td></td>
</tr>
<tr>
<td>3331</td>
<td>Differential Equations (4)</td>
<td>Methods of solution and applications of first order differential equations. Linear n-th order equations with emphasis on equations of 2nd order. Other topics may include power series solutions, Laplace transforms, linear systems. Prerequisite: MATH 2304.</td>
<td></td>
</tr>
<tr>
<td>3361</td>
<td>Ordinary Differential Equations (4)</td>
<td>Series solution of linear differential equations with variable coefficients, two point boundary value problems, systems of differential equations, phase plane analysis. Prerequisites: MATH 2101 and 3331.</td>
<td></td>
</tr>
<tr>
<td>3600</td>
<td>Number Theory (4)</td>
<td>Differential calculus. Limits and continuity. Exponential and logarithmic functions. Techniques and applications of differentiation. See note at beginning of course listings. Prerequisite: MATH 1300 or departmental permission. Must complete course with a grade of &quot;C-&quot; or better in order to earn General Education, Area B4, credit.</td>
<td></td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
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</tr>
<tr>
<td>3750</td>
<td>Numerical Analysis I (4)</td>
<td>Basic numerical methods and analysis; practical solutions of problems from engineering, science, and mathematics. Computer representation of real numbers, errors, root finding, interpolation, numerical integration, ordinary differential equations. Prerequisites: CS 1160, MATH 2101 and 2304. Cross-listed with CS 3750.</td>
<td></td>
</tr>
<tr>
<td>3841</td>
<td>Linear Programming (4)</td>
<td>Problems of maximizing or minimizing a linear function subject to linear constraints; typical applications involve planning (&quot;programming&quot;) the allocation of limited resources to achieve an optimal result. Topics include problem formulation, solution procedures, duality theory, sensitivity analysis, special problems (e.g., transportation and assignment problems). Prerequisite: MATH 2304 and competence in matrix algebra.</td>
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</tr>
<tr>
<td>3875</td>
<td>Mathematical Physics (4)</td>
<td>Mathematics theory and methods with applications to physics. In class physics laboratory explorations will utilize mathematical techniques to better understand physics phenomena. Prerequisite: MATH 1305. Co-requisite: MATH 2304. Cross-listed with PHYS 3875.</td>
<td></td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 2.0 GPA; departmental approval of activity; completion of lower division Mathematics major requirements and upper division standing. A maximum of 2 units will be accepted toward the Mathematics major. May be repeated for credit, for a maximum of 8 units. CR/NC grading only.</td>
<td></td>
</tr>
<tr>
<td>4012</td>
<td>Geometry and Measurement (4)</td>
<td>Properties of 2- and 3-dimensional figures including congruence, similarity, proportional reasoning, area, perimeter, volume, surface area. Informal constructive proofs of properties of angles, polygons, parallel lines and the Pythagorean theorem. Transformational geometry. Measurement systems, estimation, coordinate geometry. Prerequisite: MATH 2101. Not open to students with credit for MATH 4022.</td>
<td></td>
</tr>
<tr>
<td>4013</td>
<td>Statistics, Data Analysis, and Probability (4)</td>
<td>Displaying and interpreting data via graphs, tables and charts. Descriptive statistics, including mean, median, mode and range. Basic survey design, including possible sources of biases. Elementary discrete probability. Dependent and independent events. Prerequisites: MATH 2101 and satisfactory completion of the Entry Level Mathematics requirement. Cross-listed with STAT 4013. Not open to students with credit for MATH 4023.</td>
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</tr>
<tr>
<td>4014</td>
<td>Algebra and Functions (4)</td>
<td>Patterns and functional relationships. Linear and quadratic equations and inequalities. Interpretation of graphs, multiple representations of functions. Factoring and completing the square. Proportional reasoning. Systems of linear equations. Prerequisites: MATH 2101 and satisfactory completion of the Entry Level Mathematics requirement. Not open to students with credit for MATH 4024.</td>
<td></td>
</tr>
<tr>
<td>4030</td>
<td>Advanced Study of School Mathematics (4)</td>
<td>Foundations of school mathematics from an advanced standpoint. An in depth study of middle and high school level algebra, geometry and number theory and its applications, theoretical foundations and extensions. Intended for prospective elementary and middle school teachers. Prerequisites: Math 2101 and Math 1130 or consent of instructor. Not for credit in Mathematics or Computer Science major. A-F grading only.</td>
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</tr>
<tr>
<td>4040</td>
<td>History of Mathematics (4)</td>
<td>The historical development of mathematical ideas and techniques. Prerequisite: calculus or consent of instructor.</td>
<td></td>
</tr>
<tr>
<td>4121</td>
<td>Advanced Algebra (4)</td>
<td>Theory of groups, including factor groups, Jordan-Holder Theorem, Sylow theorems. Mappings and homomorphisms. Introduction to rings and fields. Topics continued in MATH 6121. Prerequisite: MATH 3122.</td>
<td></td>
</tr>
<tr>
<td>4215</td>
<td>Topics in Geometry (4)</td>
<td>Topics in geometry such as algebraic, differential, finite, or projective geometry, convexity, packing and tiling, polytopes, and isoperimetric problems. Prerequisites: MATH 3215 or consent of instructor. May be repeated once for credit with consent of the chair, for a maximum of 8 units.</td>
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<tr>
<td>4235</td>
<td>Introduction to Knot Theory (4)</td>
<td>An introduction to the theory of knots and links. Topics covered include Reidemeister moves, knot invariants, including 3-colorings, the linking number, the Alexander polynomial, the Kauffman bracket and Jones polynomial. As time permits, some applications in biology and/or chemistry will be discussed. Prerequisite: MATH 3121.</td>
<td></td>
</tr>
<tr>
<td>4340</td>
<td>Introduction to Complex Variables (4)</td>
<td>Introduction to theory of functions of complex variables. Prerequisite: MATH 3300.</td>
<td></td>
</tr>
<tr>
<td>4350</td>
<td>Theory of Functions of a Real Variable (4)</td>
<td>Pointwise and uniform convergence, Taylor series, Riemann integration, sets of measure zero, Lebesgue's theorem on the Riemann integral, the metric space of continuous functions, and selected topics. Prerequisite: MATH 3300.</td>
<td></td>
</tr>
<tr>
<td>4360</td>
<td>Introduction to Topology (4)</td>
<td>Topological spaces, metric spaces, continuity, connectedness and compactness. Prerequisite: MATH 3300.</td>
<td></td>
</tr>
<tr>
<td>4361</td>
<td>Partial Differential Equations (4)</td>
<td>Differential equations of physics: the wave equation, the heat equation, Laplace's equation; boundary-value problems. Elementary Sturm-Liouville theory, Fourier series, Fourier and Laplace transforms, Bessel functions, selected topics. Prerequisite: MATH 3331.</td>
<td></td>
</tr>
</tbody>
</table>
4365 Dynamical Systems (4)
Introduction to dynamical systems and applications. Variational calculus, Lagrangian dynamics, principle of critical action, Hamiltonian systems and symplectic mechanics, Hamilton-Jacobi equation, chaotic and nonlinear systems, fractals. Prerequisites: MATH 3100, 3300, 3331, or consent of instructor.

4750 Numerical Analysis II (4)
Continuation of MATH 3750. Numerical solution of linear systems, matrix norms, approximation of functions, algebraic eigenvalues. Prerequisite: MATH/CS 3750.

4841 Topics in Optimization (4)
Sequel to MATH 3841. Topics to be drawn from linear and/or nonlinear programming. Linear programming topics may include integer programming, game theory, network programming; nonlinear programming topics include optimality conditions and solution procedures for unconstrained and constrained optimization problems. Prerequisite: MATH 3841. May be repeated once for credit with consent of the chair, for a maximum of 8 units.

4842 Advanced Topics in Optimization (4)
Topics selected from quasi-Newton methods for multi-variable unconstrained optimization; nonlinear least squares; quadratic programming; constrained optimization with nonlinear constraints; convex optimization. Prerequisites: MATH 3750 and 3841 or permission of instructor. May be repeated once for credit, with consent of the Mathematics Graduate Studies Committee, for a maximum of 8 units.

4845 Fuzzy Sets and Fuzzy Logic (4)
(See CS 4845 for course description.)

4850 Variational Calculus (4)
Function spaces, general variation of a functional, Euler-Lagrange equations, Noether's theorem and conservation laws, Hamilton-Jacobi theory, canonical transformations and symplectic geometry. Prerequisites: MATH 3100 and MATH 3331.

4900 Independent Study (1-5)
May be repeated for credit with consent of instructor, for a maximum of 12 units.

4901 Senior Seminar (4)
Exploration of topics in mathematics. Topics selected from the literature to illustrate relationships among various areas of mathematics. Oral presentations and paper required. Prerequisite: senior standing in mathematics (completion of 32 units of mathematics courses) or permission of the instructor.

Footnotes
1. Completion of MATH 0801-2 or MATH 0900 does not satisfy the ELM requirement. Students must also pass MATH 0950 before enrolling in a baccalaureate-level mathematics course.
2. Upper division mathematics and computer science majors will not receive credit for this course.
3. Intended for prospective elementary and junior high school teachers; Mathematics and Computer Science majors will not receive credit for this course.
Modern Language and Literatures

- Department Information
- Program Description
- Career Opportunities
- Features
- Preparation
- Major Requirements (B.A.)
- Other Degree Requirements
- Chinese Language and Cultural Studies Minor
- Minor Requirements for Languages
- Certificate in Spanish for the Professions
- Undergraduate Courses

Department Information

Department of Modern Languages and Literatures
College of Letters, Arts, and Social Sciences
Office: MB 2599
Phone: (510) 885-3211

Professor
L. Ilana Holbrook, Ph.D. University of California, Davis

Associate Professors
Jesús Díaz-Caballero, Ph.D. University of Pittsburgh
Marcelo Paz, Ph.D. University of Cincinnati
Meiling Wu, Ph.D. State University of New York at Binghamton

Assistant Professors
Monique Manopoulos (Chair), Ph.D. The University of Iowa
Amy June Rowley, M.S. Western Maryland College

Program Description

The Department of Modern Languages and Literatures at Cal State East Bay offers courses of study leading to a Bachelor of Arts degree with majors in French and Spanish. Academic Minors are offered in French, German, Italian, Portuguese, Russian, Sign Language, Spanish and Chinese Language and Cultural Studies. Elementary courses are offered also in Filipino and Japanese. All programs have been designed to provide students with the cultural understanding and the academic knowledge necessary for future pursuits in the teaching of foreign languages and literatures or for graduate work in the same fields. Students may utilize other languages and literatures offered in the department as part of a Special Major in various area studies.

A Bachelor of Arts degree major in International Studies is administered through the Department of Political Science. The International Studies major consists of an integrated group of courses reflecting international aspects of various disciplines and requires intermediate level competency in a modern language. It is designed to provide the student with a broad base of understanding of the interrelationship of the world community, while at the same time providing the opportunity to specialize in an area of interest. An International Studies minor is also offered. See the listing under International Studies for further details.

With the growing involvement of the United States in international business and the increasingly multicultural character of American society itself, the importance of foreign languages in nearly every kind of occupation is considerable. The majors in foreign languages and literatures, therefore, may lead to teaching careers and represent direct, practical assets in other fields such as business, industry and commerce, civil service, law, library science, media, science, health services, social work, travel, and tourism.

Student Learning Outcomes

Students graduating with a B.A. in French or a B.A. in Spanish from Cal State East Bay will:

1. be able to express themselves with sufficient accuracy and clarity to carry on conversations in French or Spanish with native speakers and give oral presentations appropriate to the undergraduate level;
2. be able to express themselves in the written language with a fair amount of sophistication, integrating research information into written assignments while giving adequate credit to the sources of information used;
3. be familiar with the major writers, periods, and genres of (a) French literature (France and other French speaking regions throughout the world: Africa, The Caribbean, Canada, Belgium, Switzerland), or (b) Spanish and Spanish American literature (Spain, Mexico, Central America, the Caribbean, South America, and other Spanish speaking regions throughout the world); students should be able to relate the works and genres to the socio-historical context in which they developed;
4. demonstrate that they have acquired knowledge of the cultural diversity of literatures in the French or Spanish speaking world while developing an appreciation of the French or Spanish and Spanish American cultural contributions to the body of international culture: literature, art, music, cinema, history, etc.

Career Opportunities

- Teaching
- Business
- Industry and Commerce
- Law and Law Enforcement
- Library Science
- Mass Communication
Features

The department faculty come from a wide variety of national and academic backgrounds and have traveled extensively in the countries whose languages they are teaching. Slides, films, dramatic performances, potluck dinners and other activities provide the opportunity for students to interact with one another and with their professors. For those who wish to further their interest in a foreign culture and language, the Department of Modern Languages and Literatures offers clubs. Foreign Language Clubs include the French Club, the German Club, the Tomodachi Club (Japanese Cultural Club), and the Spanish Language Club.

For those who wish to accelerate their learning of another language, the department offers a Summer quarter intensive program in Spanish which covers one year's work in one quarter and yields twelve units of credit. The language laboratory is another useful feature of the department. In the laboratory students can listen to tapes which help improve their pronunciation, fluency, and comprehension. In addition, students are encouraged to take advantage of the California State University International Programs. They can take courses in a variety of universities abroad and apply them towards a degree at Cal State East Bay.

Preparation

For students to enroll at the proper level of language instruction, the department recommends the following guideline: one year of high school foreign language instruction equals one quarter of Cal State East Bay instruction. Students are expected not to repeat credit already earned in high school unless significant time has passed since the initial instruction. The department offers placement exams to facilitate student placement. Students should contact the department before enrolling in a lower division language class.

Students in foreign language majors, minors, and options may have lower division language requirements waived for those courses below the level at which they enroll.

Advanced Placement

A student who has successfully completed the advanced placement course in a foreign language or literature in high school and has a score of 3 or better on the Advanced Placement Examination will receive 8-12 units of credit equivalent to two or three courses of a foreign language as listed below.

If you have completed the French Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2101, 2102, and 2103. If you have completed the German Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to intermediate German coursework. If you have completed the Spanish Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2401, 2402, and 2403. If you have completed the Spanish Literature examination with a score of 3 or better, you will receive 8 units of credit equivalent to MLL 3400 and 4455.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements.

I. French

The French major consists of 44-68 units; the B.A. degree requires a total of 180 units. Acquisition of a reading knowledge in a second foreign language is strongly recommended.

A. Lower Division (0-24 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLL 1101-2-3 Elementary French</td>
<td>12</td>
</tr>
<tr>
<td>MLL 2101-2-3 Intermediate French</td>
<td>12, or equivalent</td>
</tr>
</tbody>
</table>

B. Upper Division (44 units)

Eight upper division units in French composition and advanced composition, with consent of Department (8) and

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLL 3130 French Culture and Civilization</td>
<td>4</td>
</tr>
</tbody>
</table>

Thirty-two units from among the other upper division French courses (32)

II. Spanish

The Spanish major consists of 44-72 units; the B.A. degree requires a total of 180 units. Students are expected to consult with Spanish division advisors in order to assure a well balanced program of upper division courses. Proficiency in another foreign language is strongly recommended.

A. Lower Division (0-28 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLL 1401-2-3 Elementary Spanish</td>
<td>12</td>
</tr>
<tr>
<td>MLL 2401-2-3 Intermediate Spanish</td>
<td>12</td>
</tr>
<tr>
<td>MLL 2410 Spanish Conversation</td>
<td>4</td>
</tr>
</tbody>
</table>

B. Upper Division (44 units)

1. MLL 3401-2-3 Advanced Composition and Syntax (12)
   - Plus One course selected from the following group:
     | Course                        | Units |
     |-------------------------------|-------|
     | MLL 3411, 3412 Spanish Linguistics, Phonetics | 4 |

2. Eight (8) units of Spanish American Literature from among the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLL 3461, 3463, 3495, 4495</td>
<td></td>
</tr>
</tbody>
</table>

3. Eight (8) units of Spanish Peninsular Literature from among the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLL 4455, 4459, 4460</td>
<td></td>
</tr>
</tbody>
</table>

4. Twelve (12) additional units should be selected from among all upper division Spanish courses. (Note: Courses numbered MLL 4455, 4459, 4460, and 4495 may be repeated as content changes. If repeated, the courses may be applied to more than one category of requirements: Groups 2 and 4 or Groups 3 and 4)
Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Chinese Language and Cultural Studies Minor

The minor consists of 32 units.

I. Required Courses (28 units):
   1. Lower Division (12 units)
      Note: Students who do not have proficiency at the intermediate level will need to take the first year of Mandarin Chinese: 1601, 1602, 1603 (Elementary Chinese I, II, III) before starting the Intermediate Mandarin Chinese course series. This could add up to 12 additional units to the minor.
         - MLL 2601, 2602, 2603 Intermediate Mandarin Chinese I, II, III (4, 4, 4)
   2. Upper Division (16 units)
      Select four courses from the list below. At least two of the four courses must have the MLL prefix.
         - ANTH 3545 China
         - ES 3552 Chinese Experience in US
         - HIST 3311 Traditional China
         - HIST 3312 Modern China
         - HIST 3313 People’s Republic of China
         - MLL 3601 Chinese News: Advanced Reading, Composition and Translation
         - MLL 3602 Modern Chinese Literature, Linguistics and Culture
         - MLL 3603 Classical Chinese Literature, Rhetoric and Culture
         - MLL 3612 Modern Chinese Short Stories
         - MLL 4900 Independent Study

II. Electives (4 units)
    Select one course from the list below (with consent of advisor).
    - ANTH 3800 Language and Culture
    - ENGL 3005 Study of Language
    - ENGL 3670 Asian/Filipino American Literature
    - ES 3551 Asian American Women and Men
    - ES 3555 Asian American Family Patterns
    - FIN 4375 International Business Finance
    - GEOG 3540 Geography of East Asia
    - MGMT 4500 Business, Government, and Society
    - MGMT 4670 Multinational Business
    - MGMT 4675 International Human Resources Management
    - MKTG 4470 International Marketing
    - MKTG 4475 International Business Projects
    - PHIL 3320 Cultural Studies
    - PHIL 3403 Philosophies of the East
    - POSC 3204 Political Systems of Asia
    - POSC 3333 Ethnic and Minority Politics
    - POSC 3418 U.S. Immigration Policy and Law
    - POSC 3470 International Law

Minor Requirements for Languages

I. French Minor (20-44 units)
   A. Lower Division (0-24 units)
      - MLL 1101-2-3 Elementary French (12)
      - MLL 2101-2-3 Intermediate French (12), or equivalent
   B. Upper Division (20 units)
      - Eight upper division units in French composition and advanced composition, with consent of Department (8)
      - Any three other upper division French courses (12)

II. German Minor (24-36 units)
   A. Lower Division
      - MLL 1201-2-3 Elementary German (12)
      - Twelve units of lower division coursework in Intermediate German, with consent of advisor (12)
   B. Upper Division
      - Four units of upper division coursework in Advanced German, with consent of advisor (4)
      - Eight units of upper division coursework in German studies, with consent of advisor (8)

III. Italian Minor (24-36 units)
A. Lower Division (12-24 units)
   - MLL 1301-2-3 Italian Culture and Language (12)
   - 12 units of intermediate Italian, with consent of advisor (12)

B. Upper Division (12 units)
   - Four units of upper division coursework in cultural trends in Italy (4)
   - Four units of upper division coursework in contemporary spoken Italian, with consent of advisor (4)
   - Four units of upper division coursework in Italian literature, with consent of advisor (4)

IV. Portuguese Minor (24-36 units)
A. Lower Division (12-24 units)
   - MLL 1851-2-3 Elementary Portuguese (12)
   - MLL 2851-2-3 Intermediate Portuguese (12)

B. Upper Division (12 units)
   - MLL 3851 Portuguese Grammar and Composition (4)
   - MLL 3861 Topics in Portuguese Literature (4)
   - MLL 3871 Topics in Brazilian Literature (4)

V. Russian Minor (20-44 units)
A. Lower Division (8-24 units)
   - MLL 1501-2-3 Elementary Russian (12)
   - MLL 2501-2-3 Intermediate Russian (12)

B. Upper Division (20 units)
   - MLL 3587 Topics in Russian Literature and Culture (in English) (4)
   - Upper division coursework in advanced Russian, with consent of advisor. The number of required units to be determined by advisor.

VI. Sign Language Minor (24-36 units)
A. Lower Division (12-24 units)
   - MLL 1901-2-3 Elementary Sign Language (12)
   - MLL 2901-2-3 Intermediate Sign Language (12)

B. Upper Division (12 units)
   - MLL 3902 Deaf Culture (4)
   - MLL 3903 Topics in American Sign Language (4)
   - MLL 3904 Sign Language: Field Work (4)

VII. Spanish Minor (24-48 units)
A. Lower Division (0-24 units)
   - MLL 1401-2-3 Elementary Spanish I, II, III (12)
   - MLL 2401-2-3 Intermediate Spanish I, II, III (12)

B. Upper Division (16 units)
   - MLL 3401-2-3 Advanced Composition and Syntax (12)
   - MLL 3411 Introduction to Spanish Linguistics (4)
   - MLL 3412 Spanish Phonetics (4)

   C. One course from each of the two following areas:
      Spanish Peninsular literature:
      - MLL 4455, 4459, 4460 (4)
      Spanish-American literature:
      - MLL 3461, 3463, 3495, 4495 (4)
      - MLL 3400 may replace one of the above required courses.

Certificate in Spanish for the Professions
The Certificate in Spanish for the Professions, consisting of 22-38 units, tells potential employers that the recipient is qualified to work with Spanish-speaking members of the community who have limited English proficiency. Designed for individuals who are, or will be, employed in courts, schools, social service bureaucracies, health care facilities, and business enterprises, the certificate program provides students with Spanish language competency in technical fields, enabling them to converse with and serve as translators and interpreters for Spanish-speaking clients. Students majoring or minoring in Spanish may obtain the certificate by completing only the three required upper division certificate courses, in addition to their major or minor program.

Required Courses (22-38 units)
A. Lower Division (0-24 units)
   - MLL 1401-2-3 Elementary Spanish I, II, III (12)
   - MLL 2401-2-3 Intermediate Spanish I, II, III (12)

B. Upper Division (14-22 units)
Spanish language, and/or Spanish Peninsular or Spanish-American Literature and Culture (4-8 units from the following list if needed to bring total units to a minimum of 22)

1. Spanish Language: MLL 3404 Spanish Terminology and Translation (4) [a second time], 3405 Advanced Conversation for Community Needs (4) [a second time]


Designed for students with conversational background in Mandarin Chinese, Cantonese, Taiwanese or other Chinese dialects that require instruction in the Pinyin romanization system, in writing Chinese characters, and synthesizing Chinese grammar. Not open to students who are currently enrolled in, or have credit for MLL 1601-2-3.

### Courses

**2601, 2602, 2603**  
Intermediate Mandarin Chinese I, II, III (4 each)  
A continuation of MLL 1603 with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Chinese culture. Prerequisites: MLL 2601 is prerequisite to MLL 2602, or consent of instructor; MLL 2602 is prerequisite to MLL 2603, or consent of instructor.

**3601**  
Advanced Reading, Composition and Translation (4)  
Advanced development of reading, writing, and translation skills through reading news about China, online or in print. Discussion of grammar and syntax in text and related topical social issues. Prerequisite: MLL 2603 or consent of instructor.

**3602**  
Modern Chinese Literature, Linguistics and Culture (4)  
Survey of the masterpieces of modern vernacular Chinese literature of the post-1919 era. Focus on the readings of prose, fiction and verse in vernacular styles; discussion of philological, linguistic and cultural issues. Prerequisite: MLL 2603 or consent of instructor.

**3603**  
Classical Chinese Literature, Rhetoric and Culture (4)  
Survey of the masterpieces of classical Chinese literature of the pre-modern era. Focus on the readings of literary classical verse and prose; discussion of Chinese philosophy, metaphor, rhetoric and history. Prerequisite: MLL 2603 or consent of instructor.

**3612**  
Modern Chinese Short Stories (4)  
Short stories and feature films about Modern China from ante-Republic era to present. Stories by prominent writers portray controversial images of Chinese women, either as wilting flowers or powerful dragon-ladies. Cultural and gender issues observed from various perspectives. May be repeated once for credit when content varies, for a maximum of 8 units.

### Modern Language and Literatures

**Filipino (Course prefix: MLL)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 1651, 1652, 1653 | Elementary Filipino I, II, III (4 each)  
Introduction to speaking, reading, and writing and understanding Filipino. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. Prerequisites: MLL 1651 is prerequisite to MLL 1652, or consent of instructor; MLL 1652 is prerequisite to MLL 1653, or consent of instructor. |
| 2652, 2653 | Intermediate Filipino II, III (4 each)  
A continuation of MLL 1653 with increased emphasis on the structure of the language, on vocabulary building, on conversation, and on the appreciation of Filipino culture; Prerequisites: MLL 2652 is prerequisite to MLL 2653, or consent of instructor. |

**French (Course prefix: MLL)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 1101, 1102, 1103 | Elementary French I, II, III (4 each)  
Introduction to speaking, understanding, reading, and writing French. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. Prerequisites: MLL 1101 is prerequisite to MLL 1102, or consent of instructor; MLL 1102 is prerequisite to MLL 1103, or consent of instructor. |
| 2101, 2102, 2103 | Intermediate French I, II, III (4 each)  
A continuation of MLL 1103, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the French-speaking world. Prerequisites: MLL 2101 is prerequisite to MLL 2102, or consent of instructor; MLL 2102 is prerequisite to MLL 2103, or consent of instructor. |
| 3101 | French Composition (4)  
Written French and formal grammar. Prerequisite: MLL 2103 or equivalent. |
| 3102 | Advanced French Composition (4)  
Continuation of MLL 3101. Prerequisite: MLL 3101 or equivalent. |
| 3130 | French Culture and Civilization (4)  
A study of French culture through literary and linguistic examples, taken from the Middle Ages through the twentieth century, illustrating its artistic, political, social, and philosophical schools. Prerequisite: MLL 2103 or consent of instructor. May be repeated once for credit when content varies, for a maximum of 8 units. |
| 4100 | French Literary Themes and Figures (4)  
A study of selected themes and figures in French literature emphasizing an author, genre, or movement. Prerequisites: four units of upper division coursework in introductory French literature (prose or drama) and consent of instructor. May be repeated once for credit when content varies, for a maximum of 8 units. |

**German (Course prefix: MLL)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 1201, 1202, 1203 | Elementary German I, II, III (4 each)  
Introduction to speaking, understanding, reading, and writing German. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. Prerequisites: MLL 1201 is prerequisite to MLL 1202, or consent of instructor; |
MLL 1202 is prerequisite to MLL 1203, or consent of instructor.

### 3240 German Film: from Metropolis to Present German Cinema (4)
Representative films from German cinema illustrating the artistic use of film during Expressionism, its propagandistic use during the Third Reich, recent films as fictional representation of the quest for German identity. May be repeated once for credit when content varies, for a maximum of 8 units.

| Modern Language and Literatures
<table>
<thead>
<tr>
<th><strong>Italian (Course prefix: MLL)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Number</strong></td>
</tr>
<tr>
<td>1301, 1302, 1303</td>
</tr>
<tr>
<td>1301 is prerequisite to MLL 1302; MLL 1302 is prerequisite to MLL 1303; or consent of instructor.</td>
</tr>
</tbody>
</table>

### Modern Language and Literatures
**Japanese (Course prefix: MLL)**

<table>
<thead>
<tr>
<th><strong>Course Number</strong></th>
<th><strong>Course Information</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1801, 1802, 1803</td>
<td>Elementary Japanese I, II, III (4 each)</td>
</tr>
<tr>
<td>Introduction to speaking, understanding, reading, and writing Japanese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. Prerequisites: MLL 1801 is prerequisite to MLL 1802, or consent of instructor; MLL 1802 is prerequisite to MLL 1803, or consent of instructor.</td>
<td></td>
</tr>
<tr>
<td>2801, 2802, 2803</td>
<td>Intermediate Japanese I, II, III (4 each)</td>
</tr>
<tr>
<td>A continuation of MLL 1803, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Japanese culture.</td>
<td></td>
</tr>
<tr>
<td>3801</td>
<td>Advanced Japanese Grammar (4)</td>
</tr>
<tr>
<td>Development of reading, writing, and speaking skills focusing on the introduction of advanced Japanese grammar through a variety of formats: readings, video, and discussion. Prerequisite: MLL 2803 or consent of instructor.</td>
<td></td>
</tr>
<tr>
<td>3831</td>
<td>Experiencing Japanese Culture (in English) (4)</td>
</tr>
<tr>
<td>Interdisciplinary study of Japanese culture, literature, and philosophy as manifested in classical and modern fiction, cinema and animation. Translated readings focus on the social realities of Japan. Hands-on experience of Japanese culture includes calligraphy, origami, and tea ceremony.</td>
<td></td>
</tr>
</tbody>
</table>

### Modern Language and Literatures
**Persian (Course prefix: MLL)**

<table>
<thead>
<tr>
<th><strong>Course Number</strong></th>
<th><strong>Course Information</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1951, 1952, 1953</td>
<td>Elementary Persian I, II, III (4 each)</td>
</tr>
<tr>
<td>Introduction to speaking, understanding, reading and writing Persian (Farsi). A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture, history, religion and geography of the Persian-speaking world. Prerequisites: MLL 1951 is prerequisite to MLL 1952, or consent of instructor; MLL 1952 is prerequisite to MLL 1953, or consent of instructor.</td>
<td></td>
</tr>
<tr>
<td>2951, 2952, 2953</td>
<td>Intermediate Persian I, II, III (4 each)</td>
</tr>
<tr>
<td>An approach to speaking, understanding, reading and writing Persian (Farsi) at the intermediate level. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture, history, religion and geography of the Persian-speaking world. Prerequisites: MLL 1953, or consent of instructor, is prerequisite to MLL 2951; MLL 2951 is prerequisite to MLL 2952, or consent of instructor; MLL 2952 is prerequisite to MLL 2953, or consent of instructor.</td>
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</tbody>
</table>

### Modern Language and Literatures
**Portuguese (Course prefix: MLL)**

<table>
<thead>
<tr>
<th><strong>Course Number</strong></th>
<th><strong>Course Information</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1851, 1852, 1853</td>
<td>Elementary Portuguese I, II, III (4 each)</td>
</tr>
<tr>
<td>Introduction to speaking, understanding, reading, and writing Portuguese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. Prerequisites: MLL 1851 is prerequisite to MLL 1852, or consent of instructor; MLL 1852 is prerequisite to MLL 1853, or consent of instructor.</td>
<td></td>
</tr>
<tr>
<td>2851, 2852, 2853</td>
<td>Intermediate Portuguese I, II, III (4 each)</td>
</tr>
<tr>
<td>A continuation of MLL 1853, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Portuguese-speaking world. Prerequisite: MLL 2851 is prerequisite to MLL 2852, or consent of instructor; MLL 2852 is prerequisite to MLL 2853, or consent of instructor.</td>
<td></td>
</tr>
<tr>
<td>3851</td>
<td>Portuguese Grammar and Composition (4)</td>
</tr>
<tr>
<td>Advanced grammar and structure applied to composition in the language. Prerequisite: MLL 2853 or consent of instructor.</td>
<td></td>
</tr>
<tr>
<td>3861</td>
<td>Topics in Portuguese Literature (4)</td>
</tr>
<tr>
<td>A variable subject course dealing with a particular aspect of Portuguese literature. Prerequisite: MLL 2853 or consent of instructor. May be repeated once for credit when content varies, for a maximum of 8 units.</td>
<td></td>
</tr>
</tbody>
</table>
### Modern Language and Literatures

#### Russian (Course prefix: MLL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 1501, 1502, 1503 | Elementary Russian I, II, III (4 each)  
Introduction to speaking, understanding, reading, and writing Russian. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. Prerequisites: MLL 1501 is prerequisite to MLL 1502, or consent of instructor; MLL 1502 is prerequisite to MLL 1503, or consent of instructor. |
| 2501, 2502, 2503 | Intermediate Russian I, II, III (4 each)  
A continuation of MLL 1303, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Russian culture. Prerequisites: MLL 2501 is prerequisite to MLL 2502, or consent of instructor; MLL 2502 is prerequisite to MLL 2503, or consent of instructor. |
| 3587 | Topics in Russian Literature and Culture in English (4)  
An interdisciplinary course with variable subject matter which may deal with general surveys of Russian Literature and culture, comparative readings in Russian and Western European literatures, and monographic studies on various Russian authors. Fulfills the University Writing Skills requirement for students who began work on the present degree before Fall quarter, 1985. May be repeated once for credit when content varies, for a maximum of 8 units. |

### Modern Language and Literatures

#### Sign Language (Course prefix: MLL)

<table>
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<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
</table>
| 1901, 1902, 1903 | Elementary Sign Language I, II, III (4 each)  
A basic sequence in American Sign Language with emphasis on receptive and expressive skills. Includes intensive practice, individual evaluation, and introduction to Deaf culture. Prerequisites: MLL 1901 is prerequisite to MLL 1902, or consent of instructor; MLL 1902 is prerequisite to MLL 1903, or consent of instructor. |
| 2901, 2902, 2903 | Intermediate Sign Language I, II, III (4 each)  
A continuation of MLL 1903, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Deaf culture. Prerequisites: MLL 2901 is prerequisite to MLL 2902, or consent of instructor; MLL 2902 is prerequisite to MLL 2903, or consent of instructor. |
| 3902 | Deaf Culture (4)  
Analysis of factors that define the deaf community/culture. Compares and contrasts deaf culture with other minority groups. Readings about the deaf in the arts, sciences and humanities. Prerequisite: MLL 2903 or consent of instructor. |
| 3903 | Topics in American Sign Language (4)  
Selected topics related to American Sign Language (ASL). Analysis of the structure of ASL. Conversation strategies in ASL. Cross-cultural interactions between the deaf and the hearing. Some theoretical bases of language acquisition of deaf children. Prerequisite: MLL 2903 or consent of instructor. |
| 3904 | Sign Language: Field Work (4)  
Application in the community: state school, special classes in public schools, agencies serving the deaf. Comparison of variations in Sign Language due to ethnic, racial, educational, regional, and age factors. Prerequisite: MLL 2903 or consent of instructor. |

### Modern Language and Literatures

#### Spanish (Course prefix: MLL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 1401, 1402, 1403 | Elementary Spanish I, II, III (4 each)  
Introduction to speaking, understanding, reading, and writing Spanish. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. Prerequisites: MLL 1401 is prerequisite to MLL 1402, or consent of instructor; MLL 1402 is prerequisite to MLL 1403, or consent of instructor. |
| 2401, 2402, 2403 | Intermediate Spanish I, II, III (4 each)  
A continuation of MLL 1403, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Spanish-speaking world. Prerequisites: MLL 2401 is prerequisite to MLL 2402, or consent of instructor; MLL 2402 is prerequisite to MLL 2403, or consent of instructor. |
| 2404, 2405, 2406 | Intermediate Spanish for Bilingual Speakers I, II, III (4 each)  
Intensive three-course, intermediate level series for heritage or bilingual speakers of Spanish. Emphasis is grammar, writing, and reading. Courses prepare students for upper division classes in literature and culture in the Spanish major and must be taken in sequence. Prerequisite: Instructor's approval. |
| 2410 | Spanish Conversation (4)  
A practical application of Spanish to present-day experiences. Spanish sounds and intonation; vocabulary building. Prerequisite: MLL 2403 or consent of instructor. |
| 3400 | Introduction to Literary Analysis (4)  
An introduction to literary analysis; the recognition of the terminology, genres, and rhetorical figures as well as a discussion of... |
movements and literary styles. May be taken concurrently with MLL 2403. Prerequisite: MLL 2402.

3401 Advanced Spanish Composition and Syntax, I (4)
Written Spanish and formal grammar applied to advanced composition in the language. Prerequisite: MLL 2403 or consent of instructor.

3402 Advanced Spanish Composition and Syntax, II (4)
Continuation of MLL 3401. Prerequisite: MLL 3401 or consent of instructor.

3403 Advanced Spanish Composition and Syntax, III (4)
Selected authors with special attention to style. Prerequisite: MLL 3402 or consent of instructor.

3404 Spanish Terminology and Translation (4)
Spanish for business, law, medicine, and teaching. Emphasis on specialized vocabulary, translation, and interpreting. Prerequisite: MLL 2403 or consent of instructor. May be repeated once for credit when content varies, for a maximum of 8 units.

3405 Advanced Conversation for Community Needs (4)
Written and conversational Spanish with emphasis on fluency in a specific professional area: Business, Medicine, Law, Teaching. Prerequisite: MLL 2403 or consent of instructor. May be repeated once for credit when content varies, for a maximum of 8 units.

3406 Practical Spanish: Community Service (6)
Students will be assisting at the University and/or in the community as tutors, translators, and teaching aides. Prerequisite: MLL 2403 or consent of instructor. May be repeated once for credit when content varies (for a maximum of 12 units), with a maximum of 6 units toward the certificate.

3410 Advanced Spanish Conversation (4)
A practical application of Spanish to present-day experiences. Designed to develop advanced oral communication skills. Emphasis on increasing vocabulary, accuracy and grammatical control. Prerequisite MLL 2403 or consent of instructor.

3411 Introduction to Spanish Linguistics (4)
An introduction to the principles of linguistic analysis with emphasis upon examples taken from Spanish. A brief historical survey of the development of the Spanish language. Prerequisite: MLL 2403 or consent of instructor.

3412 Spanish Phonetics (4)
The fundamentals of Spanish pronunciation and intonation through the phonetic structure of the language. Attention given to each student's difficulties. Individual laboratory work. Prerequisite: MLL 3411 or consent of instructor.

Modern Language and Literatures
Spanish Peninsular Literature and Culture (Course prefix: MLL)

Course Number Course Information
3418 Spanish Culture and Civilization (4)
A study of Spanish culture through literary examples, illustrating Spain's artistic, political, social movements and philosophical ideas. Prerequisite: MLL 2403 or consent of instructor.

4455 Studies in the Golden Age of Spain (4)
Specific author, movement, genre or theme of the 16th and 17th Centuries. Prerequisite: MLL 2403 or consent of instructor. May be repeated for credit when content varies, for a maximum of 8 units.

4457 Survey Spanish Literature I: Medieval and Golden Age (4)
Survey of Spanish literature from the Middle Ages to 1700. Socio-political, aesthetic, philosophical and literary ideas studied through readings of major works from the Medieval, Renaissance, and Baroque periods. Prerequisite: MLL 2403 or consent of instructor.

4458 Survey Spanish Literature II: 18th Century to Present (4)
Survey of Spanish Literature from the 18th Century to the present. Socio-political, aesthetic, philosophical and literary ideas studied through selections of major works; neo-classicism, romanticism, naturalism, the Generation of '98, and current authors. Prerequisite: MLL 2403 or consent of instructor.

4459 Studies in Spanish Literature of the Modern Age (4)
Intensive study of selected authors, genres, or literary movements from 18th Century to early 20th Century. Neo-classicism, romanticism, naturalism, the Generation of '98, and current authors. Prerequisite: MLL 2403 or consent of instructor. May be repeated for credit when content varies, for a maximum of 8 units.

4460 Studies in 20th Century Spanish Literature (4)
Spanish literature after the Generacion del '98; intensive study of a single literary genre, movement theme, or author from 1927 to the present. Prerequisite: MLL 2403 or upper division standing in Spanish, or consent of instructor. May be repeated two times for credit when content varies, for a maximum of 12 units.

4461 Spanish Film (in English) (4)
Spanish cinematography from 1920 to the present, as related to cultural mythology and social and political problems of Spain. Films in Spanish with English subtitles. Prerequisite (applies to Spanish majors and minors only): MLL 2403 or consent of instructor.

Modern Language and Literatures
Spanish-American Literature and Culture (Course prefix: MLL)

Course Number Course Information
3461 Introduction to Spanish-American Literature: 1492 to 1900 (4)
Philosophical, religious, political, artistic, and literary elements examined in Latin American literature. Survey begins with the analysis of pre-Colombian texts and moves through the centuries; colonial literature, romanticism, realism, and modernism discussed. Prerequisite: MLL 2403 or consent of instructor.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>3463</td>
<td>Introduction to Spanish-American Literature: 1900 to the Present (4)</td>
<td>Philosophical, religious, political, artistic, and literary elements examined in contemporary Latin American literature. Prose, poetry and drama of the 20th Century. Continuation of MLL 3461. Prerequisite: MLL 2403 or consent of instructor.</td>
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</tr>
<tr>
<td>3495</td>
<td>Spanish-American Culture and Civilization (4)</td>
<td>A study of Spanish American culture and civilization through its history, arts, and social institutions. Prerequisite: MLL 2403 or consent of instructor.</td>
<td></td>
</tr>
<tr>
<td>4495</td>
<td>A Single Movement, Country or Theme: Spanish American Literature (4)</td>
<td>Single author, country, movement or theme in Spanish-American Literature. Prerequisite: MLL 2403 or consent of instructor. May be repeated once for credit when content varies, for a maximum of 8 units.</td>
<td></td>
</tr>
</tbody>
</table>

Footnotes

1. Lower division requirements will be waived for student with prior knowledge of the language. See the "Advanced Placement" section above.
2. May be repeated for credit if subject matter is different.
Music

- Department Information
- Program Description
- Career Opportunities
- Scholarships
- Preparation
- Admission
- Major Requirements (B.A.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses

Department Information

Department of Music
College of Letters, Arts, and Social Sciences
Office: Music and Business Bldg. 2571
Phone: (510) 885-3135 FAX: (510) 885-3461
Email: music@csueastbay.edu
Website: http://music.csueastbay.edu

Professors Emeriti
Frank J. La Rocca, Ph.D. University of California, Berkeley
Ellen Wassermann, M.M. Peabody Conservatory

Associate Professor
Buddy O. James, D.M.A. University of Southern California

Assistant Professors
Wesley J. Broadnax, D.M.A. Michigan State University
John Eros, Ph.D. The University of Michigan, Ann Arbor
Rafael Hernandez (Chair), D.M. Indiana University
Peter K. Marsh, Ph.D. Indiana University
Johannes P. Wallmann, Ph.D. New York University

Program Description

The Music Department at CSUEB integrates rigorous academic training with a driving passion for the making of great music: the classics from the European-American tradition, great jazz, the new ‘classics’ of our own time, world music, experimental music and more. With a rich variety of opportunities for performing and composing and a deep commitment to teacher education, the Music Department offers something for all students seriously committed to pursuing a life in music.

Student performance groups are open to all qualified students and one need not be a music major to participate. There are more than twenty active ensembles including Symphonic Band, Jazz Workshop, University Singers, Orchestra, Opera Workshop, New Music Ensemble, Chorus, Oratorio Society, Percussion Ensemble, Chamber Singers, and many small vocal and instrumental ensembles.

The Department of Music offers Bachelor of Arts degree and Master of Arts degree majors which are fully accredited by the National Association of Schools of Music. All music majors have the advantage of continuous applied lessons with instrumental, vocal, or composition teachers on the faculty. A music minor is also offered.

The Music Department occupies a large, fully-equipped, modern facility with a number of special resources: a Media Center for Music Technology; Music Resource Center, with thousands of scores and recordings; Choral Music Education Student Resource Center, with thousands of choral octavos and conducting resources; large musical equipment collection for student use; Recital Hall with custom acoustical design; and professional recording facilities.

The Music curriculum is designed to serve the needs of students who have career goals in performance, composition, music technology, jazz, public school or private teaching, or graduate study, as well as those who are pursuing other fields of study and choose music as an elective.

Student Learning Outcomes

Students graduating with a B.A. in Music from Cal State East Bay will have achieved the following:

1. improved rhythm and pitch identification skills and pitch accuracy for application in performance and composition;
2. development of enriched tone production in tandem with improved technical skills in performance;
3. enhanced awareness and knowledge of theoretical structures and compositional techniques;
4. an awareness of historical context and references as well as an increased awareness and knowledge of the literature;
5. improved listening skills and levels of interaction in ensemble performance.

Career Opportunities

- Choral Director
- Composer
- Arranger
- Music Professor/Teacher
- Concert Artist
- Symphony Member
Scholarships

The Music Department annually awards a number of scholarships to entering and returning music majors. For more information, contact the Music Department office at (510) 885-3135.

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Admission

Students wanting to select music as a major are expected to have had a variety of pre-college cognitive and affective experiences, such as high school performance, high school theory programs, individual private instruction with music professionals, or music professional experiences.

Admission to the major in music is determined by audition. Students must complete this audition and be accepted to the department prior to being accepted in the major.

Transfer students will be placed at the appropriate applied lesson level determined by their successful audition. Transfer students will also be subject to a proficiency examination as described below under “Special Requirements of the Department of Music, Section IV. Proficiency Examinations.”

Major Requirements (B.A.)

The major consists of 87 units; the B.A. requires a total of 180 units.

Sample Program

A Sample Program for this degree can be found at the department website: [music.csueastbay.edu](http://music.csueastbay.edu).

I. Lower Division (49 units)

- MUS 1027, 1028, 1029 Sightsinging I, II, III (3 units)
- MUS 1031, 1032, 1033 Music Theory I, II, III (12 units)
- MUS 1155 Music Through the Ages (4 units)
- MUS 1210-1270 Applied Music (major performance media) (6 units)
- MUS 1314, 1315, 1316 Basic Piano Class I, II, III (3 units)
- MUS 2027, 2028, 2029 Sight Singing IV, V, VI (3 units)
- MUS 2031, 2032, 2033 Music Theory IV, V, VI (12 units)
- MUS 3501-05, 3509-15 Music Performance Activities (6 units)

II. Upper Division (38 units)

- One of: Music 3051, 3061, 3062 Form and Analysis; Counterpoint I, II (4 units)
- MUS 3155, 3156, 3157 Music Literature and Analysis I, II, III (12 units)
- MUS 3210-3270 Applied Music (major performance media) (12 units)
- MUS 3501-05, 3509-15 Music Performance Activities (6 units)
- MUS 3505 Chamber Ensembles. Four units to be taken in four different quarters (4 units)

Special Requirements of the Department of Music

I. Applied Lessons

A. Each Music major will declare an applied music discipline (keyboard, voice, wind, brass, percussion, strings, jazz, guitar, harp, composition) with the department. Majors wishing to choose composition as their applied music discipline are required to complete first year study in an instrumental or vocal discipline or demonstrate equivalent experience and submit a portfolio of written works for review. Students whose portfolios are accepted, will begin applied lessons in composition.

B. To receive applied lessons, an undergraduate student must be enrolled for a minimum of six units, two of which must be in any music course other than major performance activities and applied music. Registration for applied lessons requires concurrent enrollment in a major performance activity (MUS 3500-50). Students who do not meet this requirement by the end of the add/drop period will not be eligible for applied lessons that quarter. Ensembles that may be used to meet this requirement are listed in the Handbook for Undergraduate Music Majors.

All students enrolled in applied lessons must demonstrate their progress in the major before a faculty jury at the end of the third quarter of study at the current applied level. A failed jury will result in a failing grade for the applied lesson. Students are limited to a total of twelve quarters of study in applied instruction (assuming a passing grade for each quarter of instruction was given).

C. Applied lesson instruction culminates in a level 40 recital as outlined in the Handbook for Undergraduate Music Majors.

II. Recitals

A. Music majors are to appear each year in regularly scheduled student recitals as determined by the department.

B. Specific recital performance requirements are outlined in the Handbook for Undergraduate Music Majors.

C. Music majors are required to attend four DEPARTMENTAL recitals or concerts each quarter on which they are not a performer or
III. Major Performance Activities and Chamber Ensembles
A. Each music major is required to play his or her principal instrument (as determined by applied lesson enrollment) in one major music performance activity (MUS 3500-50) each quarter in which he or she is registered for applied lessons. Students may choose to perform on a secondary instrument or voice to fulfill the requirement if performance opportunities on the principal instrument do not exist.
B. The 4 units of chamber ensemble required for the Music major must be taken in 4 different quarters.

IV. Proficiency Examinations
A. Proficiency examinations may be required in any or all aspects of music performance skills, theory, and history and literature as a basis for determining placement in sequence courses.
B. An upper division transfer student who has completed most of his or her music major may be required to take remediation in certain courses in theory, history and literature, and performance based on the results of the proficiency examinations.
C. All new music majors (except keyboard majors) are required to take a piano proficiency exam. If the exam is not passed, the student must enroll in the appropriate level of class piano instruction until the proficiency exam or MUS 2313 is passed. (Freshmen music majors, including keyboard majors, are required to take for credit a minimum of MUS 1314, 15, 16. They may challenge the course for credit if they believe their keyboard skills meet the demands of MUS 1314, 15, 16.)
D. All keyboard majors are required to pass a proficiency exam in sight-reading, keyboard harmony and open-score reading or pass MUS 2314, 2315, 2316.

Major Advising
Since requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements.
Music Theory (Course Prefix: MUS)

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<th>Course Number</th>
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| 1008          | Music Theory for Non-Music Majors I (4)  
Fundamentals of music notation. Major and minor scale and chord formations. Emphasis on practical musicianship through rhythmic exercises and reading of songs on simple melody and rhythm instruments. Recommended for non-music majors in Liberal Studies and Multiple Subject Credential programs. Three hrs. lect., 2 hrs. act. |
| 1015          | Basic Musicianship Through Guitar for Non-Music Majors I (4)  
Development of music reading and understanding through study of guitar. Recommended for non-music majors pursuing a credential program. Students provide own guitar. Three hrs. lect., 2 hrs. act. |
| 104           | Global Hip-Hop (4)  
Exploration of the spread of hip-hop throughout the world, examining the social context, stylistic sources and musical work of artists from the US, Africa, Asia, Europe, and Latin America. |
| 106           | Blues, R&B and Soul (4)  
Examination of three musical genres that form the backbone of American popular music - blues, rhythm & blues, and soul - and the way these styles influence popular music and culture in the US and the rest of the world. |
| 2130          | Pop Music in Western Society (4)  
Popular forms of Rock Music and their influence on society. Topics include music of social protest, race relations, gender issues, and economic influences. Emphasis on developing listening skills through observing live performances, recordings, and videotapes. Previous training not necessary. Field trips may be required. Not open to students with credit for MUS 1006. |
| 302           | What to Listen for in Music (4)  
Development of a greater appreciation and enjoyment of music through study of the musical content of selected works. Study of the elements of music to develop critical listening skills applicable to all styles of music. Previous musical training not necessary. Field trips may be required. |
| 3012          | Introduction to World Music and Culture (4)  
Music as tradition and the continuity it nurtures within a culture. Traditional music of Africa, Asia, Latin America and the Middle East will be examined incorporating folk, classical, world beat, jazz, popular and experimental musics. |
| 3080          | Music Entrepreneurship (4)  
Survey of the music business from the perspective of performing artists and composers. The course will focus on four areas: copyright and intellectual property law, the role of record labels, careers in the music business, and the musician as entrepreneur. |
| 3120          | Art Song Literature (4)  
An historical survey of art song literature with a focus on important composers and their respective contributions to the genre. Includes the study of important song cycles. Intended for singers, teaching professionals, and aspiring private studio teachers. Prerequisite: Consent of instructor. |
| 3898          | Cooperative Education (1-4)  
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units. Not applicable to the music major; a maximum of 4 units may be applied to the music minor. CR/NC grading only. |
| 3999          | Issues in Music (4)  
Readings, discussion, and research on contemporary and/or significant issues in music. May be repeated for credit when content varies, for a maximum of 8 units. |

**Music Theory**

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<tr>
<th>Course Number</th>
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</table>
| 1027, 1028, 1029 | Sightsinging I, II, III (1 each)  
Development of music reading skills applicable to all instrumental and vocal performance media. Dictation, analysis and singing of melodies and melodic exercises; study and performance of basic rhythmic materials. Two hrs. act.  
  I. Co-requisite: MUS 1031, 1314.  
  II. Prerequisite: MUS 1027, or consent of instructor. Co-requisites: MUS 1032 and 1315.  
  III. Prerequisite: MUS 1028, or consent of instructor. Co-requisites: MUS 1033 and 1316. |
| 1031, 1032, 1033 | Music Theory I, II, III (4 each)  
The integrated study of tonal harmony, part-writing, analysis and ear-training.  
  I. Intensive fundamentals, triads and seventh chords. Each student will take an assessment exam at the beginning of the quarter to determine the level of preparedness in fundamentals. Co-requisites: MUS 1027 and 1314.  
  II. Elementary counterpoint, figuration, SATB scoring, elementary instrumentation, and arranging. Prerequisites: MUS 1027, 1031, 1314. Co-requisites: MUS 1028 and 1315.  
  III. Harmonization, advanced figuration, chorale harmonization, sequences. Prerequisites: MUS 1028, 1032, 1315. Co-requisites: MUS 1029 and 1316. |
| 1085          | Introduction to Audio Production (4)  
Application to music composition and recording of fundamental acoustics and psychoacoustics, MIDI, and digital audio workstation (DAW) software. Three hrs. lect.; 2 hrs. act. |
| 2027, 2028, 2029 | Sightsinging IV, V, VI (1 each)  
Skills development in ear training and sight-singing. Includes melodic, harmonic, and rhythmic performance, analysis and dictation. Two hrs. act.  
  IV. Prerequisite: MUS 1029, or consent of instructor. Co-requisite: MUS 2031.  
  V. Prerequisite: MUS 2027, or consent of instructor. Co-requisite: MUS 2032.  
  VI. Prerequisite: MUS 2028, or consent of instructor. Co-requisite: MUS 2033. |
| 2031          | Music Theory IV, V, VI (4 each)  
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<tr>
<th>Course Code</th>
<th>Course Information</th>
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</thead>
</table>
V. Introduction to form, chromaticism, advanced tonal procedures. Prerequisites: MUS 2027, 2031. Co-requisite: MUS 2028.  
VI. Twentieth Century music up to the present; extension of tonality; non-tonal music. Analysis and compositional exercises. Prerequisites: MUS 2028, 2032. Co-requisite: MUS 2029. |
| 2041 | Jazz Theory and Improvisation (3)  
Integrated approach to jazz theory, repertoire, and improvisation. Improvisation, theoretical studies and analytical techniques. Theoretical materials will influence and shape the improvisational skills developed in small performing ensembles. Prerequisite: MUS 1033 or consent of instructor. May be repeated once for credit, for a maximum of 6 units. Two hrs. lect., 2 hrs. lab. |
| 2085 | Recording Techniques in Audio Production (4)  
Fundamentals of studio recording, audio production and the use of digital audio workstation (DAW) software in recording and composition. Not open to students with credit for MUS 2081. Three hrs. lect., 2 hrs. lab. |
| 2086 | Tracking and Mixing in Audio Production (4)  
Tracking and mixing of recordings and compositions using sequencing software and digital audio connection protocols. Further uses of digital audio workstation (DAW) software in recording and composition. Prerequisites: MUS 1085 or MUS 2081 or MUS 2085 or permission of instructor. Not open to students with credit for MUS 2082. Three hrs. lect., 2 hrs. lab. |
| 2087 | Composition and Scoring in Audio Production (4)  
Music technology as the primary medium of expression in electronic, video/film scoring and live performance contexts. Prerequisites: MUS 2082 or MUS 2086 or permission of instructor. Not open to students with credit for MUS 2083. Three hrs. lect., 2 hrs. lab. |
| 2400 | Stage and Acting Basics for Singers (1)  
Techniques of movement while singing and during musical interludes. Development of operatic character types through movement. Study of music as dialogue, pacing and timing of lines, acting out of recitatives. Co-requisite: MUS 3505 or consent of instructor. May be repeated for credit, for a maximum of 12 units. Two hrs. act. |
| 3034 | Music Theory VII (4)  
Twentieth Century music up to the present; extension of tonality; non-tonal music. Analysis and compositional exercises. Prerequisite: MUS 2033 or equivalent. |
| 3051 | Form and Analysis (4)  
The study and analysis of music written in traditional forms. Prerequisite: MUS 2033. |
| 3061, 3062 | Counterpoint I, II (4 each)  
I. The writing of counterpoint modeled on the style of Palestrina. Additional work modeled on other 16th century composers may be introduced at the discretion of the instructor. Prerequisite: MUS 3034.  
II. The writing of counterpoint modeled on the style of J. S. Bach. Additional work modeled on other 17th and 18th century composers may be introduced at the discretion of the instructor. Prerequisite: MUS 3034. |
| 3071 | Jazz Arranging (3)  
Technical features of various jazz styles; arranging for various combinations of instruments. Prerequisite: MUS 2033 or consent of instructor. |
| 3085 | Audio: Pro Tools (4)  
Using Pro Tools audio software to record live music, sample, design sounds, and master recordings. Not open to students with credit for MUS 3082. Three hrs. lect., 2 hrs. lab. |
| 3086 | Audio: Sequencing (4)  
Using music sequencing software such as Reason, Ableton, and Digital Performer, to run hardware and software synthesizers and samplers in the creation of digital music. Not open to students with credit for MUS 3082. Three hrs. lect., 2 hrs. lab. |
| 3091 | Music Notation Software (3)  
Using music notation software and other publishing pre-press software to produce printed music for publication and performance. Two hrs. lect., 2 hrs. lab. |
| 4054 | Instrumentation (4)  
Study of the instruments of the orchestra and band; scoring for small ensembles; survey of scoring for school orchestra, band, and chorus. Prerequisite: MUS 2033. |

**Music History and Literature (Course Prefix: MUS)**

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<tr>
<th>Course Number</th>
<th>Course Information</th>
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</table>
| 1155 | Music Through the Ages (4)  
Introduction to the history of Western art music. Emphasis on listening, reading, and beginning score study to develop awareness of style and structure. Influence of various styles and genres of music from other cultures may be included. Prerequisite: MUS 1032 or permission of instructor. |
| 3155, 3156, 3157 | Music Literature and Analysis I, II, III (4 each)  
Emphasis given to style analysis; the relationship of music to the social and cultural background of each epoch. Prerequisite for each: MUS 2033 or consent of instructor.  
I. Music from the beginnings of Western Civilization through Medieval and Renaissance times.  
II. Music of the Baroque and Classical periods.  
III. Music of the Romantic and Contemporary periods. |
# Applied Music (Course Prefix: MUS)

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<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>1210-1270</td>
<td>Applied Music (1 each) - Individual advanced instruction for music majors and minors. May be repeated for credit for a maximum of 6 units.</td>
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<tr>
<td>1210</td>
<td>Piano</td>
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<td>1211</td>
<td>Organ</td>
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<td>1212</td>
<td>Harpsichord</td>
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<td>1220</td>
<td>Voice</td>
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<td>Violin</td>
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<td>1231</td>
<td>Viola</td>
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<td>1232</td>
<td>Cello</td>
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<td>String Bass</td>
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<td>1234</td>
<td>Harp</td>
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<td>1235</td>
<td>Guitar</td>
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<td>1240</td>
<td>Flute</td>
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<td>1241</td>
<td>Oboe</td>
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<td>1242</td>
<td>Clarinet</td>
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<td>1243</td>
<td>Bassoon</td>
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<td>1244</td>
<td>Saxophone</td>
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<td>1250</td>
<td>Trumpet</td>
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<td>1251</td>
<td>French Horn</td>
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<td>1252</td>
<td>Trombone</td>
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<td>1253</td>
<td>Baritone</td>
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<td>1254</td>
<td>Tuba</td>
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<tr>
<td>1260</td>
<td>Percussion</td>
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<td>1270</td>
<td>Composition - Prerequisites: (1) reasonable proficiency in at least one other area of applied music; (2) knowledge of music theory equivalent to first year theory; and (3) consent of instructor.</td>
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<tr>
<td>1314</td>
<td>Basic Piano Class I (1) - Group instruction in piano for music majors. Co-requisites: MUS 1027 and 1031. Two hrs. act.</td>
</tr>
<tr>
<td>1315</td>
<td>Basic Piano Class II (1) - Group instruction in piano for music majors. Prerequisite: MUS 1314. Co-requisites: MUS 1028 and 1032. Two hrs. act.</td>
</tr>
<tr>
<td>1316</td>
<td>Basic Piano Class III (1) - Group instruction in piano for music majors. Prerequisite: MUS 1315. Co-requisites: MUS 1029 and 1033. Two hrs. act.</td>
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<tr>
<td>2311, 2312, 2313</td>
<td>Intermediate Class Piano I, II, III (1 each) - Continuation of MUS 1316. MUS 2311: Major mode formulae, prerequisites: MUS 1316 and MUS 1033 or equivalents. MUS 2312: Minor mode formulae; prerequisite: MUS 2311 or consent of instructor. MUS 2313: open score reading; prerequisite: MUS 2312 or consent of instructor. Two hrs. act.</td>
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<tr>
<td>2314</td>
<td>Keyboard Sight-Reading (1) - Sight-reading technique as applied to keyboard literature. Prerequisite: Music major. Keyboard concentration. Two hrs. act.</td>
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<tr>
<td>2315</td>
<td>Keyboard Harmony (1) - Harmonic formulae in all keys, sequences, transpositions and simple figured bass; sight harmonization of melodies and bass lines. Designed for keyboard concentrators at sophomore level or above. Two hrs. act.</td>
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<tr>
<td>2316</td>
<td>Open Score Reading (1) - Principles of reading and transcribing open scores at the keyboard. Examples chosen from choral, orchestral and ensemble literature. Designed for keyboard concentrators at sophomore level or above. Two hrs. act.</td>
</tr>
<tr>
<td>2371</td>
<td>Basic Guitar (1) - Fundamentals of playing guitar with emphasis on developing competencies sufficient to employ the instrument as a teaching tool. Prerequisite: Music major or consent of instructor. Two hours activity.</td>
</tr>
<tr>
<td>3210-3270</td>
<td>Applied Music (2 each) - Individual advanced instruction for music majors. May be repeated for credit, for a maximum of 12 units.</td>
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<tr>
<td>3210</td>
<td>Piano</td>
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<td>3244</td>
<td>Saxophone</td>
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<td>3253</td>
<td>Baritone</td>
</tr>
<tr>
<td>3254</td>
<td>Tuba</td>
</tr>
<tr>
<td>3260</td>
<td>Percussion</td>
</tr>
</tbody>
</table>
### Composition

**Prerequisites:**
1. reasonable proficiency in at least one other area of applied music;
2. knowledge of music theory equivalent to first year theory; and
3. consent of instructor.

### Music Performance Activities (Course Prefix: MUS)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 3500-3530     | Large Ensembles (1 each)  
Large ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Field trips may be required. Each large ensemble may be repeated for credit, for a maximum of 12 units. Two hrs act. |
| 3531-3590     | Chamber Ensembles (1 each)  
Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act. |

#### Wind, Brass, and Percussion Ensembles

- **31 Chamber Winds**  
  Repertoire for small and large combinations of winds, brass, and percussion with occasional soloists.
- **32 Brass Ensemble**  
  Repertoire for small and large combinations of brass instruments with occasional soloists.
- **33 Trumpet Ensemble**  
  Repertoire for small and large combinations of trumpets with occasional soloists.
- **34 Trombone Ensemble**  
  Repertoire for small and large combinations of trombones and low brass with occasional soloists.
- **35 Percussion Ensemble**  
  Repertoire for small and large combinations of pitched and non-pitched percussion instruments.

#### String and Keyboard Ensembles

- **41 String Ensemble**  
  Repertoire for small and large combinations of bowed, struck and plucked string instruments with occasional soloists.
- **42 Guitar Ensemble**  
  Repertoire for small and large combinations of guitars with occasional soloists.
- **43 Piano Ensemble**  
  Repertoire for small and large combinations of keyboard instruments with special attention paid towards works for piano four-hands and two pianos.

#### Jazz Combos

- **50 Jazz Improvisation Ensemble**  
  Introductory-level jazz ensemble focusing on general improvisation techniques in jazz.
- **51 Jazz Standards Ensemble**  
  Jazz ensemble focusing on standard jazz combo repertoire.
- **52 Contemporary Jazz Ensemble**  
  Jazz ensemble emphasizing modern, mainstream jazz repertoire.
- **53 Blue Note Jazz Ensemble**  
  Small jazz ensemble focusing on post-bop jazz of the 1950s and 1960s.
- **54 Latin Jazz Ensemble**  
  Jazz ensemble focusing on Afro-Cuban, Salsa, and Brazilian jazz repertoire.
- **55 Jazz Composers Ensemble**  
  Jazz ensemble focusing on the composition and performance of student works for jazz ensemble.
- **56 Electric Jazz Ensemble**  
  Jazz ensemble focusing on Fusion, Funk, and World Jazz.
- **57 Avant-garde Jazz Ensemble**  
  Jazz ensemble focusing on free improvisation, game pieces, extended improvisation techniques, and other experimental means of composing and performing jazz.
- **58 Rhythm Section Ensemble**  
  Jazz ensemble emphasizing rhythmically challenging material such as odd-meter composition, polyrhythmic works, and pieces with frequent and dramatic metric changes.
- **59 Sight-reading Ensemble**  
  Jazz ensemble focusing on continual honing of sight-reading abilities through continual practice and performance of works unseen previous to rehearsal.

#### Vocal Ensembles

- **60 Vocal Repertory Ensemble**
Chamber ensemble focusing on repertoire for solo voice and small and large combinations of voices with special attention paid to Art Song and peer review and collaborative assessment of performance practice.

- 61 Chamber Singers
  Small vocal ensemble focusing on repertoire for chamber choir, mixed voices.
- 62 Jazz Singers
  Small vocal ensemble focusing on repertoire for chamber choir, mixed voices, that is drawn from jazz, pop, and world traditions.

**New Music and World Ensembles**

- 70 Orchestre dB New Music Ensemble
  Chamber ensemble focusing on repertoire for small and large combinations of string, wind, brass, percussion, vocal, keyboard, and electronic instruments with special attention paid towards the workshop and performance of newly composed student and faculty works.

<table>
<thead>
<tr>
<th>Music Education (Course Prefix: MUS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Number</strong></td>
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<tr>
<td>2321</td>
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<td>2331-2361</td>
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<td>2355</td>
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<tr>
<td>2361</td>
</tr>
</tbody>
</table>

| 3095 | **Music Technology for Educators (3)** |
| | Instruction in uses of audio and software, and software for desktop, interactive, and music publishing to aid in the development of music education curricula, programs, and lessons. Two hrs. lect., 2 hrs. lab. |
| 3370 | **Basic Conducting (3)** |
| | Basic techniques of conducting including simple, compound and asymmetrical meters, expression and interpretation through observation and laboratory experience. *Prerequisite: upper division standing or consent of instructor.* |
| 3380 | **Choral Conducting (3)** |
| | Special techniques of choral conducting including vocal and score reading and analysis, interpretation, and rehearsal through observation and laboratory experience. *Prerequisite: upper division standing or consent of instructor; MUS 3370 or equivalent must precede MUS 3380.* |
| 3390 | **Instrumental Conducting (3)** |
| | Special techniques of instrumental conducting including score reading and analysis, interpretation, rehearsal through observation and laboratory experience. *Prerequisites: upper division standing or consent of instructor. MUS 3370 or equivalent must precede MUS 3390.* |
| 4200 | **Vocal Diction and Literature (3)** |
| | Diction and performance practice of representative vocal literature in the most commonly used languages: English, Italian, and Latin; or German, French, and Spanish. *Prerequisites: Upper division standing in Music, or consent of instructor. May be repeated once for credit, for a maximum of 6 units. Two hrs. lect., 2 hrs. act.* |
| 4435 | **Seminar in Public School Instrumental Teaching Techniques (3)** |
| | Provides opportunity for students intending to become teachers to develop rehearsal techniques, organizational procedures related to public school band and orchestra programs; to become familiar with public school teaching materials; to further develop conducting techniques; and to improve secondary instruments skills. Field trips may be required. *Prerequisites: Basic Conducting; two quarters each, basic strings, woodwinds, brass, one of percussion; others by consent of instructor.* |
| 4440 | **Seminar in Public School Choral Teaching Techniques (3)** |
| | Development of rehearsal techniques and organizational procedures related to choirs and vocal ensembles in the public schools. Teaching materials and appropriate literature from various stylistic periods. Field trips may be required. *Prerequisites: MUS 3370 and MUS 3380, or consent of instructor.* |
| 4445 | **Seminar in Elementary Classroom Music Teaching Techniques (3)** |
| | Development of classroom management and teaching techniques appropriate for elementary general music and choral classes. Emphasis on the Kodaly method and related instructional materials. Field trips may be required. *Prerequisite: upper division standing or consent of instructor.* |
| 4450 | **Seminar in the Art and Science of Vocal Pedagogy I (3)** |
| | Pedagogical approaches to teaching voice: methods of vocal instruction, proper vocal production, and effective ensemble singing. Intended for singers, teaching professionals, and aspiring teachers of choral and solo singing. *Prerequisite: Consent of instructor.* |
Course Number | Course Information
---|---
4900 | Independent Study (1-4)
      | May be repeated for credit with consent of instructor, for a maximum of 12 units.

Footnotes

1. MUS 1027-29 and 1031-33 and 1314-16 to be taken concurrently.
2. Majors entering with composition as their applied area are required to be proficient in an instrumental medium. Because composition instruction does not normally begin before the sophomore year, an entering freshman will audition and enroll for instrumental instruction as described in section I.A.; or, with permission of a composition instructor, may enroll without audition for Applied Piano.
3. The chamber ensemble requirement may be fulfilled during any four quarters.
4. Substitutions for this requirement may be made, with the approval of the Departmental Minor advisor.
5. Upper division substitutions may be made for this requirement, with the approval of the Departmental Minor advisor.
Program Description
The Department of Nursing and Health Sciences offers an undergraduate program that leads to the Bachelor of Science degree with a major in Nursing. The program is designed to prepare a nurse generalist. Graduates of the program are prepared to work as professional nurses and/or pursue graduate education in nursing. There are two options within the major: the Prelicensure option and the RN Advanced Placement option.

Student Learning Outcomes
Students graduating with a B.S. in Nursing from Cal State East Bay will:
1. synthesize knowledge from the natural, behavioral sciences and the humanities with current nursing knowledge and theory to deliver nursing care;
2. provide safe, compassionate nursing care to a diverse client population;
3. use critical thinking and communication skills to develop partnerships with clients and other health care professionals;
4. demonstrate responsibility and accountability for design, delivery, and evaluation of client care;
5. demonstrate professional behaviors in interactions with clients, families, colleagues, and the public.

Career Opportunities
Nurses deliver care to people in hospitals, extended care facilities, private homes, public health organizations, schools and in other community settings.

Major Requirements (B.S.)
Prelicensure Option
The Prelicensure option consists of two years of pre-nursing requirements and eight quarters of nursing courses. Nine quarters, however, are frequently needed to complete all nursing courses because of general education requirements and clinical space limitations. The prerequisite courses may be completed at Cal State East Bay or by taking equivalent courses at another college or university. Nursing courses have concurrent laboratories on campus and in local hospitals and community settings. Expenses for clinical courses include the purchase of uniforms, stethoscopes, malpractice insurance, personal health insurance, laboratory equipment, course syllabi, and so forth.

The Prelicensure option program is accredited by the State of California Board of Registered Nursing (Tel: 916-322-3350) and by the Commission on Collegiate Nursing Education (202-887-6791). Upon completion of the Nursing major, the student is qualified to take the National Council Licensure Examination (NCLEX-RN) and apply for the California Public Health Nursing Certificate.

Preparation
Students must take nine specific prerequisite courses to be eligible for admission to the Prelicensure option. Courses must be completed by the
end of fall quarter of the preceding year for the student to be eligible for admission to the nursing program in the following fall quarter.

Students who plan to use transfer courses to satisfy prerequisite requirements must have equivalencies determined by the Cal State East Bay Department of Nursing and Health Sciences.

Admission

Because Nursing has been designated as an impacted program by the Board of Trustees, a special admission procedure has been instituted to assure that all students have an opportunity to be considered for admission to the Nursing major for fall quarter. General information on the program, admission criteria and application procedures may be obtained from the Department of Nursing and Health Sciences. To be considered for admission to the Clinical Nursing courses, students must complete two application forms:

1. The "CSU Application for Admission" and
2. the "Nursing Supplemental Application."

Both applications must be filed in November for admission in the fall quarter of the following academic year. Students must also take the "Test of Essential Academic Skills." To be eligible for admission, the student must have a 3.00 GPA in the following:

1. most recent 90 quarter/60 semester units,
2. nine prerequisite courses, and
3. five prerequisite science courses. "C-" grades are not acceptable in the prerequisites that include:

   - BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
   - BIOL 2020 Human Physiology and Anatomy II (5)
   - BIOL 2025 Introduction to Microbiology (5)
   - CHEM 1601 Basic Chemistry for Health Sciences (or 1605) (4)
   - CHEM 1602 Basic Chemistry for Health Sciences (4)
   - COMM 1000 Public Speaking or COMM 1004 Interpersonal Communication (4)
   - ENGL 1001 College Writing I (4)
   - STAT 1000 Elements of Probability and Statistics (5)
   - A course in Critical Thinking such as PHIL 1000 Workshop in Clear Thinking or PHIL 1001 Introduction to Logic (4)

Licensed Vocational Nurses, Medical Corps members, and other health-care personnel wishing to gain admission to more advanced clinical nursing courses must seek advisement from the Department of Nursing and Health Sciences prior to applying to the program.

Curricular Requirements

The Prelicensure option consists of 143 units; the B.S. degree requires a total of 183 units.

I. Pre-Nursing Courses (40 units)

   - BIOL 2010 (or 2011), 2020 (or 2021), 2025 (15)
   - CHEM 1601 (or 1605), 1602 (8)
   - COMM 1000 or 1004 (4)
   - ENGL 1001 (4)
   - STAT 1000 (5)
   - A course in Critical Thinking such as PHIL 1000 or 1001 (4)

II. Non-Nursing Courses (17 units)

   - ANTH 1000 (or 1300) or SOC 1000 (or 1001, 1002, 2001 or 2002) (4)
   - HDEV 3800 (4)
   - HIST 4710 (4)
   - PSYC 1000 (or 1001 or 1005) (5)

III. Nursing Courses (86 units)

   - Level II: NURS 3001, 3002, 3003, 3201, 3202, 3401, 3402, 3403, 3404, 3405, 3406, 3407, 3408, 3409, 3410, 3411, 3412, 3413, 3502 (33)
   - Level III: NURS 4203, 4207, 4208, 4301, 4302 (18)

RN Advanced Placement Option

The Registered Nurse Advanced Placement option is a 4-6 quarter program. The first quarter focuses on selected theories and concepts taught on Levels I and II of the basic nursing program. Students join the basic program for Research Utilization, Nursing Leadership, Community Health, and Preceptorship.

Note: The RN Advanced Placement program is open only to students who hold Registered Nurse licensure.

Eligibility

To be eligible for the RN Advanced Placement option, a student must:

1. Have a valid California RN License.
2. Be a graduate of an ADN program (within the last twelve months); or have six months or equivalent full-time nursing practice within the United States in the past two years.
3. Meet all university admission requirements.

Curricular Requirements

The RN Advanced Placement option consists of 105 units many of which will have been completed in the student's basic nursing program. Units may be earned through credit by examination. The B.S. degree requires a total of 180 units.

Sample Program

A Sample Program for this degree can be found at the department website: [http://www.sci.csueastbay.edu/nursing](http://www.sci.csueastbay.edu/nursing).
II. Non-Nursing Courses (17 units)
- ANTH 1000 (or 1300) or SOC 1000 (or 1001, 1002, 2001, or 2002) (4)
- HDEV 3800 (4)
- HIST 4710 (4)
- PSYC 1000 (or 1001 or 1005) (5)

III. Nursing Courses (48 units)
- Bridge Year: NURS 2005, 2015, 3202, 3401, 3502, 3503, 3505, 3507, 3509 (30)
- Level III: NURS 4203, 4207, 4208, 4301 and either 4302 or a combination of 4305 and a 4-unit upper division course approved by advisor (18)

Clinical Course Progression Policies

I. Clinical Course Progression
A. Courses with the NURS prefix must be successfully completed or challenged in the proper sequence.
B. In order to progress within the Nursing major the student must:
   1. earn a grade of "C" or better or "CR" in courses with a NURS prefix,
   2. earn a grade of "C" or better in NURS 2005 and 2015; before beginning Level II clinical courses.
   3. be enrolled concurrently or have earned a grade of "C" or better in NURS 3201 before beginning any other Level II courses.
   4. earn a grade of "C" or better in NURS 3202 before beginning any subsequent Level III nursing courses.
C. A student loses eligibility for preferential admission to subsequent nursing courses if a grade of "D," "F," "NC," or "W" is received in any NURS prefix course. This policy also holds true for students who receive a Departmental Warning in a clinical course.
D. A student may not continue in a clinical practice course and will receive an "NC" grade after he or she is notified of clinically unsafe behavior(s).
E. A student who has two failures ("NC," "D," "F") in any of the NURS prefix courses will be dropped from the Nursing major. In the calculation of failures, the first grade assigned in any NURS prefix course which received Grade Forgiveness is included.

II. Academic Renewal of Core Theory Courses
A. Eligibility criteria
   1. For a course with a "D," faculty will make every effort for prompt grade forgiveness.
   2. For a course with an "F," there is no consideration for prompt grade forgiveness.
   3. Only one Grade Forgiveness is permitted while a student is in the Nursing major.
   4. Failure of an exam or paper while promptly attempting grade forgiveness of a course is considered a second failure and the student is dropped from the major.
B. Guidelines, prompt attempt at grade forgiveness
   1. The original grade remains on the transcript.
   2. The student will be given an alternate exam or paper which must be completed before the beginning of the next quarter.
   3. Students who pass the alternate exam or paper must register for the repeated course on an Individual Study basis in the next quarter to receive Grade Forgiveness.

III. Reentering Clinical Nursing Sequence
1. A written request for readmission to the clinical nursing sequence must be submitted to the chair of the Department of Nursing and Health Sciences. This must be done before Registration at the beginning of the academic year.
2. A student who withdraws or interrupts the clinical nursing sequence for physical and/or emotional reasons must present evidence (e.g., doctor's letter) that his/her current health status is satisfactory to physically and/or emotionally care for patients in any clinical setting. The final decision for reentry into the clinical nursing sequence will rest with the Executive Committee of the Department of Nursing and Health Sciences.
3. A student is not guaranteed that a request to repeat a clinical nursing course will be granted. This will depend on availability of clinical nursing practice space. First priority for repeating a course is given to students who withdrew or dropped the course. Second priority is given to those students who failed the course. The student must meet all requirements in effect upon return to clinical nursing courses.
4. Students who allow two years to elapse between enrollments in clinical nursing courses will be subject to recency considerations. If they are allowed to reenter, they may be required to repeat preparatory clinical courses at the discretion of the Nursing Executive Committee.

Major Advising
Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements.

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.
<table>
<thead>
<tr>
<th>Course Information</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>Success in Nursing (2)</td>
<td>2002</td>
</tr>
<tr>
<td>Learning strategies for the applied science of nursing. Written and oral communication activities relevant to nursing major courses. Prerequisites: departmental permission. May be repeated two times for credit, for a maximum of 4 units. CR/NC grading only.</td>
<td></td>
</tr>
<tr>
<td>Clinical Pathophysiology (4)</td>
<td>2005</td>
</tr>
<tr>
<td>Mechanisms of disease with implications for recognition and clinical management. Prerequisites: BIOL 2010 (or 2011) and BIOL 2020 or equivalent.</td>
<td></td>
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<tr>
<td>Principles of Nutrition and Medical Nutrition Therapy (4)</td>
<td>2010</td>
</tr>
<tr>
<td>Functions and sources of nutrients. Health disorders caused by lack or excess of nutrients. Nutritional needs throughout the life cycle. Specialization and career opportunities of nutritionists and dietitians. Concepts of medical nutrition therapy and basis of nutritional assessment.</td>
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</tr>
<tr>
<td>Pharmacology (3)</td>
<td>2015</td>
</tr>
<tr>
<td>Introduction to pharmacotherapeutics. Prerequisites: BIOL 2020 and 2025.</td>
<td></td>
</tr>
<tr>
<td>Introduction to Contemporary Nursing (4)</td>
<td>2020</td>
</tr>
<tr>
<td>Introduction to contemporary issues in nursing. Concepts and principles used in design/delivery of nursing care to promote client adaptation. Examination of nursing as a profession. Prerequisites: department permission; BIOL 2010 (or 2011), 2020, 2025; CHEM 1601 (or 1605), 1602; COMM 1000 or 1004; ENGL 1001; PHIL 1000 or 1001 or equivalent; STAT 1000. Co-requisites: NURS 2021, 2022.</td>
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</tr>
<tr>
<td>Nursing Support of Community-Based Clients (2)</td>
<td>2021</td>
</tr>
<tr>
<td>Provision of nursing support to well clients living in the community. Health screening/assessment, client teaching included. Prerequisites: department permission; BIOL 2010 (or 2011), 2020, 2025; CHEM 1601 (or 1605), 1602; COMM 1000 or 1004; ENGL 1001; PHIL 1000 or 1001 or equivalent; STAT 1000. Co-requisites: NURS 2021, 2022.</td>
<td></td>
</tr>
<tr>
<td>Level I Nursing Skills I (2)</td>
<td>2022</td>
</tr>
<tr>
<td>Nursing Care of Adults I (4)</td>
<td>2030</td>
</tr>
<tr>
<td>Nursing care delivery for patients and families experiencing mild to moderate alteration in health/function. Concepts and principles necessary to anticipate, identify, and meet universal biopsychosocial adaptation needs for nursing in healthcare context. Prerequisites: department permission; NURS 2010, 2020, 2021, 2022; PSYC 1000 (or 1001 or 1005). Co-requisites: NURS 2031, 2032.</td>
<td></td>
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<tr>
<td>Care of Adults I Practicum (2)</td>
<td>2031</td>
</tr>
<tr>
<td>Basic Physical Assessment (2)</td>
<td>2032</td>
</tr>
<tr>
<td>Physical assessment skills necessary to provide professional nursing care. Prerequisites: department permission; NURS 2010, 2020, 2021, 2022; PSYC 1000 (or 1001 or 1005). Co-requisites: NURS 2030, 2031. Miscellaneous course fee. See quarterly Class Schedule for current fee. CR/NC grading only. Six hrs. lab.</td>
<td></td>
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<tr>
<td>Nursing Care of Adults II (4)</td>
<td>2040</td>
</tr>
<tr>
<td>Continuation of Nursing Care of Adults I. Nursing care to support patients and families experiencing mild to moderate alteration in health/function. Theories and principles necessary to anticipate, identify, meet biopsychosocial needs in selected pathophysiologic states. Prerequisites: department permission; NURS 2015, 2030, 2031, 2032; SOC 1000 (or 1001, 1002, 2001, 2002) or ANTH 1000 or 1300. Co-requisites: NURS 2041, 2042.</td>
<td></td>
</tr>
<tr>
<td>Care of Adults II Practicum (3)</td>
<td>2041</td>
</tr>
<tr>
<td>Prerequisites: department permission; NURS 2015, 2030, 2031, 2032; SOC 1000 (or 1001, 1002, 2001, 2002) or ANTH 1000 or 1300. Co-requisites: NURS 2040, 2042. CR/NC grading only. Nine hrs. lab.</td>
<td></td>
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<tr>
<td>Level I Nursing Skills II (1)</td>
<td>2042</td>
</tr>
<tr>
<td>Prerequisites: department permission; NURS 2015, 2030, 2031, 2032; SOC 1000 (or 1001, 1002, 2001, 2002) or ANTH 1000 or 1300. Co-requisites: NURS 2040, 2041. Miscellaneous course fee. See quarterly Class Schedule for current fee. CR/NC grading only. Three hrs. lab.</td>
<td></td>
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<tr>
<td>Level II Nursing Skills I (1)</td>
<td>3001</td>
</tr>
<tr>
<td>Prerequisites: department permission; NURS 2005, 2010, 2015, 2040, 2041, 2042. Miscellaneous course fee. See quarterly Class Schedule for current fee. Three hrs. lab.</td>
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</tr>
<tr>
<td>Level II Nursing Skills II (1)</td>
<td>3002</td>
</tr>
<tr>
<td>Prerequisites: department permission; NURS 3001 and 3201. Miscellaneous course fee. See quarterly Class Schedule for current fee. Three hrs. lab.</td>
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<tr>
<td>Level II Nursing Skills III (1)</td>
<td>3003</td>
</tr>
<tr>
<td>Prerequisites: department permission; NURS 3002. Miscellaneous course fee. See quarterly Class Schedule for current fee. Three hrs. lab.</td>
<td></td>
</tr>
<tr>
<td>Patients and Families with Complex Needs (4)</td>
<td>3201</td>
</tr>
<tr>
<td>Concepts and principles from nursing and behavioral sciences applied to care of acutely ill patients and their families. Concepts and theories addressed include role, adaptation, communication, teaching/learning, systems and research. Prerequisites: NURS 2040, 2041, and 2042; HDEV 3800 or PSYC 4420; department permission.</td>
<td></td>
</tr>
<tr>
<td>Nursing Leadership (4)</td>
<td>3202</td>
</tr>
<tr>
<td>Integration of traditional leadership and management theory with contemporary healthcare issues, nursing trends, and practice applications. May be taken concurrently with NURS 3402-3413 or with NURS 3509 for RN Advanced Placement option. Prerequisites: department permission; NURS 3001, 3002, 3201, 3401.</td>
<td></td>
</tr>
<tr>
<td>Legal Responsibilities of Health Care Providers (2)</td>
<td>3401</td>
</tr>
<tr>
<td>Overview of American legislative and judicial system and its effect on consumer health care. The professional nurse is viewed as an advocate of clients as consumers of health care. Prerequisite: NURS 3201; department permission.</td>
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</tr>
<tr>
<td>Nursing Care of Adults III (1)</td>
<td>3402</td>
</tr>
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</table>
| Nursing care of patients with complex illness requiring surgery. Principles from nursing, natural, and behavioral sciences to
<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>3403</td>
<td>3403 Principles of Community Health Nursing (2)</td>
<td>Prerequisite: NURS 3201. May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3404</td>
<td>3404 Research Utilization (2)</td>
<td>Core functions of public health and placement option--NURS 3509. Prerequisites: department permission; all 3000-level NURS courses; RN Advanced resources to facilitate research utilization.</td>
</tr>
<tr>
<td>3405</td>
<td>3405 Childbearing Family Practice (2)</td>
<td>May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3406</td>
<td>3406 Care of Clients with Psychiatric/Mental Health Needs (1)</td>
<td>Theories of human behavior and the purposeful use of self provide a theoretical framework for psychiatric and mental health care of clients and their families. May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3407</td>
<td>3407 Psychiatric/Mental Health Nursing Practicum (2)</td>
<td>May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3408</td>
<td>3408 Nursing Care of Childbearing Families (1)</td>
<td>May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3409</td>
<td>3409 Childbearing Family Practice (2)</td>
<td>May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3410</td>
<td>3410 Nursing Care of Adults IV (1)</td>
<td>Nursing care of patients with acute, complex illness requiring medical intervention. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs of patients and their families. May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3411</td>
<td>3411 Nursing Care of Adults IV Practice (2)</td>
<td>May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3412</td>
<td>3412 Nursing Care of Elder Adults (1)</td>
<td>Nursing care of elders with acute, complex illness. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs of patients and their families. May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3413</td>
<td>3413 Care of Elder Adults Practice (2)</td>
<td>May be taken concurrently with NURS 3201. Prerequisites: NURS 2005, 2010, 2015, 2040, 2041, 2042, 3201; department permission.</td>
</tr>
<tr>
<td>3503</td>
<td>3503 Advanced Physical Assessment (3)</td>
<td>Physical assessment of adults for experienced Registered Nurses. Prerequisite: Department permission required. Open only to R.N. students enrolled in the Nursing major.</td>
</tr>
<tr>
<td>3505</td>
<td>3505 Advanced Principles I (4)</td>
<td>Advanced concepts of professional role, systems, change, and academic writing. Examination of evidence based practice resources. Prerequisites: department permission; BIOL 2010 (or 2011), 2020, 2025; CHEM 1601 (or 1605), 1602; COMM 1000 or 1004; ENGL 1001; PHIL 1000 or 1001 or equivalent; STAT 1000; current California R.N. Licensure. Open only to R.N. students enrolled in the Nursing major.</td>
</tr>
<tr>
<td>3507</td>
<td>3507 Advanced Principles II (4)</td>
<td>Continuum of care as it applies to patients with complex illness. Adaptation and nursing process incorporated into nursing interventions to facilitate patient transitions. Prerequisite: NURS 3505. Open only to R.N. students enrolled in the Nursing major.</td>
</tr>
<tr>
<td>3508</td>
<td>3508 Advanced Principles III (4)</td>
<td>Effects of hospitalization on patients and families. Exploration of nursing interventions related to theories of aging and illness role. Nursing research critique. Prerequisite: NURS 3507. Open only to R.N. students enrolled in the Nursing major.</td>
</tr>
<tr>
<td>3898</td>
<td>3898 Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; department approval of activity. May be repeated for credit, for a maximum of 8 units. Not for credit in the Nursing major. CR/NC grading only.</td>
</tr>
<tr>
<td>3999</td>
<td>3999 Issues in Nursing (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in nursing. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4203</td>
<td>4203 Research Utilization (2)</td>
<td>Critique of quantitative and qualitative nursing research with implications for clinical practice. Use of evidence-based practice resources to facilitate research utilization. Prerequisites: department permission; all 3000-level NURS courses; RN Advanced Placement option--NURS 3509.</td>
</tr>
</tbody>
</table>
| 4207   | 4207 Principles of Community Health Nursing (2)                     | Community-oriented, population-focused approaches to health promotion, disease prevention. Core functions of public health and
nursing applied to individuals, aggregates and communities at risk for development of health problems. Prerequisites: department permission; all 3000-level Nursing courses; RN Advanced Placement option--NURS 3509.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>4208</td>
<td>Practicum of Community Health Nursing (4)</td>
<td>Prerequisites: department permission; all 3000-level Nursing courses; RN Advanced Placement option--NURS 3509. Co-requisite: NURS 4207. Open only to students enrolled in the Nursing major. CR/NC grading only.</td>
</tr>
<tr>
<td>4301</td>
<td>Preceptorship Seminar (2)</td>
<td>Preceptorized course that promotes professional role transition through guided independence in professional nursing practice. Leadership/management concepts applied to contemporary professional practice issues. Prerequisites: department permission; all 3000-level nursing courses; RN Advanced Placement option--NURS 3509.</td>
</tr>
<tr>
<td>4302</td>
<td>Preceptorship Practicum (8)</td>
<td>Prerequisites: department permission; all 3000-level nursing courses; RN Advanced Placement option--NURS 3509. Co-requisite: NURS 4301. Open only to students enrolled in the Nursing major. CR/NC grading only.</td>
</tr>
<tr>
<td>4305</td>
<td>Preceptorship Practicum for the RN-BSN Student (4)</td>
<td>Prerequisites: department permission; NURS 3509. Co-requisite: NURS 4301. Open only to RN-BSN students. CR/NC grading only. Twelve hrs. act.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
</tbody>
</table>
Program Description
PACE is an innovative program which enables adult working students to make accelerated progress toward a Bachelor of Arts degree with a major in either Human Development or Liberal Studies. PACE classes are the same as those taken by students pursuing their degrees through the traditional university format. The only difference is the carefully structured course sequence, as well as the flexible method of delivery which may include course materials online. The PACE Program is also available at the Cal State East Bay Concord Campus.

Convenient Locations
- Hayward Hills Campus
- Concord Campus

Career Opportunities
Graduates in Human Development enjoy a wide variety of professional career opportunities. Among these are business, consulting, counseling and social services, probation/corrections, and education. The Human Development major is excellent preparation for graduate programs in law, clinical psychology, public administration, and business administration.

Liberal Studies graduates go on to a broad range of careers and occupations in community services, business, government, early childhood education and the elementary (K-8) teaching profession. The Liberal Studies major is also excellent preparation for law school and graduate work in numerous fields such as public administration.

Features
PACE students are provided with 12 to 13 units per quarter. All classes are offered evenings, weekends, or online for the convenience of the working adult. The Human Development major can be fully completed online.

Students who come into the program with all entry requirements met, including sufficient transfer units, may complete the B.A. or B.S. in a minimum of seven quarters.

PACE Priority: Seating is reserved for PACE students in designated classes through the first pass of regular registration. PACE registration privileges only apply to the first pass of registration. Students placed on a waitlist for a course will be taken in the order in which they were placed on the waitlist. Also, students who miss the first class may be dropped.

Preparation
The best preparation for entry into the PACE Program is the completion of lower division General Education requirements. PACE welcomes inquiries from community college counselors and prospective students. Pre-admission advising for potential transfer students is available provided that previous college transcripts are supplied. Specific entry requirements are:

1. Must be working at least 30 hours per week.
2. Completion of 60 transferable semester units with a minimum GPA of 2.00.
3. Completion of the following specific course requirements with a grade of "C" or better:
   - Written communication
   - Oral communication
   - Critical Thinking
- A transferable Math or Statistics course
  Students should check with their community college transfer advisor for specific courses that meet these requirements.

4. Lower-division General Education coursework must be completed for PACE admission. Please consult with a community college transfer advisor for questions regarding Cal State East Bay's lower-division GE requirements.

**Admission**

Application to PACE is a two-step process. Prospective students must first apply to the university using the CSUMentor online application. Students must then complete the PACE application, which is available online from the PACE website, [www.csueastbay.edu/pace](http://www.csueastbay.edu/pace).

PACE applicants are evaluated for acceptance into the PACE program after they are admitted to the university. Students will be notified of their acceptance into the program by email. Students are normally admitted to PACE in Fall Quarter each year due to the cohort nature of the program. However, students may apply for other quarters and will be accepted into the program on a space available basis. Students who have not completed the PACE entry requirements are encouraged to do so, either at Cal State East Bay or at their community college, and reapply to the program when they are completed.

**Program Structure and Requirements**

PACE students are provided with a program curriculum roadmap that provides a quarter-by-quarter schedule of their program's course offerings. Students are expected to follow the roadmap as closely as possible, taking a minimum of eight units each quarter, or risk being discontinued from the PACE program.

**Major Requirements**

See the [Human Development chapter](#) or [Liberal Studies chapter](#) in the undergraduate section of the catalog.
Department Information

Department of Philosophy
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4006
Phone: (510) 885-3225, FAX: (510) 885-2123
Website: http://class.csueastbay.edu/philosophy/

Professors
Marek W. Bielecki, Ph.D. University of Warsaw (Poland)
Jennifer L. Eagan (Chair), Ph.D. Duquesne University

Assistant Professors
Barbara Hall, Ph.D. University of Arizona, J.D. DePaul University Law School
Christopher Moreman, Ph.D. University of Wales, Lampeter

Program Description

The Department of Philosophy at Cal State East Bay seeks to promote the exploration of enduring human concerns—concerns, for example, about the nature of knowledge, ethics, truth, and God. In addition to emphasizing classical philosophy, the department encourages students to think critically about contemporary debates, particularly in the areas of law, human rights, and social justice; science, technology, and values; and religion. The department's faculty strive to instill in students lifelong habits of questioning, of exploring views contrary to their own, and of engaging in reasoned and honest dialogue. By their focus on analysis, comprehension and communication, they aim to develop qualities that are essential to personal fulfillment, civic responsibility, and career success.

Many different kinds of students choose the major in philosophy. Some intend to do graduate work in philosophy, often with the intention of becoming philosophy professors who research and teach in philosophy. Others take philosophy as a preparation for another professional area. Traditionally, for example, philosophy has been one of the chief roads to professional law schools. On the other hand, the aim of many religious studies students is to prepare for entrance into theological seminary. Philosophy also serves as a good general liberal arts education, since many of the long-established university disciplines are founded on philosophical principles: political science, sociology, education, aesthetics, physics, and other subjects. Finally, many students major in philosophy in order to prepare for careers that require clarity of thought, analytical ability, good writing skills, and the ability to present a reasoned argument.

Student Learning Outcomes

Students graduating with a B.A. in Philosophy from Cal State East Bay should:

1. be able to read and comprehend complex philosophical texts;
2. be able to offer good philosophical criticism to the positions presented by others;
3. be able to construct their own philosophical positions and present them persuasively to others in dialogue and/or writing;
4. be able to take in and fruitfully utilize criticisms of their own philosophical positions;
5. show an openness to giving careful and serious consideration to different philosophical views and the reasons offered in support of them;
6. be able to present arguments from various philosophical perspectives/traditions, including those very different from their own;
7. be able to empathize with the experiences of others insofar as those experiences are relevant to the resolution of philosophical issues;
8. have competence in the history of philosophy (ancient/medieval, Rationalism and Empiricism, Kant and Idealism, roots of contemporary philosophy, and contemporary philosophy) and subject areas of philosophy (ethics, epistemology or metaphysics); students should understand the interrelations of these areas of philosophy;
9. develop the ability to do philosophical research and to engage with secondary sources;
10. be able to utilize their philosophical training in their public or personal life.

Career Opportunities

- Analyst
- Business Executive
- Clergy
- Consultant
- Critic
- Editor
- Foreign Service Officer
- Journalist
- Lawyer
- Philosopher
- Policy Analyst
- Primary/Secondary School Teacher
- Professor
Public Administrator
Theologian
Writer

Major Requirements (B.A.)
The Philosophy major consists of 60 units of Philosophy courses of which at least 56 units must be upper division. Philosophy majors should consult with a Philosophy department advisor or the chairperson for advice in selecting Philosophy courses that suit their individual educational and career goals. The Philosophy major consists of 60 units; the B.A. degree requires a total of 180 units.

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements
The Philosophy minor consists of 28 units of Philosophy courses of which at least 24 units must be upper division. The purpose of the Minor in Philosophy is to provide a general background in Philosophy. Philosophy minors can choose any set of upper division Philosophy classes, which can include courses in the areas of religious studies, law, human rights, social justice, philosophy of science, ethics, and the history of philosophy. Philosophy courses focus on writing and critical reasoning skills; therefore the Philosophy Minor fits well with any major. Prospective Philosophy minors should consult with a Philosophy department advisor or the chairperson to select courses.

Undergraduate Courses

Lower Division Critical Thinking Courses (Course prefix: PHIL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>Workshop in Clear Thinking (4) Development of clarity and focus in thinking, with attention to rigor, modes of explanation, validity of reasoning, etc.</td>
</tr>
<tr>
<td>1001</td>
<td>Introduction to Logic (4) Beginning study of the forms of valid inference, including informal fallacies, syllogistic logic and symbolic logic.</td>
</tr>
</tbody>
</table>

Lower Division Philosophy Courses (Course prefix: PHIL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1102</td>
<td>Issues in Environmental Ethics (4) Critical examination of ethical issues in environmental philosophy. Topics may include: the impact of human activity on environmental systems, climate change, loss of biodiversity, sustainable practices, and intergenerational justice. Not open to students with credit for PHIL 1103 or 1104.</td>
</tr>
<tr>
<td>1103</td>
<td>Science, Ethics, and Technology (4) The ethical implications of various technologies, such as biotechnology, medical technologies, environmental technologies, and informational technologies. Not open to students with credit for PHIL 1102 or 1104.</td>
</tr>
<tr>
<td>1104</td>
<td>The Philosophy of Environmental Science and Policy (4) Study of issues related to the morality and justification of environmental science as a source of knowledge and guide to human action. Topics include: scientific disagreement, whose interests should concern us, and what should influence our evaluation of government policies. Not open to students with credit for PHIL 1102 or 1103.</td>
</tr>
<tr>
<td>1201</td>
<td>Introduction to Ancient Philosophy (4) Introduction to ancient philosophy and the origin of Western philosophy through primary texts. Topics may include the good life, mythology, the natural world, justice, knowledge, and reality.</td>
</tr>
<tr>
<td>1303</td>
<td>Introduction to the Philosophy of Art (4) Introduction to aesthetics through artistic forms such as music, visual art, and literature. Topics may include expression, representation, and creativity, as well as questions exploring what constitutes a work of art and the role of the artist.</td>
</tr>
<tr>
<td>1401</td>
<td>Religions of the World (4) Comparative study of religions from around the world, such as Hinduism, Buddhism, Taoism, Judaism, Christianity and Islam.</td>
</tr>
<tr>
<td>1605</td>
<td>Introduction to Asian Thought (4) The thought of China, India, and Japan, past and present, as expressed in philosophical texts. Not open to students with credit for PHIL 2605.</td>
</tr>
<tr>
<td>2001</td>
<td>Introduction to Philosophy (4) Major themes, thinkers and methods in philosophy. Topics include the history of philosophy, the nature of philosophical questioning, God, reality, truth and the self.</td>
</tr>
<tr>
<td>2002</td>
<td>Introduction to Ethics (4) Introduction to philosophical ethics. Topics include major ethical theories, virtue, vice, character, moral education and relativism. Impact of cultural diversity on ethical discourse.</td>
</tr>
</tbody>
</table>
### 2003 Introduction to Judaism, Christianity, and Islam (4)
Covers the three Abrahamic faiths: Judaism, Christianity, and Islam. Students will learn about each tradition's historical development and the specific beliefs of each, in addition to the relationships between these faiths and the sources of conflict.

### 2040 Early Modern World Philosophies (4)
Evolution of religious and philosophical traditions of early modern Europe, Middle East, and Asia. Impact of Islam on Judeo-Christian thought; philosophical debates regarding conquest and colonization of the Americas; changing perspectives on race and gender; the Enlightenment in global perspective.

### 2605 Asian Thought (4)
Buddhist thought of India, Southeast Asia, and Japan as expressed in its philosophical texts, visual art and music, and literature; demonstration of the interconnections among these disciplines. Not open to students with credit for PHIL 1605.

#### Upper Division Critical Thinking Courses (Course prefix: PHIL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3002</td>
<td>Modern Logic (4)</td>
</tr>
<tr>
<td></td>
<td>Advanced course in symbolic logic. Students without a mathematical background are encouraged to first take PHIL 1001.</td>
</tr>
<tr>
<td>3010</td>
<td>Critical Legal Reasoning (4)</td>
</tr>
<tr>
<td></td>
<td>Development of ability to think clearly and rationally with focus on legal reasoning. Argument by analogy, use of precedent, interpretation of court opinions, and LSAT preparation.</td>
</tr>
</tbody>
</table>

#### Upper Division Philosophy Courses (Course prefix: PHIL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3100</td>
<td>Ethics (4)</td>
</tr>
<tr>
<td></td>
<td>Major theories about ethics or morality and their relation to different social systems, institutions and cultures of the world.</td>
</tr>
<tr>
<td>3151</td>
<td>Environmental Ethics (4)</td>
</tr>
<tr>
<td></td>
<td>Philosophical conceptions of nature and the environment, and human responsibilities towards it, drawn from different historical and cultural traditions.</td>
</tr>
<tr>
<td>3152</td>
<td>Biomedical Ethics (4)</td>
</tr>
<tr>
<td></td>
<td>Ethical issues in biology and medicine, such as euthanasia, abortion, truth-telling, genetic engineering, cloning, distribution of medical resources.</td>
</tr>
<tr>
<td>3153</td>
<td>Biology and Ethics (4)</td>
</tr>
<tr>
<td></td>
<td>Conceptual and ethical issues arising from new developments in biology. Topics may include cloning, genetic engineering, biodiversity, the evolution/creation debate.</td>
</tr>
<tr>
<td>3151</td>
<td>Environmental Ethics (4)</td>
</tr>
<tr>
<td></td>
<td>Philosophical conceptions of nature and the environment, and human responsibilities towards it, drawn from different historical and cultural traditions.</td>
</tr>
<tr>
<td>3152</td>
<td>Biomedical Ethics (4)</td>
</tr>
<tr>
<td></td>
<td>Ethical issues in biology and medicine, such as euthanasia, abortion, truth-telling, genetic engineering, cloning, distribution of medical resources.</td>
</tr>
<tr>
<td>3153</td>
<td>Biology and Ethics (4)</td>
</tr>
<tr>
<td></td>
<td>Conceptual and ethical issues arising from new developments in biology. Topics may include cloning, genetic engineering, biodiversity, the evolution/creation debate.</td>
</tr>
<tr>
<td>3161</td>
<td>Philosophy and Sex (4)</td>
</tr>
<tr>
<td></td>
<td>A philosophical examination of conceptual and ethical issues raised by sexuality and sexual love. Possible topics include love and sexuality, promiscuity, prostitution, adultery, homosexuality, sexual harassment, pornography, and same-sex marriage.</td>
</tr>
<tr>
<td>3201</td>
<td>Aesthetics (4)</td>
</tr>
<tr>
<td></td>
<td>Theories of art, such as imitation, formalism and expressionism; the contrast between representational and abstract art.</td>
</tr>
<tr>
<td>3216</td>
<td>Philosophy and Science Fiction (4)</td>
</tr>
<tr>
<td></td>
<td>Philosophical views about topics contained implicitly in science fiction writing and film.</td>
</tr>
<tr>
<td>3230</td>
<td>Art and Philosophy of the East (4)</td>
</tr>
<tr>
<td></td>
<td>An interdisciplinary investigation of the relationship between art and philosophy of Asia, with particular emphasis on Hinduism and Buddhism. Team taught by faculty from the Art and Philosophy departments. Cross-listed with ART 3230.</td>
</tr>
<tr>
<td>3301</td>
<td>Theory of Knowledge (4)</td>
</tr>
<tr>
<td></td>
<td>An exploration of such issues as skepticism, relativism, truth, and the nature of understanding. May be repeated once for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>3305</td>
<td>Fundamental Questions: Self, Nature, and God (4)</td>
</tr>
<tr>
<td></td>
<td>Topics such as the mind-body problem, freedom versus determinism, and the nature of truth, faith, and reason.</td>
</tr>
<tr>
<td>3311</td>
<td>Metaphysics (4)</td>
</tr>
<tr>
<td></td>
<td>An exploration of the nature of matter, mind, space, time, truth, and the real. May be repeated once for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>3321</td>
<td>Philosophy of the Human Sciences (4)</td>
</tr>
<tr>
<td></td>
<td>Philosophical study of theories, methods and problems in the social and behavioral sciences. May be repeated once for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>3322</td>
<td>Philosophy of Language (4)</td>
</tr>
<tr>
<td></td>
<td>An exploration of fundamental issues concerning language and discourse, such as truth, communication, meaning, representation, understanding, metaphor, and irony.</td>
</tr>
<tr>
<td>3332</td>
<td>Philosophy of Science (4)</td>
</tr>
<tr>
<td></td>
<td>The nature of scientific explanation, scientific methods, and conceptual revolutions in science.</td>
</tr>
<tr>
<td>3335</td>
<td>Science, Technology and Values (4)</td>
</tr>
<tr>
<td>3341</td>
<td>Philosophy of Cognition and Artificial Intelligence (4)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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</tr>
<tr>
<td>3400</td>
<td>Philosophy of Religion (4)</td>
</tr>
<tr>
<td>3401</td>
<td>Contemporary Religious Thinkers (4)</td>
</tr>
<tr>
<td>3403</td>
<td>Philosophies of the East (4)</td>
</tr>
<tr>
<td>3404</td>
<td>Mysticism (4)</td>
</tr>
<tr>
<td>3410</td>
<td>Comparative Themes in Eastern and Western Philosophy (4)</td>
</tr>
<tr>
<td>3411</td>
<td>Jewish Philosophy (4)</td>
</tr>
<tr>
<td>3417</td>
<td>The Philosophy of Islam (4)</td>
</tr>
<tr>
<td>3421</td>
<td>Atheism (4)</td>
</tr>
<tr>
<td>3430</td>
<td>The Bible in Film (4)</td>
</tr>
<tr>
<td>3431</td>
<td>Cults, New Religious Movements (4)</td>
</tr>
<tr>
<td>3432</td>
<td>Religion, Monsters, and Horror (4)</td>
</tr>
<tr>
<td>3452</td>
<td>Social and Political Philosophy (4)</td>
</tr>
<tr>
<td>3503</td>
<td>Philosophy of Law (4)</td>
</tr>
<tr>
<td>3510</td>
<td>Human Rights and Social Justice: Cultural Groups and Women in the U.S. (4)</td>
</tr>
<tr>
<td>3511</td>
<td>Philosophy of Human Rights and Global Justice (4)</td>
</tr>
<tr>
<td>3515</td>
<td>Race and Social Justice (4)</td>
</tr>
<tr>
<td>3543</td>
<td>Evil (4)</td>
</tr>
<tr>
<td>3560</td>
<td>Business and Professional Ethics (4)</td>
</tr>
<tr>
<td>3601</td>
<td>Ancient and Medieval Philosophy (4)</td>
</tr>
<tr>
<td>3602</td>
<td>Modern Philosophy (4)</td>
</tr>
<tr>
<td>3603</td>
<td>Thinkers of the Enlightenment (4)</td>
</tr>
<tr>
<td>3604</td>
<td>Roots of Contemporary Philosophy (4)</td>
</tr>
<tr>
<td>3605</td>
<td>Studies in Contemporary Philosophy (4)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>3701</td>
<td>Philosophy of Education (4)</td>
</tr>
<tr>
<td>3720</td>
<td>Feminist Philosophy (4)</td>
</tr>
<tr>
<td>3721</td>
<td>African-American Philosophical Perspectives (4)</td>
</tr>
<tr>
<td>3925</td>
<td>Contemporary Ethical Issues (4)</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Philosophy (4)</td>
</tr>
<tr>
<td>4606</td>
<td>Seminar in Philosophy (4)</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>
Physics

- Department Information
- Program Description
- Career Opportunities
- Features
- Preparation
- Major Requirements (B.S.)
- Major Requirements (B.A.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses

Department Information

Department of Physics
College of Science
Office: North Science 231
Phone: (510) 885-3401
Email: physics@csueastbay.edu
Website: [www.sci.csueastbay.edu/physics](http://www.sci.csueastbay.edu/physics)

Associate Professors
Derek Kimball, Ph.D. University of California, Berkeley
Jason Singley (Chair), Ph.D. University of California, San Diego
Gary S. Weston, Ph.D. University of California, Los Angeles

Assistant Professor
Erik Helgren, Ph.D. University of California, Los Angeles

Program Description

In physics, one attempts to discover, formulate, explain, and apply the basic laws of nature. You could be a physicist and work in areas as diverse as astrophysics, relativity, properties of materials, or the standard model of fundamental particles and interactions. Principles of physics provide the foundation for other sciences as well as engineering. Some of the examples of modern technological development from the application of physical principles include radio and television, computers, laser scanners, and communication by fiber optics. In addition, physicists explore problems in astronomy and theories for the origin and evolution of the universe.

At Cal State East Bay students can choose between a Bachelor of Science (B.S) degree and a Bachelor of Arts (B.A.) degree with a major in Physics. The B.S. degree major program is designed to give students an understanding of the fundamentals of physics including concepts of atomic and nuclear physics, classical mechanics, wave motion and sound, electromagnetism and optics, heat and thermodynamics, relativity, quantum mechanics, and elementary particles and their interactions.

Whereas the B.S. degree provides more focus, the B.A. degree major program is designed to satisfy the needs of students who require greater breadth of study across the sciences than the B.S. program can provide. Students who might be more interested in the B.A. degree, for example, would be prospective secondary-school teachers, or students who wish to pursue interdisciplinary study (e.g., in biophysics), or graduate study in professional programs (e.g., in the health sciences), business, or law in technical fields. For those students interested in becoming secondary-school teachers, an option in Physics Education is available which has a larger breadth of science courses required for teaching in California.

Student Learning Outcomes

Students graduating with a Bachelor's degree in Physics from Cal State East Bay will have:

- the ability to do advanced calculations and solve technical problems in experimental physics;
- a general grasp of theoretical principles and their application in particular problems;
- the ability to work productively and creatively in both individual and group situations;
- the habit of critical thinking.

Career Opportunities

- Astronomer
- Biochemical Engineer
- Device Engineer
- Electrical Engineer
- Electric Power Administrator
- Geophysicists
- Laboratory Assistant
- Laser Technician
- Mechanical Engineer
- Pharmacologist
- Physics Teacher
- Pollution Control Technician
- Professor
- Renewable Energy Manager
- Research Scientist
Features

With relatively small classes and teaching as a major emphasis of faculty members, the physics major involves a considerable amount of individualized instruction. In addition, research done by faculty members often includes student participation.

Hands-on experience is a central theme of the programs. Upper division students use modern equipment to conduct experiments in such areas as fiber optics, atomic and molecular spectroscopy, nuclear magnetic resonance, and solar cell construction and characterization.

Physics majors have an opportunity to be inducted into the national physics honors society, Sigma Pi Sigma. Additionally, students may join the Society of Physics Students (SPS).

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The B.S. degree major consists of 105 units; the B.S. degree requires a total of 180 units.

Sample Program

A Sample Program for this degree can be found at the department website: [www20.csueastbay.edu/csci/departments/physics/](http://www20.csueastbay.edu/csci/departments/physics/)

I. Lower Division (41 units)
   - CHEM 1101, 1102 General Chemistry (5, 5)
   - MATH 1304, 1305, 2304 Calculus I, II, III (4, 4, 4)
   - MATH 2101 Elements of Linear Algebra (4)
   - PHYS 1001, 1002, 1003 General Physics (5, 5, 5)

II. Upper Division (64 units)
   - MATH 3331 Differential Equations (4)
   - MATH 4361 Partial Differential Equations (4)
   - PHYS 3101, 3102 Analytic Mechanics I, II (3, 3)
   - PHYS 3151, 3152 Thermal and Statistical Physics I, II (3, 3)
   - PHYS 3180 Computational Physics (4)
   - PHYS 3280 Electronics (4)
   - PHYS 3281 Experimental Physics (4)
   - PHYS 3283 Advanced Laboratory (4)
   - PHYS 3301, 3302, 3303 Quantum Mechanics I, II, III (3, 3, 3)
   - PHYS 4001, 4002, 4003 Electromagnetism I, II, III (3, 3, 3)
   - PHYS 4250 Selected Topics or PHYS 4850 Undergraduate Research (3)
   - PHYS 4600 Solid State (3)
   - PHYS 4700 Modern Optics (3)
   - PHYS 4950 Physics Capstone (1)

Total Units: 105

Major Requirements (B.A.)

The B.A. degree major consists of 87 units; the B.A. degree requires a total of 180 units.

I. Lower Division (41 units)
   - CHEM 1101, 1102 General Chemistry (5, 5)
   - MATH 1304, 1305, 2304 Calculus I, II, III (4, 4, 4)
   - MATH 2101 Elements of Linear Algebra (4)
   - PHYS 1001, 1002, 1003 General Physics (5, 5, 5)

II. Upper Division (46 units)
   - MATH 3331 Differential Equations (4)
   - PHYS 3101, 3102 Analytic Mechanics I, II (3, 3)
   - PHYS 3151 Thermal and Statistical Physics I (3)
   - PHYS 3180 Computational Physics (4)
   - PHYS 3280 Electronics (4)
   - PHYS 3281 Experimental Physics (4)
   - PHYS 3301, 3302 Quantum Mechanics I, II (3, 3)
   - PHYS 4001, 4002 Electromagnetism I, II (3, 3)

Select nine (9) units of electives from the following:
   - PHYS 3303 Quantum Mechanics III (3) or PHYS 4600 Solid State (3)
- PHYS 4003 Electromagnetism III (3) or PHYS 4700 Modern Optics (3)
- Three units selected from PHYS 4250 Selected Topics (1-3) and PHYS 4850 Undergraduate Research (1-3)

**Total Units:** 87

**Physics Education Option**

The Bachelor of Arts degree, major in Physics with an option in Physics Education, is designed for students interested in a career teaching physics at the high school level, but also prepares students to work as an industrial physicist. This program covers all of the content areas necessary for teaching both high school physics and general science courses in middle and high schools, thus preparing graduates to enter a single subject credential program. The B.A. degree major with a Physics Education option consists of 91 units; the B.A. degree requires a total of 180 units.

**I. Lower Division (46 units)**

- BIOL 1000 Basic Concepts in Biology (5)
- CHEM 1100 Introduction to College Chemistry (5)
- GEOL 1000 Earth Systems Science (5)
- MATH 1304, 1305, 2304 Calculus I, II, III (4, 4, 4)
- MATH 2101 Elements of Linear Algebra (4)
- PHYS 1001, 1002, 1003 General Physics (5, 5, 5)

**II. Upper Division (45 units)**

- MATH 3331 Differential Equations (4)
- PHIL 3335 Science, Technology and Values (4)
- PHYS 3101 Analytic Mechanics I (3)
- PHYS 3151 Thermal Physics I (3)
- PHYS 3180 Computational Physics (4)
- PHYS 3280 Electronics (4)
- PHYS 3281 Experimental Physics (4)
- PHYS 3301, 2 Quantum Mechanics I, II (3, 3)
- PHYS 4001, 2 Electromagnetism I, II (3, 3)
- PHYS 4250 Selected Topics or 4850 Undergraduate Research (3)
- PHYS 4950 Physics Capstone (1)
- TED 3001 Exploring Education (3)

**Total Units:** 91

**Other Degree Requirements**

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

**Minor Requirements**

The minor in physics is designed to provide a general background in physics for students majoring in other areas. It is of particular value to students majoring in such sciences as biology, chemistry, computer science, geology, and mathematics. A minor in physics will broaden students' understanding of physical science and will expand employment opportunities, including teaching at the secondary school level. The minor consists of 28 units.

**A. Required courses (15 units):**

- PHYS 1001, 1002, 1003 General Physics (5, 5, 5)

**B. Three courses from the following list (9 units):**

- PHYS 3101, 3102 Analytical Mechanics I, II (3, 3)
- PHYS 3151, 3152 Thermal and Statistical Physics I, II (3, 3)
- PHYS 3301, 3302, 3303 Quantum Mechanics I, II, III (3, 3, 3)
- PHYS 4001, 4002, 4003 Electromagnetism I, II, III (3, 3, 3)
- PHYS 4600 Solid State Physics (3)
- PHYS 4700 Modern Optics (3)

**C. One course from the following list (4 units):**

- PHYS 3180 Computational Physics (4)
- PHYS 3280 Electronics (4)
- PHYS 3281 Experimental Physics (4)
- PHYS 3283 Advanced Laboratory (4)

**Undergraduate Courses**

**Undergraduate Courses (Course prefix: PHYS)**

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</table>
1001. General Physics (5 each)
All major fields of physics are covered in this sequence. This sequence is designed for physics, physical science, geology (B.S.), and chemistry (B.S.) majors. Prerequisites or co-requisites: MATH 1304, 1305, 2304. Each course is a prerequisite of the one following. Four hrs. lect., 3 hrs. lab., each
- 1001 Newtonian Mechanics and Oscillations
- 1002 Thermodynamics and Optics
- 1003 Electromagnetism

1021 General Physics Supplemental Instruction (.5)
Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 1001). Co-requisite: PHYS 1001. Not for credit in PHYS major. CR/NC grading only. 1 hr. act.

1022 General Physics Supplemental Instruction (.5)
Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 1002). Co-requisite: PHYS 1002. Not for credit in PHYS major. CR/NC grading only. 1 hr. act.

1023 General Physics Supplemental Instruction (.5)
Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 1003). Co-requisite: PHYS 1003. Not for credit in PHYS major. CR/NC grading only. 1 hr. act.

1200 Behind the Music (4)
This course offers a basic introduction to the physical properties of sound waves. The focus will be on developing a scientific framework in which to understand how different musical instruments produce a variety of sounds. Not for credit in Physics major.

1500 How Things Work (4)
A conceptual look at how popular and common things work, what they mean in an everyday way, and how they all fit together in one working unit. Not for credit in Physics major. Not open to students with credit for PHYS 1700.

1700 Elementary Physics (4)
A non-mathematical survey of the basic physical laws (rules) of nature with emphasis on the origin, meaning, significance, and limitations of these laws. Topical areas include mechanics, wave motion, electricity and magnetism, heat and thermodynamics, relativity, quantum theory, and elementary particle theory. Not for credit in Physics major. Not open to students with credit for PHYS 1500.

1780 Elementary Physics Laboratory (1)
A lab designed to accompany PHYS 1700 and to introduce students to some equipment used in physics. The experiments are hands-on activities in mechanics, wave motion and sound, temperature and heat, electricity, light, and radioactivity. Not for credit in Physics major. Three hrs. lab.

1800 Astronomy (4)
A descriptive survey of astronomy, astrophysics, and cosmology. Emphasis is on the physical nature and evolution of galaxies, stars, and planets. Not for credit in Physics major. Not open to students with credit for PHYS 1600.

1880 Astronomy Laboratory (1)
A lab designed to accompany PHYS 1800 and PHYS 3700. Experiments are hands-on activities involving positions and motions of the moon, planets, and stars. Some night observations are included. Not for credit in Physics major. Three hrs. lab.

2004 General Physics (5)
A continuation of the General Physics sequence (PHYS 1001, 1002, 1003) focusing on modern physics: relativity, quantum mechanics, atomic and molecular physics, nuclear and particle physics. Course is a bridge to upper division work in sciences, and special emphasis is placed on advanced mathematical techniques and problem-solving skills. Prerequisites: MATH 2304 and PHYS 1003. Four hrs. lect., 3 hrs. lab.

2005 The Science of Energy (4)
A descriptive course covering energy resources, production, and consumption in the 21st century. Energy input and output of physical systems such as household appliances and modes of transportation. Not for credit in Physics major.

2701, 2702, 2703
Introductory Physics (4 each)
A three-quarter sequence in general physics, designed primarily for students taking the B.S. biological sciences (including pre-professional students), chemistry (B.A.), and geology or for non-science majors requiring a good foundation in physics. Knowledge of algebra and trigonometry required. For students who are not majoring in physics. Not for credit in Physics major. Three hrs. lect., 3 hrs. lab each.
- 2701 Force, Mass and Motion
  Prerequisite: Trigonometry or MATH 1300.
- 2702 Heat, Sound, Electricity and Magnetism
  Prerequisite: PHYS 2701.
- 2703 Light and Modern Physics
  Prerequisite: PHYS 2702.

2711 Introductory Physics Supplemental Instruction (.5)
Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 2701). Co-requisite: PHYS 2701. Not for credit in PHYS major. CR/NC grading only. 1 hr. act.

2712 Introductory Physics Supplemental Instruction (.5)
Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 2702). Co-requisite: PHYS 2702. Not for credit in PHYS major. CR/NC grading only. 1 hr. act.

2713 Introductory Physics Supplemental Instruction (.5)
Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 2703). Co-requisite: PHYS 2703. Not for credit in PHYS major. CR/NC grading only. 1 hr. act.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3102</td>
<td>Analytic Mechanics II (3)</td>
<td>Particles and rigid bodies. Oscillations and waves. Fluids. Prerequisite: PHYS 3101; prerequisite or co-requisite: MATH 3331.</td>
</tr>
<tr>
<td>3151</td>
<td>Thermal and Statistical Physics I (3)</td>
<td>The laws of thermodynamics, states of matter, kinetic theory, introduction to statistical mechanics. Prerequisite: PHYS 1003.</td>
</tr>
<tr>
<td>3152</td>
<td>Thermal and Statistical Physics II (3)</td>
<td>Canonical and other ensembles. Quantum gases and phase transitions. Prerequisite: PHYS 3151; prerequisite or co-requisite: MATH 3331.</td>
</tr>
<tr>
<td>3180</td>
<td>Computational Physics (4)</td>
<td>Computer programming and numerical techniques relevant to physics. Data acquisition and analysis. Prerequisite: PHYS 1003; prerequisite or co-requisite: MATH 3331. Two hrs. lect., 6 hrs. lab.</td>
</tr>
<tr>
<td>3280</td>
<td>Electronics (4)</td>
<td>Hands-on introduction to analog and digital circuits and components commonly found in laboratory electronics. Prerequisite: PHYS 1003 or consent of instructor. Cross-listed with ENGR 3280. Two hrs. lect., 6 hrs. lab.</td>
</tr>
<tr>
<td>3281</td>
<td>Experimental Physics (4)</td>
<td>Experiments in various fields of physics. Experimental design. Computer interfacing. Written and oral reports. Laboratory safety. Prerequisite: PHYS 3280 or consent of instructor. Two hrs. lect., 6 hrs. lab.</td>
</tr>
<tr>
<td>3283</td>
<td>Advanced Laboratory (4)</td>
<td>Experimental projects, including optical and solid state physics topics. Prerequisite: PHYS 3280. May be repeated once for credit with consent of instructor, for a maximum of 8 units. Two hrs. lect., 6 hrs. lab.</td>
</tr>
<tr>
<td>3301</td>
<td>Quantum Mechanics I (3)</td>
<td>Introduction to Schrodinger's equation and the mathematical formalisms of quantum mechanics. Prerequisite: PHYS 1003.</td>
</tr>
<tr>
<td>3302</td>
<td>Quantum Mechanics II (3)</td>
<td>Applications of Schrodinger's equation. Angular momentum. Prerequisite: PHYS 3301; prerequisite or co-requisite: MATH 3331.</td>
</tr>
<tr>
<td>3303</td>
<td>Quantum Mechanics III (3)</td>
<td>Approximation methods and further applications of quantum mechanics. Prerequisite: PHYS 3302; prerequisite or co-requisite: MATH 4361.</td>
</tr>
<tr>
<td>3700</td>
<td>The Big Bang and Other Cosmologies (4)</td>
<td>A descriptive course on the cosmological origin and evolution of the universe. Historical review of cosmological models and discussion of current theories. Stellar and galactic origin and evolution, stellar energy, the early universe, open and closed universes, and the search for extra-terrestrial life.</td>
</tr>
<tr>
<td>3710</td>
<td>Solar System Astronomy (4)</td>
<td>Overview of the structure and evolution of the solar system. Topics include the sun, terrestrial and Jovian planets, moons, asteroids, comets, as well as the discovery of extra-solar planets and the resulting impact on our understanding of solar system formation.</td>
</tr>
<tr>
<td>3720</td>
<td>Stars and Galaxies (4)</td>
<td>An overview of the universe with emphasis on the study of stars and galaxies. Topics include stars, stellar evolution, black holes, neutron stars, galaxies, and the role of dark matter and dark energy in galaxy formation.</td>
</tr>
<tr>
<td>3750</td>
<td>Biophysics Tools in the History of Medical Research (4)</td>
<td>A basic introduction to major biophysics tools invented in the 20th century, how they help to amplify, aggregate and differentiate biological data, and some significant discoveries to which they have contributed. Examples are drawn from diabetes, cardiovascular, and kidney research. Not for credit in Physics major.</td>
</tr>
<tr>
<td>3800</td>
<td>Achievements of Women in Science (4)</td>
<td>(See BIOL 3800 for course description.)</td>
</tr>
<tr>
<td>3875</td>
<td>Mathematical Physics (4)</td>
<td>See MATH 3875 for course description.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the physics major; a maximum of 2 units will be accepted toward the minor. CR/NC grading only.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Physics (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in physics. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4001</td>
<td>Electromagnetism I (3)</td>
<td>Study of electricity and magnetism leading to Maxwell's equations in vacuum. Prerequisite: PHYS 1003.</td>
</tr>
<tr>
<td>4002</td>
<td>Electromagnetism II (3)</td>
<td>Materials and boundary value problems. AC circuits. Prerequisite: PHYS 4001; prerequisite or co-requisite: MATH 3331.</td>
</tr>
<tr>
<td>4003</td>
<td>Electromagnetism III (3)</td>
<td>Electromagnetic radiation. Relativity in electromagnetism. Prerequisite: PHYS 4002; prerequisite or co-requisite: MATH 4361.</td>
</tr>
<tr>
<td>4250</td>
<td>Selected Topics (1-3)</td>
<td>Various subjects and projects providing an extension of the physics curriculum. Prerequisite: PHYS 1003. May be repeated for credit, for a maximum of 3 units for any combination of PHYS 4250 and 4850.</td>
</tr>
<tr>
<td>Modern Optics (3) Introduction to photonics. Lasers and fibers. Non-linear optics and electro-optics. Prerequisite: PHYS 4002.</td>
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<tr>
<td>Course</td>
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<td>Description</td>
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<tr>
<td>4850</td>
<td>Undergraduate Research (1-3)</td>
<td>Research leading to a formal report, under the direction of a faculty member. Co-requisites: PHYS 3281 and 3283. May be repeated for credit, for a maximum of 3 units for any combination of PHYS 4250 and 4850. Three to nine hrs. act./lab.</td>
</tr>
<tr>
<td></td>
<td>Independent Study (1-4)</td>
<td></td>
</tr>
<tr>
<td>4950</td>
<td>Physics Capstone (1)</td>
<td>Comprehensive overview and synthesis of undergraduate physics. Must be taken in Spring quarter immediately preceding graduation.</td>
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Political Science

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- **Pre-Law Students**
- **Other Degree Requirements**
- **Minor Requirements**
- **Undergraduate Courses**

**Department Information**

Department of Political Science  
College of Letters, Arts, and Social Sciences  
Office: Meiklejohn Hall 4092  
Phone: (510) 885-3221  
Website: [http://class.csueastbay.edu/politicalscience/](http://class.csueastbay.edu/politicalscience/)

**Professors**

Norman A. Bowen, Ph.D. State University of New York at Albany  
Kim Geron (Interim Chair), Ph.D. University of California, Riverside  
David Sadofsky Baggins, Ph.D. Syracuse University  
Michael E. Good, Ph.D. Miami University of Ohio

**Associate Professors**

Melissa R. Michelson, Ph.D. Yale University

**Assistant Professors**

Elizabeth Bergman, Ph.D. Claremont Graduate University  
Maria C. Ortuoste, Ph.D. Arizona State University

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**Program Description**

The political science curriculum helps students to acquire an organized body of knowledge about government and to think analytically about public policy, law, and politics. The political science degree prepares graduates to enter careers in government, public service, public administration, public policy analysis, legislative advocacy, business, international relations, and teaching. Many Cal State East Bay political science graduates continue their academic careers in law school, or in the pursuit of graduate degrees in political science or public policy analysis.

**Student Learning Outcomes**

Students graduating with a B.A. in Political Science from Cal State East Bay will:

1. know the techniques for skillfully reading and interpreting different types of writing, such as textbooks, scholarly books and journal articles, case law, newspaper articles, government documents (including those that employ statistics), and original philosophical texts;
2. be able to assess information, including demonstrating the ability to distinguish between the central and peripheral aspects of a piece of writing, and between well-substantiated arguments and unsupported assertions;
3. be able to write knowledgeably, correctly, clearly and logically.

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**Career Opportunities**

- Administrative Assistant  
- Attorney  
- Campaign Aide/Manager  
- Diplomat  
- FBI/CIA Agent  
- Foreign Service Officer  
- International Relations Specialist  
- Journalist  
- Labor Organizer/Union Representative  
- Law Clerk  
- Legislative Advocate/Lobbyist  
- Legislative Aide  
- Paralegal  
- Legal Assistant  
- Police Officer  
- Politician  
- Polling Specialist  
- Private Investigator  
- Public Administrator  
- Public Information Officer  
- Research Specialist
Features

The political science major offers a Pre-Law option for students planning a career in law. The Public Affairs and Administration option is designed to meet the needs of students contemplating a career in public administration. The Political Science department offers a major, a minor, and a Liberal Studies option. Special features of the Political Science major include: the Intercollegiate Model United Nations Club; field trips to Sacramento and to State and Federal courts; guest political speakers; pre-law advising; local, Sacramento, Washington, and political campaign internships; and the Political Science Club.

Preparation

For Advanced Placement course equivalencies, see Registration chapter.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The regular major consists of 56 units; the Pre-Law option consists of 64 units; the Public Affairs and Administration option consists of 61 units. The B.A. degree requires a total of 180 units.

The Traditional Political Science Major

I. Lower Division (8-16 units)
   A. POSC 1201 American Political Institutions (4)
   B. POSC 1202 Public Policy/California Politics (4)
   C. Students may take an additional 0-8 units of lower division political science courses.

II. Upper Division (40-48 units)
   A. POSC 3030 The Study of Political Science (4)
   B. One course in each of the following five fields (20):  
      1. American Government and Public Administration (includes courses listed under Public Policy and Administration)  
      2. Public Law  
      3. Comparative Government and Politics  
      4. International Relations  
      5. Political Theory  
   C. POSC 4910 Political Science Seminar (4)
   D. Twelve (12) to twenty (20) additional units from upper division political science courses

Pre-Law Option

Also see "Pre-Law Students" later in this chapter.

Students taking this option will focus their coursework in legal studies. Completion of this program will lead to a B.A. degree, major in Political Science with an option in Pre-Law. The total required for the major with Pre-Law option is 64 units. The total required for the B.A. degree is 180 units.

Two quarters before you expect to graduate, complete a major check sheet and inquire about other requirements for graduation. The following is an outline indicating specific courses and options necessary for completing the option in pre-law.

I. Foundation Courses (24 units)
   - POSC 1201 American Political Institutions (4)
   - POSC 1202 Public Policy/California Politics (4)
   - POSC 3030 The Study of Political Science (4)
   - One lower or upper division course in International Relations (4)
   - One lower or upper division course in Comparative Government (4)
   - One upper division course in Political Theory (4)

II. The Political and Policy Context of the Law (16 units)
    Choose 16 units from the following:  
    - HSC 3350 Health Legislation and Government Programs (4)
    - MGMT 4500 Business, Government and Society (4)
    - any Political Science course listed under the headings "American Government and Politics" or "Public Policy and Administration."

III. Public Law (20 units)
    Any 20 units recognized by the Department as a public law class. These include 3410 (Law and Society), 3417 (Survey of American Law), 3418 (Immigration Law), 3441 (Constitutional Law), 3442 (Constitutional Rights), 3460 (Environmental Law), 3470 (International Law), 3503 (Philosophy of Law), 4445 (Bureaucratic Politics); any business law class.

IV. Capstone (4 units)
    - POSC 4910 Political Science Seminar (4)

Public Affairs and Administration Option

Students taking this option will concentrate their coursework in American political institutions, public policy, and administrative processes. Completion of this program will lead to a B.A. degree major in Political Science, with an option in Public Affairs and Administration.

Since several courses overlap (ECON 2301, 2302, ACCT 2251, MGMT 4500), the department encourages students who pursue this option to
The major with this option consists of 61 units; the B.A. requires a total of 180 units. The course requirements for this option are as follows:

I. Lower Division (21 units)
   - ECON 2301 (4)
   - ECON 2302 or POSC 1202 (4)
   - POSC 1201 (4)
   One course from each group (9 units)
   - Group I: STAT 1000 or STAT 2010
   - Group II: ACCT 2251

II. Upper Division (40 units)
   1. Group I: Public Affairs and Administrative Process (at least 12 units)
      - ECON 3370
      - POSC 3800, 3870, 4445, 4861
      - PUAD 4900, 4830
   2. Group II: Political Institutions and Processes (at least 8 units)
      - Any Political Science courses listed under the heading "American Government and Politics"
   3. Group III: Public Affairs and Public Policy (8 units)
      - ECON 3375; HSC 3350; MGMT 4500; POSC 3505; and any Political Science course listed under the heading "Public Policy and Administration," if not used under Group I.
   4. Service Requirement (4 units)
      - May be fulfilled by taking POSC 3113, 3898 or another service course approved by the department chair.
   5. Foundation Requirement (4 units)
      - POSC 3030 The Study of Political Science
   6. Capstone Course (4 units)
      - POSC 4910 Political Science Seminar

Pre-Law Students

The study of law is a postgraduate professional program, requiring three years of full-time study beyond the completion of the bachelor's degree. No specific pre-law undergraduate program is required for admission to law schools. However, students wishing to focus on legal studies at Cal State East Bay, may complete the Pre-Law option in the Political Science major.

Students intending to enter law school commonly complete undergraduate majors in political science, economics, business, or history. The pre-law student's undergraduate plan of study should include among its objectives a facility in the proper use of written and spoken English, a sampling of undergraduate law courses, one or more critical/logical thinking courses, and a basic understanding of government and economics. Some law schools recommend that students take a basic accounting course, particularly if they are interested in business or tax law.

Students planning to enter law school should consult a pre-law advisor. Dr. David Baggins of the Department of Political Science, who is an attorney, serves as the university pre-law advisor. Several other departments also have pre-law advisors.

Most accredited law schools require that applicants complete the Law School Admission Test. The LSAT is typically given in September, December, February, and June at one or more testing centers in the Bay Area. Pre-law students should obtain LSAT registration materials and law school applications early in their senior year. Students can access information on the LSAT by viewing http://www.lsac.org. The Political Science department library has a copy of the Law School Guidebook and many law school catalogs.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 24 units of Political Science courses of which at least 16 units must be in upper division. The purpose of the Minor in Political Science is to provide a general background in political science to complement majors in such areas as business administration, environmental studies, science, humanities, and the other social sciences. The student should consult with a Political Science department advisor or the chairperson in selecting courses.

Undergraduate Courses

Lower Division Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>Introduction to Political Science (4)</td>
</tr>
</tbody>
</table>

Introduction to the study of politics and government, surveying the concepts and approaches of political science.
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1171</td>
<td>Environmental Politics (4) The history and present status of the ideologies, interests, movements and understandings that form modern environmental policy and politics.</td>
</tr>
<tr>
<td>1201</td>
<td>American Political Institutions (4) Development of political institutions and ideas in the U.S. Key elements of the political system, including the Constitution, Presidency, Congress, Courts, parties, elections, and bureaucracy. Combined with POSC 1202 meets code requirements in U.S. history, U.S. Constitution and California government.</td>
</tr>
<tr>
<td>1202</td>
<td>Public Policy/California Politics (4) Issues in American public policy, focusing on current and historical trends and issues.</td>
</tr>
<tr>
<td>1500</td>
<td>Conflict in World Politics (4) Causes of conflict. Topics include Iraq and Desert Storm, Bosnia, the Middle East, and Third World conflicts. Analysis of foreign aggression, civil war, terrorism, ethnic struggle, nationalism, boundary disputes, military force, sanctions, peacekeeping, mediation, disaster relief, and economic aid.</td>
</tr>
<tr>
<td>2002</td>
<td>The Golden State? Modern Politics, Economics and Culture in California (4) Consideration of the political, cultural and economic forces that are changing California. Focus on statewide elections and initiatives on the ballot. May be repeated once for credit when content varies, for a maximum of 8 units.</td>
</tr>
</tbody>
</table>

**Upper Division Courses**

**Political Science**

*American Government and Politics (Course prefix: POSC)*

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>3101</td>
<td>American Government in Simulation (4) The institutions of the U.S. national government, such as the Congress, the courts and party conventions, studied through the use of simulations, both electronic and classroom, in which all students participate.</td>
</tr>
<tr>
<td>3111</td>
<td>The American Presidency (4) Study of the American Presidency both historically and analytically with an emphasis on roles and powers; the struggle between the President and Congress; the leadership role of the President in government, political parties, and public opinion.</td>
</tr>
<tr>
<td>3113</td>
<td>Political Internship (2-4) Practical experience on a legislative or executive staff or in a campaign organization. May be repeated once for credit with consent of instructor, for a maximum of 8 units.</td>
</tr>
<tr>
<td>3115</td>
<td>United States Congress (4) Development of the modern Congress, including 20th century reforms; Congressional power; leadership and partisanship; inter-branch relations; Congressional elections and campaign finance reform, incumbency and redistricting; the committee system. Not open to students with credit for POSC 3112.</td>
</tr>
<tr>
<td>3120</td>
<td>State and Local Politics and Government (4) The structures, processes, policies, political culture and power distributions of governments of states, cities, suburbs, small towns, metropolitan areas and neighborhoods. Special reference to California and San Francisco Bay Area institutions and problems. Satisfies the California state and local government code requirement.</td>
</tr>
<tr>
<td>3130</td>
<td>Urban Politics (4) Styles and structures of city government; community power studies; community control and metropolitan government; problems of crime, welfare, finance, education, pollution, planning; emphasis on the Bay Area.</td>
</tr>
<tr>
<td>3300</td>
<td>Voting and Public Opinion (4) Nature and causes of voter turnout and vote choice. Determinants and effects of public opinion. Methodology used for measurement and analysis of these subjects. Prerequisite: STAT 1000 or 1100.</td>
</tr>
<tr>
<td>3310</td>
<td>Political Parties and Campaigning (4) Party organizations in U.S. and California, historical changes in party operations, political machines and patronage, money in politics, party labels, the differences and similarities between the major parties, minor parties, the new style of campaigns, professional campaign management firms, the prospects for reform.</td>
</tr>
<tr>
<td>3330</td>
<td>Interest Groups, Lobbying, and Political Reform (4) Private power and American public policy; the nature and sources, strategy and tactics of pressure group power in the American political process. Business, labor, agriculture, the professions, minority groups, and religion as organized groups influencing political decision making.</td>
</tr>
</tbody>
</table>
Women and Politics (4)  
Public policy relating to American women; impact of the women's movement on public policy and political behavior; women as voters, political activists, political office-holders; the function of sex roles in the political system.

Culture and Politics in the United States (4)  
How political personality is formed by cultural experience in the U.S. Influences such as generational effects, gender, region, ethnicity and sexual identity. News reporting, literature, movies and television as sources of the development of political personality.

Practical Politics (4)  
Professional skills in winning elections and influencing policy. Reading and practice in framing issues, political strategy, campaign management, advertising, polling, speech writing, media relations, Internet use, fund-raising, litigation, lobbying, building and sustaining support.

Political Science  
Public Policy and Administration (Course prefix: POSC)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 3170          | Public Policy and the Family (4)  
The evolution of and current controversies over American government policies on the family, including abortion, family planning, marriage, divorce and custody, child care subsidies, wife battering, child abuse, and welfare. Impact of policies on the poor and minority groups, as well as on middle class whites. |
| 3418          | U.S. Immigration Policy and Law (4)  
Development of U.S. immigration policy including theories, demographic trends, sources of immigration legislation, case law. Relationship of politics, policy, culture, social and economic status to racial and ethnic groups, women, and workers. |
| 3419          | Labor Policy and Law (4)  
Historical development and changing fortunes of working class, trade unions, immigrant, and women workers. Growth among government workers and declining numbers in private industry. U.S. Government's labor laws and judicial interpretation for private and public sectors. |
| 3522          | The Politics and Law of New Genetic Technologies (4)  
The politics and law of new genetic technologies (cloning, stem cell research, genetic engineering, etc.) in global perspective. National and international models for oversight. Comparison of approaches by types of political regime and economic system. |
| 3800          | Public Policy Analysis (4)  
Surveys the formulation, implementation, and impact of public policy dealing with social and economic problems. Examines and evaluates the causes and content of government policy in various areas such as civil rights, social welfare, urban affairs, crime, education, health, environment, energy, taxation. |
| 3870          | Public Personnel Management (4)  
Politics, history, values and contemporary issues related to employment in the public sector. Topics include discriminatory practices, affirmative action efforts, training and development programs, comparable worth pay systems, collective bargaining, and constitutional rights of employees. |
| 4171          | Public Policy and the Environment (4)  
Politics of human-environment relationships. Sustainability, biodiversity, population, consumption, technology, energy, water, resources, recycling, pollution, and urban systems. Cultural values, paradigm change, science, risk analysis, market pricing, competition of networks, and citizen action. Significant written assignment integrates theory and practice. |
| 4172          | Public Policy and Health (4)  
Research and reports on the development and administration of public policy with regard to medicine and health care; problems of organization and financing of health care services, health insurance, medical research, and health worker programs in the United States. |
| 4445          | Bureaucratic Politics and Administrative Law (4)  
| 4861          | Politics of Budgeting (4)  
Politics and governmental budgeting; executive-legislative relationships, interest group activities, and citizen demands; the budget as an instrument for management, planning, and policy-making at federal, state, and local levels. |

Political Science  
Comparative Government and Politics (Course prefix: POSC)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 3201          | Political Systems of Western Europe (4)  
The governments and politics of Great Britain, France, Germany, and other Western European nations. Development and expansion of the European Union. |
| 3204          | Political Systems of Asia (4)  
An analysis of politics in selected Asian countries. The degree of emphasis on particular countries and areas such as China, India, Japan, and Southeast Asia varies. |
| 3222          | Government and Politics of Eastern and Central Europe (4)  
The politics of the formerly communist states of Eastern and Central Europe. Countries covered include Russia, Ukraine, Poland, Romania, the Balkans and others. New democratic institutions and economic development. Links with Western Europe. |
| 3230          | Government and Politics in the Middle East (4)  

Introduction to the study of contemporary politics in the Middle East. Comparative approach, analyzing the political, social, religious and economic aspects of the area.

3260 Government and Politics of Africa South of the Sahara (4)
The governments of the nations of Africa south of the Sahara, with special reference to comparative colonial policies, nationalist movements, political parties, and the problems of nation building; comparative economic systems and the role of the military.

3280 Political Systems of Latin America (4)
Political development, instability, and revolution in a comparative framework. Case studies of political development in major countries; group conflicts, ideology, administrative problems, and the role of violence.

3290 Comparative Law (4)
Examination of essential features of law and their impact upon society using a comparative method. Incorporation of comparative legal theory of various legal systems, and how legal institutions express diverse civilizations.

### Political Science

**Public Law (Course prefix: POSC)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
</table>
| 3410 | Law and Society (4)
* Rise of the American legal system and evolution of values in the law. Courts in the political system and the policy impact of modern legal initiatives. |
| 3417 | Survey of American Law (4)
* The basic elements of the American legal system, its essential values, and its impact on society. Personal injury, contracts, criminal law, regulation, and international law. Emphasis on case law as the basis for exploring the legal system. |
| 3418 | U.S. Immigration Policy and Law (4)
* Development of U.S. immigration policy including theories, demographic trends, sources of immigration legislation, case law. Relationship of politics, policy, culture, social and economic status to racial and ethnic groups, women, and workers. |
| 3441 | American Constitutional Law: Government (4)
* The American Constitution as a model of government. The role of democracy, federalism, assumptions regarding human nature, citizenship, separation of powers, capitalism, and issues of empire building. |
| 3442 | American Constitutional Law: Rights (4)
* The Bill of Rights as interpreted by Court decisions since its adoption. Topics include freedom of speech, religion, equal protection, and personal privacy. Emphasis on the relationship among rights, politics, judicial behavior and public policy. |
| 3460 | Environmental Law (4)
* Legislative, judicial, and administrative controls over public and private actions impacting on the environment. Examination of statutory, administrative, and judicial decisions relating to the environment and of government actors and agencies making these decisions. |
| 3470 | International Law (4)
* The rules that govern governments and world bodies. Includes treaties, law of the sea, environmental protection, use of force, terrorism, and markets. Focus on the movement toward global community. Not open to students with credit for POSC 3951. |
| 3503 | Philosophy of Law (4)
(See PHIL 3503 for course description.) |
| 4445 | Bureaucratic Politics and Administrative Law (4)
(See the "Public Policy and Administration" section for course description.) |

**International Relations (Course prefix: POSC)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 3500 | World Problems and Global Response (4)
* Arms control, human rights, development, debt, women's rights, world population, environmental protection, and technology transfers. Analysis of key actors (United Nations, specialized agencies, national governments, non-governmental organizations) and policy alternatives. Student opportunity to work with local organizations. |
| 3505 | American Foreign Policy (4)
* National security, economic and development assistance policies since World War II. Current policy choices and the constitutional conflict between Congress and the President. Role of the State Department, the military, the CIA, and non-governmental organizations (labor, business, and veterans). |
| 3508 | Politics of Filipino-American Relations (4)
* Filipino-American relations within the context of Filipino nationalism and America's rise as a superpower. |
| 3510 | War and Peace (4)
* Major power security concerns, regional alliances, and Third World countries. Analysis of nuclear, chemical, biological, and conventional arms proliferation and arms control. Military doctrine and weapons systems, conflict resolution, peacekeeping, and peace movements. Student opportunity to work with local organizations. |
| 3520 | International Relations (4)
* The conduct of relations among states. The international system, national power, sovereignty, nationalism, ideology; use of diplomacy, propaganda, economic influence, military force; problems of neocolonialism, multinational corporations, racial tensions, nuclear deterrence, war, the role of the United Nations. |
| 3521 | Politics of the Global Economy (4) |
International trade and development assistance. Focus on GATT, the World Trade Organization, the G7 nations, and the International Monetary Fund. Problems of transnational corporations, labor standards, and migration. Global liberalism compared with collectivist economies. Ecological, participatory, regional and nationalist challenges.

3550 The United Nations and World Community (4)
Historical, institutional and theoretical background of the contemporary United Nations and related agencies; focus on participation of selected countries in the UN structure and operations with regard to current international problems and issues. May be repeated once for credit by students participating in Model UN, for a maximum of 8 units.

Political Science
Political Theory (Course prefix: POSC)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3703</td>
<td>American Political Thought (4) Significant American political ideas and thinkers from the Pilgrims to the present. Includes, among others, Jefferson, Madison, Calhoun, King, and Gingrich.</td>
</tr>
<tr>
<td>3704</td>
<td>Marxism in Theory and Practice (4) The writings of Marx and the characteristics of Marxism in the 20th century.</td>
</tr>
<tr>
<td>3711</td>
<td>Greek, Roman and Medieval Political Thought (4) Major Western political ideas from the Greeks through the 15th century. Emphasis upon major political theorists in the development of classical Greek and Roman, Medieval Christian, and Renaissance political theory.</td>
</tr>
<tr>
<td>3713</td>
<td>Contemporary Political Thought (4) Major Western political ideas in the 19th and 20th centuries. Emphasis upon central figures in the development of Democratic, Marxist, Socialist, and various other contemporary bodies of political theory.</td>
</tr>
<tr>
<td>3715</td>
<td>The State and the Family (4) The relationship between the public and private spheres. The relationship between the state and family as perceived by political theorists. The home as a metaphor for public life; the patriarchal and other modes of government and the family; the interdependence of the family, the economy, and the state; the family as haven of resistance in a hostile political environment. Classical political theory texts and contemporary writings.</td>
</tr>
<tr>
<td>3716</td>
<td>Citizenship, Community, and Democratic Theory (4) The duties and rights of citizenship, personal and ethnic identities, and evolving democratic theory. Specific issues raised by contemporary politics: national service, immigration policy models of citizenship participation, dismantling the welfare state, utopian and contemporary notions of community, and affirmative action. Classical and contemporary texts.</td>
</tr>
</tbody>
</table>

Political Science
General (Course prefix: POSC)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3030</td>
<td>The Study of Political Science (4) History and assumptions of political science as a field; basic skills and methodology; ethics in politics, administration and law; careers; personal learning goals; portfolios; Library tour.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4) Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the Political Science major; a maximum of 4 units will be accepted toward the Political Science minor.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Political Science (4) Readings, discussion, and research on contemporary and/or significant issues in political science. May be repeated once for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4) May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
<tr>
<td>4910</td>
<td>Political Science Seminar (4) Contributions of natural and social science theories, methods, results for political science; scope and method of political science; individual research on selected topics. Registration priority given to political science majors and minors. Prerequisite: POSC 3030. Open to seniors only.</td>
</tr>
</tbody>
</table>
Preprofessional Programs

- Biomedical Sciences
- Pre-Physical Therapy
- Pre-Law Studies
- Pre-Theological Studies

Email: preprof@csueastbay.edu
Website: http://www.sci.csueastbay.edu/PHAP/

Biomedical Sciences

A student interested in entering medicine, dentistry, optometry, pharmacy, physical therapy, veterinary science, or allied health sciences should contact the Preprofessional Health Academic Program at the Department of Physics office, SCN 231 (510-885-3401). The current director of the program and preprofessional health advisor is Dr. Oscar Wambuugh, an assistant professor of health sciences. He usually holds regular prehealth advising hours as indicated at the program website. Peer student advisors (officers of the PreHealth Society) hold regular office hours which are also posted at the program site.

The Preprofessional Health Academic Program located at the Department of Physics office will direct the student to a preprofessional advisor to receive program information and individual counseling about meeting the requirements for admission to professional schools. The program requires that students register by downloading and completing an application available at the program website. The program offers a letter service that organizes the student’s individual letters of recommendation as a package sent to professional schools.

The required courses for the various professional fields do not comprise a major, therefore the student is free to select any major. Accordingly, in addition to the preprofessional advisor, each student must also select a major advisor on the same basis as do all other students at the university. Admission to professional schools is highly competitive. Consequently, the major selected should be one representing an alternate career objective satisfactory to the student.

Students intending to enter the health professions should plan on completing a baccalaureate degree with an appropriate academic major. Many students major in biological sciences (any option), biochemistry or health sciences (pre-doctoral option B3), but majors in the social sciences and the humanities are acceptable to professional schools, provided the specified courses in science have been completed.

Admission to professional schools is restricted to those students who have developed a facility in the use of English and in quantitative thinking, who have mastered the fundamentals of the physical and biological sciences, studied in depth one of the major fields of knowledge, and obtained a competitive score in the required entrance tests.

Cal State East Bay is an official test center for the Medical College Admission Test (MCAT). The now computerized MCAT is administered throughout the year under the auspices of the Testing Office. Premedical students are urged to schedule this test for Spring of their junior year.

The Dental/Optometry/Pharmacy/Veterinary Admission Test, required of all predental, preoptometry, prepharmacy and preveterinary students, may be taken by application throughout the year. Students should plan to take this test in Spring of their junior year. Contact the Testing Office for further details, or visit the respective test websites.

Courses such as ANTH 3720 (Medical Anthropology), HSC 3300 (Healthcare Systems in the U.S.), PHIL 3152 (Biomedical Ethics), HSC 3200 (Environmental Health), HSC 3250 (Genes and Human Health) and SOC 4720 (Medical Sociology) will be of value to students in broadening their educational experiences and increasing their skills; in addition to preparing students for interviews at professional schools. Some of these courses may be counted for General Education, depending upon the major. More information is available at the program website or further discussion with a prehealth advisor.

Sample programs for preprofessional students in Medicine (including allopathic, osteopathic, podiatric, and veterinary medicine) and Dentistry can be found at www.sci.csueastbay.edu/PHAP/. Please consult with a prehealth advisor first, before embarking on any of these programs.

Allied Health Fields

The following programs are offered by the university in the allied health fields. The Department of Biological Sciences has an option in Biomedical Laboratory Sciences in its B.S. degree major. Options in Athletic Training, Exercise Nutrition and Wellness, Physical Education Teaching, and Pre-Physical Therapy are available in the Department of Kinesiology and Physical Education. The Department of Nursing and Health Sciences has a B.S. degree major both in Nursing and in Health Sciences. The graduate department of Educational Psychology has an M.S. in Counseling. Both B.S. and M.S. programs in Speech Pathology and Audiology are offered as well as a Clinical Rehabilitative Services Credential. The Department of Public Affairs and Administration offers an interdisciplinary Master of Science in Health Care Administration degree. These programs are described in the alphabetical listing in this catalog. Please contact the appropriate departments and schools for additional information.
Field Observation and Voluntary Participation

Students enrolled in the program must complete one to three quarters of field observation and volunteer participation in physical therapy at cooperating agencies. Evidence of such fieldwork can be gained by liaison with appropriate personnel at these agencies.

Additional Courses

Additional courses may be needed to meet the requirements of specific programs in Physical Therapy. Examples are given below. Students are advised to consult a preprofessional advisor in the Department of Kinesiology and Physical Education for further information.

- BIOL 4160 Medical Physiology (4)
- CHEM 2301/2302 Survey of Organic Chemistry (4, 4)
- KIN 4330 Clinical Exercise Physiology (4)
- KIN 4340 Motor Development (4)
- PSYC 4420 Developmental Psychology (4)
- KIN 4000-level course on computer applications in kinesiology and physical education

Pre-Law Studies

The study of law is a postgraduate professional program, usually requiring three years of full-time study beyond the completion of the bachelor’s degree. No specific pre-law undergraduate program is required for admission to law schools. However, for students wishing to focus on legal studies at Cal State East Bay, the Political Science Department has a Pre-Law option in the Political Science Major.

Students intending to enter law school commonly complete undergraduate majors in political science, philosophy, economics, business, or history. The pre-law student's undergraduate plan of study should include among its objectives a facility in the proper use of written and spoken English, a sampling of undergraduate law courses, one or more critical/logical thinking courses, and a basic understanding of government and economics. Some law schools recommend that students take a basic accounting course, particularly if they are interested in business or tax law.

Students planning to enter law school should consult a pre-law advisor. Dr. David Baggins of the Department of Political Science, who is an attorney, serves as the university pre-law advisor. Several other departments also have pre-law advisors.

Most accredited law schools require that applicants complete the Law School Admission Test. The LSAT is typically given in September, December, February, and June at one or more testing centers in the Bay Area. Pre-law students should obtain LSAT registration materials and law school applications early in their final year of college. Copies of these materials can also be secured from the pre-law advisor in the Department of Political Science and from the Testing Office, Library, Room LI 3165A. The Political Science Department Library also has a copy of the Law School Guidebook and many law school catalogs.

Pre-Theological Studies

The American Association of Theological Schools recommends that students anticipating graduate theological education take a broad liberal arts program leading to the B.A. degree. Cal State East Bay recommends that pre-theology students complete the Religious Studies Option in the Philosophy Major. A reading knowledge of at least one language other than English is highly recommended. Students should elect courses which will sharpen their conceptual processes (logic, scientific method, literary or historical research) and should have more than an introduction to the world of people and ideas, the world of nature, and the world of human affairs. It is also possible to complete a minor in religious studies. Students planning to enter theological schools should consult the Department of Philosophy (MI 4006) about their major and baccalaureate degree.
Psychology

- Department Information
- Program Description
- Career Opportunities
- Features
- Preparation
- Major Requirements (B.A.)
- Major Requirements (B.S.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses

Department Information

Department of Psychology
College of Science
Office: South Science 229
Phone: (510) 885-3484

Professors
Marvin R. Lamb (Chair), Ph.D. University of California, Berkeley
Fred I. Leavitt, Ph.D. University of Michigan
John D. Lovett, Ph.D. University of California, Los Angeles
Alan Monat, Ph.D. University of California, Berkeley
Michael E. Patch, Ph.D. University of California, Los Angeles
David A. Sandberg, Ph.D. Ohio University
Mary Kay Stevenson, Ph.D. University of South Carolina, Columbia

Associate Professor
Dong-Won Choi, Ph.D. University of Illinois, Urbana-Champaign

Assistant Professors
Emily Cleveland, Ph.D. Clark University
David Fencsik, Ph.D. University of Michigan
Heike Winterheld, Ph.D. University of Minnesota

Program Description

Psychology is the science of behavior and mental processes. Many psychologists work primarily with people to understand how they think, respond to stress, learn and forget, develop into unique personalities, and interact with one another. Others study the behavior and nervous systems of animals in order to find general principles that apply across species. Psychologists apply their knowledge to do therapy and counseling, to improve practices in schools, prisons, and rehabilitation centers, and to enhance performance in industry, business, and the professions.

The Psychology department offers a major in both the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.) degrees. These are basic programs; to become a "psychologist" requires graduate training.

The B.A. program is appropriate for most psychology students. It provides a basic understanding of human behavior and motivation that is valuable in many careers in business, government, and education. It also provides the background expected for entry into graduate programs in clinical psychology, counseling psychology, school psychology, health psychology, social psychology, or experimental psychology.

The B.S. programs are designed for more specialized purposes. Students in the B.S. program must select one of the two options in that program: Industrial/Organizational Psychology or Ergonomics and Human Factors. The option in Industrial/Organizational Psychology provides preparation for careers related to business, with an emphasis on personnel management. The option in Ergonomics and Human Factors provides preparation for careers in the design of work environments to take account of human limitations and strengths, for example, the design of equipment (computers, aircraft, automobiles) or the design of industrial procedures.

In Psychology's minor program, students can choose courses to complement training in business, communication, health and medicine, law and criminology, statistics, biology, and many other fields. Of special interest to students in that program might be our courses in developmental psychology, personality, cognitive processes, and learning.

Student Learning Outcomes

Students graduating with a B.A. or B.S. in Psychology from Cal State East Bay will:

1. have developed scientific thinking and methodological skills;
2. have mastered the content and theory of the field of psychology;
3. be able to apply psychology and prepare for careers.

Career Opportunities

B.A.:
- Clinical/Counseling/Child Psychologist
- Community Mental Health Employee
- Experimental Psychologist
- Human Service Worker
### Police/Probation Officer
- Recreation Worker
- School Counselor
- Social Worker
- Special Education Teacher
- Substance Abuse Counselor

### B.S.:
- Advertising Account Executive
- Business Executive
- Career Counselor
- Employee Counselor and Trainer
- Human Resource Specialist
- Personnel Representative
- Program Evaluator
- Public Relations Specialist

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**Features**

The Psychology department's facilities include a fully equipped computer lab, an animal lab, and several labs for studying human behavior. These facilities support an unusual and important characteristic of the department - its emphasis on hands-on student involvement in the study of human and animal behavior through participation in laboratory courses and faculty research, in field trips, and in community volunteer placements.

Both the Psychology Club and Psi Chi (national honor society in psychology) provide opportunities for students to get together to hear speakers and to discuss topics such as career and graduate school opportunities.

All courses required for the psychology B.A. major are offered in the evening program over each three-year cycle. However, the range of choices and flexibility of scheduling is more limited in the evening program.

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**Preparation**

For Advanced Placement course equivalencies, see Registration chapter.

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### Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72 units; the B.A. degree requires a total of 180 units.

#### I. Core Requirements (36 units)

- BIOL 1001 Introduction to Biology (4)
- BIOL 1002 Introduction to Biology, Lab (or 1004 or 2005) (1)
- PSYC 1000 General Psychology (or 1001 or 1005) (5)
- PSYC 2020 Methods of Investigation in Psychology (4)
- PSYC 3100 Experimental Psychology (5)
- PSYC 4200 Conditioning and Learning (4)
- PSYC 4320 Physiological Psychology (4)
- STAT 1000 Elements of Probability and Statistics (5)

#### II. Breadth Requirements (20 units)

One from each line required:

- PSYC 3200, 3210, 3220 or 3230 (testing/survey and test construction/individual differences/applied measurement) (4)
- PSYC 3500, 4420, or 4610 (social/developmental/personality) (4)
- PSYC 4220, 4345, or 4740 (cognitive/sensory/psycholinguistics) (4)
- PSYC 4310, 4350, or 4360 (comparative/heredity/ psychopharmacology) (4)
- PSYC 4210, 4390, or 4620 (theories of learning/history and systems/theories of personality) (4)

#### III. Laboratory Requirements (4 units)

Any two required:

- PSYC 4800 Human Learning and Cognition Laboratory (2)
- PSYC 4801 Learning and Motivation Laboratory (2)
- PSYC 4802 Sensation and Perception Laboratory (2)
- PSYC 4803 Physiological Psychology Laboratory (2)
- PSYC 4804 Social and Personality Laboratory (2)
- PSYC 4805 Comparative Psychology Laboratory (2)
- PSYC 4806 Developmental Psychology Laboratory (2)
- PSYC 4808 Industrial Psychology Laboratory (2)

#### IV. Elective Requirements (12 units)

Twelve additional units of permissible upper division (3000 or 4000 level) psychology courses; or STAT 4000 and eight additional units of permissible upper division psychology courses. A maximum of four units from 4900 or Laboratory Requirement courses may be used
toward satisfying this requirement. Course descriptions indicate whether an upper division course is permissible for credit toward the major.

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## Major Requirements (B.S.)

Students in the B.S. degree program must select either the Industrial/Organizational Psychology option or the Ergonomics and Human Factors option. The major with the option in Industrial/Organizational Psychology consists of 75 units; the major with the option in Ergonomics and Human Factors consists of 90-94 units; the B.S. degree requires a total of 180 units.

### I. Industrial/Organizational Psychology Option (75 units)

**A. Core Requirements (51 units)**

- PSYC 1000 General Psychology (or 1001 or 1005) (5)
- PSYC 2020 Methods of Investigation in Psychology (4)
- PSYC 3100 Experimental Psychology (5)
- PSYC 3400 Ergonomics and Human Factors (4)
- PSYC 3500 Social Psychology (4)
- PSYC 3540 Groups and Organizations (4)
- PSYC 3420 Conditioning and Learning (4)
- PSYC 4220 Cognitive Processes (4)
- PSYC 4500 Industrial Psychology (4)
- STAT 1000 Elements of Probability and Statistics (5)
- STAT 3010 Statistical Methods in the Social Sciences (4)

**Advanced laboratories:** Two different courses from PSYC 4800, 4801, 4802, 4803, 4804, 4805, 4806, or 4808 (4)

**B. Area Requirements (16 units)**

**Industrial:** Assessment, Selection and Performance Appraisal (8 units)

Select 8 units from the following:

- PSYC 3200 Psychological Tests (4)
- PSYC 3210 Principles of Survey and Test Construction (4)
- PSYC 3220 Psychology of Individual Differences (4)
- PSYC 3230 Applied Measurement (4)
- PSYC 3240 Decision Theory (4)

**Organizational:** Group Processes, Culture, and Work Motivation (8 units)

Select 8 units from the following:

- PSYC 3250 Behavior Modification (4)
- PSYC 3520 Interpersonal Processes (4)
- PSYC 3550 Social Influence and Change (4)
- PSYC 3600 The Impact of Culture on Social Psychology (4)
- PSYC 4300 Motivation (4)

**C. Electives (8 units)**

Select 8 units from any combination of courses listed below. (Note: At least one Management course is recommended.)

1. Permissible upper division Psychology (PSYC) courses (excludes PSYC courses whose course descriptions indicate that they may not be used to satisfy a Psychology major requirement)
2. The following courses from the Management program:

- MGMT 3600 Theories of Management (4)
- MGMT 3610 Human Resources Management (4)
- MGMT 3680 Industrial Relations (4)
- MGMT 4615 Compensation and Benefits (4)
- MGMT 4618 Human Resources Training and Development (4)

3. The following courses from the Statistics department:

- STAT 3510 Sampling Procedures for Surveys (4)
- STAT 3900 Data Analysis Using Statistical Packages (4)
- STAT 3910 Statistical Software Design (4)
- STAT 4000 Analysis of Variance in the Behavioral Sciences (4)
- STAT 4515 Applied Multivariate Analysis (4)
- STAT 4610 Introduction to Nonparametric Statistical Methods (4)

### II. Ergonomics and Human Factors Option (90-94 units)

Students in this option are urged to complete a minor in Statistics, Computer Science, Mathematics, or Physics. Courses can be counted simultaneously toward a minor and a major.

**A. Psychology Requirements (54 units)**

- PSYC 1000 General Psychology (or 1001 or 1005) (5)
- PSYC 2020 Methods of Investigation in Psychology (4)
- PSYC 3100 Experimental Psychology (5)
- PSYC 3240 Decision Theory (4) or PSYC 4220 Cognitive Processes (4) or PSYC 4740 Psycholinguistics (4)
- PSYC 3400 Ergonomics and Human Factors or ENGR 3190 Human Factors Engineering (4)
- PSYC 3420 Stress and Coping (4)
- PSYC 3500 Social Psychology (4) or PSYC 3540 Groups and Organizations (4)
- PSYC 4220 Conditioning and Learning (4)
- PSYC 4320 Physiological Psychology (4)
- PSYC 4345 Sensation and Perception (4)
- PSYC 4500 Industrial Psychology (4)

Advanced Labs: Two different courses from PSYC 4800, 4801, 4802, 4803, 4804, 4805, 4806 or 4808 (4)

Approved Internship: PSYC 4900 Independent Study (4)

B. Other Requirements (28-32 units)
- CS 1160 Introduction to Computer Science I (4)

Complete the following courses (24-26 units):
- MATH 1304 Trigonometry and Analytic Geometry (4)
- PHYS 2701, 2702, 2703, or PHYS 1001, 1002, 1003 (12-15)
- STAT 1000 and 3010 or STAT 3502 and 3503 (8-9)

C. Elective Concentration (8 units)
Two additional courses, both from the same group:
- Computer Science Group: CS 2360 and four additional units in CS courses.
- Engineering Group: ENGR 3020 Work Design and Measurement (4) and ENGR 3090 Industrial Costs and Controls (4)
- Mathematics Group: MATH 1304 (4) and 1305 (4) Calculus I and II
- Psychology Group: Eight units of permissible upper division psychology courses in addition to those used to fulfill the other requirements in this major.
- Statistics Group: Eight units of upper division statistics courses, not including STAT 3010, 3502, or 3503

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements
The minor in Psychology is designed to provide a general background in psychology to complement training for careers in business and industry, biology, the medical professions, law or criminology, communication, and many other professions. See a psychology department advisor for help in selecting courses to complement your program. The minor consists of 29-35 units.
- PSYC 1000 (or 1001 or 1005) (5)
- PSYC 1100 or 2020 (4)
- Twenty additional units selected from courses meeting the Elective Requirements in the description of the B.A. major, or PSYC 3100 plus 12 additional units from courses meeting these Elective Requirements. (Notice that PSYC 3100 has 8-9 additional units of prerequisites. See the course description.)

Undergraduate Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</table>
| 1000          | General Psychology (5)  
 An introduction to the scientific study of basic processes underlying human and animal behavior; sensation and perception, learning and thinking, motivation, and emotion. Not open to students with credit for PSYC 1001, 1005, 2004, or 2009. Four hrs. lect., 2 hrs. act. or 5 hrs lect. |
| 1001          | General Psychology and Society (5)  
 An introduction to the scientific study of basic processes underlying human and animal behavior, sensation and perception, learning and thinking, motivation and emotion, as it relates to the individual and society. Not open to students with credit for PSYC 1000, 1005, 2004, or 2009 |
| 1005          | General Psychology for Healthier Living (5)  
 An introduction to the scientific study of basic processes underlying human and animal behavior; sensation and perception, learning and thinking, motivation, and emotion. Emphasis on psychological aspects of health. Not open to students with credit for PSYC 1000, 1001, 2004, or 2009. |
| 1100          | Critical Thinking in Psychology (4)  
The role of critical thinking in the scientific study of behavior. Inductive and deductive use of experiments by which selected problems are investigated with emphasis on experimental design and common logical fallacies in interpreting empirical data. Not for credit in the Psychology major. |
| 2020          | Methods of Investigation in Psychology (4)  
 Experimental, correlational, and observational methods in the study of psychology with selected examples. Prerequisites: PSYC 1000 (or 1001 or 1005). Not open to students with credit for PSYC 3090. |
| 2420          | Stress and Coping (4)  
 Survey of theories and research about stress and coping; applications, e.g., illness, death/dying, the work place, and natural disasters. Not for credit in Psychology major. Not open to students with credit for PSYC 3420. |
3100 Experimental Psychology (5)
A laboratory course in the development, design, and execution of psychological experiments, the analysis of data, and the writing of formal research reports. Prerequisites: PSYC 2020 or 1100; STAT 3010, or STAT 3502, or MGMT 3100. Three hrs. lect., 6 hrs. lab.

3190 Human Factors Engineering (4)
(See ENGR 3190 for course description.)

3200 Psychological Tests (4)
Introduction to selecting and evaluating standardized tests of aptitude, achievement, personality, and other human traits. Validity, reliability, generalizability, and ethics. Prerequisites: PSYC 1000 (or 1001 or 1005); STAT 1000, and STAT 2010, or STAT 3010.

3210 Principles of Survey and Test Construction (4)
Construction of survey or test instruments using Classical Test theory and Item Response theory; item development; sampling; data analysis; test bias and test fairness; interpretation and presentation of results. Prerequisites: PSYC 1000 (or 1001 or 1005); STAT 1000 (or 2008); and STAT 2010 or STAT 3010.

3220 Psychology of Individual Differences (4)
Survey of human traits (including intelligence), and examination of evidence for differences among individuals differing in sex, age, personality, race, etc. Consideration of social implications. Prerequisites: PSYC 1000 (or 1001 or 1005); STAT 1000 and STAT 2010, or STAT 3010, or STAT 3031.

3230 Applied Measurement (4)
An introduction to applied measurement. Signal detection theory, unidimensional scaling, multidimensional scaling, and policy modeling techniques. Relevance to cognitive processes, industrial psychology, and perceptual processes. Prerequisites: PSYC 1000 (or 1001 or 1005), STAT 1000 (or 2008), and STAT 2010 or STAT 3010.

3240 Decision Theory (4)
An introduction to the literature and methods of decision science. The theory and decision strategies, with examples across many applications. Focus on descriptive as opposed to normative models. Students will study decision strategies and methods of modeling preference structures. Prerequisites: PSYC 1000 (or 1001 or 1005) and STAT 1000 (or 2008) or equivalent.

3250 Behavior Modification (4)
The extension of principles and concepts emerging from the experimental analysis of behavior to problems of behavior modification outside the laboratory. Prerequisite: PSYC 1000 (or 1001 or 1005).

3300 Psychology of Essential Life Issues (4)
Topics of everyday concern, including self-image, sexuality, death, happiness, personal effectiveness, and love. Psychology majors may take for university credit. Prerequisite: PSYC 1000 (or 1001 or 1005) or consent of instructor. Not for credit in Psychology major. CR/NC grading only.

3400 Ergonomics and Human Factors (4)
Human factors in tasks involving attention, decision making, and other complex responses. Current findings, methods of research, and applications in industry and other man-machine situations. Prerequisite: PSYC 1000 (or 1001 or 1005).

3410 Psychology of Women (4)
Critical examination of data affecting views of and by women, including: socialization of sex-roles, rape, marriage, the family, career barriers, development of stereotypes. Psychology majors may take for university credit. Prerequisite: WOST 1000 or upper division standing. Not for credit in Psychology major.

3420 Stress and Coping (4)
A systematic look at the major theories and research about stress and coping, with discussion of applications. Stress and coping will be examined in the context of everyday situations, e.g., illness, death and dying, and the workplace. Prerequisite: PSYC 1000 (or 1001 or 1005). Not open to students with credit for PSYC 2420.

3500 Social Psychology (4)
Current theory and research on behavioral and cognitive processes arising in human social interaction. Emphasis on experimental investigations of self appraisal and attribution, collective and group dynamics, social conformity and conflict. Prerequisite: PSYC 1000 (or 1001 or 1005).

3520 Interpersonal Processes (4)
Selected topics on the development and maintenance of social relationships, interpersonal attraction, self disclosure, communication dynamics of power and intimacy, and the resolution of conflict. Prerequisite: PSYC 1000 (or 1001 or 1005).

3540 Groups and Organizations (4)
The behavior of individuals in modern groups and organizations: work groups, universities, and other bureaucracies. Emphasis on theories of problem solving to create satisfying, effective, productive environments within organizations. Prerequisite: PSYC 1000 (or 1001 or 1005).

3550 Social Influence and Change (4)
Selected topics in the use of persuasion and social power to effect both behavioral compliance and attitude change: Includes problems of effective leadership and intervention as well as resistance to change in applied settings. Prerequisite: PSYC 1000 (or 1001 or 1005).

3600 The Impact of Culture on Social Psychology (4)
A survey of cultural variations in motivational, cognitive, and emotional processes (such as attitude and social judgment), and how such variations manifest themselves in interpersonal and group contexts (such as conflict resolution). Prerequisites: PSYC 1000 (or 1001 or 1005). 3500.

4200 Conditioning and Learning (4)
Basic principles and results of conditioning and learning experimentation. Prerequisite: PSYC 2020 or 1100.

4210 Theories of Learning (4)
Survey of theories of learning with emphasis on experimental work arising from them; their underlying assumptions, strengths and weaknesses, practical implications, and methodological approaches to research problems. Prerequisite: PSYC 4200.

4220 Cognitive Processes (4)
Selected topics in thinking and information processing in humans, e.g., problem solving, language, memory and forgetting, concept formation, attention, creativity, imagery, etc. Various theories and selected experiments are described, analyzed and interpreted.
### 4300 Motivation (4)
Nature of primary and secondary drives. Critical analysis of the concept of motivation in relation to behavior, learning, and performance. Prerequisite: PSYC 4200.

### 4310 Comparative Psychology (4)
Survey of the similarities and differences in sensory systems, learning, motivation, social organization, and development of closely related and relatively unrelated animals, including the human species. Strongly recommended: PSYC 2020 or 1100. Prerequisite: PSYC 1000 (or 1001 or 1005).

### 4320 Physiological Psychology (4)
The biological foundations of human and animal behavior, including physiological processes related to sensory and motor activity, perception, learning, thinking, motivation, and emotion. Prerequisite: PSYC 1000 (or 1001 or 1005).

### 4345 Sensation and Perception (4)
The function of the eyes, ears, and other sense organs in bringing information about the world to the brain. The use of this information in perceiving objects and events. Prerequisite: PSYC 1000 (or 1001 or 1005).

### 4350 Heredity and Behavior (4)
A consideration of genetic and environmental determinants of behavior and psychological characteristics of animals and humans. Strongly recommended: PSYC 2020 or 1100. Prerequisite: PSYC 1000 (or 1001 or 1005).

### 4360 Psychopharmacology (4)
Classification of psychoactive drugs, principles of action, reading the drug literature critically, beneficial and harmful effects of prescription and illegal drugs, prevention and treatment of abuse, pharmacotherapy, including alternatives to psychiatric drugs. PSYC 2020 or 1100 as prerequisite strongly recommended. Prerequisite: PSYC 1000 (or PSYC 1001 or 1005).

### 4390 History and Systems of Psychology (4)
Survey of historical developments in the emergence of modern scientific psychology. Contemporary theoretical systems discussed with emphasis on how they approach the recurring problems of psychology. Prerequisites: 16 units of upper division psychology and senior standing.

### 4410 Abnormal Psychology (4)
Overview of the major psychiatric disorders such as mood and anxiety disorders, posttraumatic stress disorder, personality disorders, substance abuse and dependence, and schizophrenia. Emphasis is on diagnostic criteria; biological, psychological, and sociocultural causes; and treatment implications. Prerequisite: PSYC 1000 (or 1001 or 1005).

### 4420 Developmental Psychology (4)
Psychological development across the life span. Affords a developmental perspective of perception, cognition, language, and of emotional, social, and personal behavior. Strongly recommended: PSYC 2020 or 1100. Prerequisite: PSYC 1000 (or 1001 or 1005).

### 4440 Child Psychopathology (4)
Survey of psychiatric disorders affecting children and adolescents. Emphasis is on diagnostic criteria; biological, psychological, and sociocultural causes; and treatment implications.

### 4500 Industrial Psychology (4)
Applications of industrial psychology concepts and methods to actual cases (e.g., hiring, evaluation, motivation, training, compensation, safety, marketing, total quality management, stress management, morale, ethics/dishonesty, reorganization, human factors). Lecture, case study, individual and group projects. Prerequisite: Senior standing in Industrial/Organizational Psychology option. Not open to students with credit for PSYC 4820.

### 4610 Psychology of Personality (4)
Critical review of method and content in the study of personality. Historical development of the field, with attention to recent applications of scientific method to problems of personality. Strongly recommended: PSYC 2020 or 1100. Prerequisite: PSYC 1000 (or 1001 or 1005).

### 4620 Theories of Personality (4)
Undergraduate seminar: survey and analysis of some major theories of personality, including systematic analysis of theory construction. Prerequisite: PSYC 4610, or consent of instructor.

### 4630 Introduction to Psychotherapy and Clinical Methods (4)
Overview of professional issues in clinical psychology and the theoretically based approaches to psychotherapy (i.e., psychoanalytic, cognitive, behavioral, existential, humanistic, and systems). Prerequisite: PSYC 4410 or 4610.

### 4660 The Psychology of the Healthy Personality (4)
Topics include models of psychological health, maintenance of health across the life span, and the dilemmas women and minorities face in maintaining health in the face of discrimination. Prerequisite: PSYC 1000 (or 1001 or 1005) or consent of instructor.

### 4740 Psycholinguistics (4)
Basic psychological aspects of human verbal behavior and related phenomena. The acquisition and development of language, perception of language, and effect of language on thought. Strongly recommended: PSYC 2020 or 1100. Prerequisite: PSYC 1000 (or 1001 or 1005).

### 4800 Human Learning and Cognition Laboratory (2)
Selected experiments in human learning, verbal learning, abilities, and problem solving. Experiments will be designed, executed, analyzed, and reported. Prerequisites: PSYC 3100, and PSYC 4200, or 4220, or 4740. May be repeated three times for credit, for a maximum of 8 units. Six hrs. lab.

### 4801 Learning and Motivation Laboratory (2)
Selected experiments in conditioning, learning and motivation, with an emphasis on subhuman species. Experiments will be designed, executed, analyzed, and reported. Prerequisites: PSYC 3100 and 4200. May be repeated three times for credit, for a maximum of 8 units. Six hrs. lab.

### 4802 Sensation and Perception Laboratory (2)
Selected experiments from psychophysics, perception, vision, audition, and olfaction. Experiments will be designed, executed, analyzed, and reported. Prerequisites: PSYC 3100, and PSYC 4220 or 4320 or 4345. May be repeated three times for credit, for a maximum of 8 units. Six hrs. lab.

### 4803 Physiological Psychology Laboratory (2)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Repeatable Credits</th>
<th>Lab Hours</th>
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</thead>
<tbody>
<tr>
<td>4804</td>
<td>Social and Personality Laboratory (2)</td>
<td>Selected experiments in social psychology and personality problem areas. Experiments will be designed, executed, analyzed, and reported.</td>
<td>Prerequisites: PSYC 3100; and PSYC 3500 or 4610.</td>
<td>3</td>
<td>6</td>
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<tr>
<td>4805</td>
<td>Comparative Psychology Laboratory (2)</td>
<td>Selected experiments on social organization, communication, perception, activity patterns, learning and behavioral development in animals (insects, fish, reptiles, birds, mammals). Experiments will be designed, executed, analyzed, and reported.</td>
<td>Prerequisites: PSYC 3100; and PSYC 4310 or 4350.</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>4806</td>
<td>Developmental Psychology Laboratory (2)</td>
<td>Selected experiments from a human developmental perspective. Experiments will be designed, executed, analyzed, and reported.</td>
<td>Prerequisites: PSYC 3100 and 4420.</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>4808</td>
<td>Industrial Psychology Laboratory (2)</td>
<td>Selected experiments in industrial psychology, tests and surveys, and decision-making. Experiments will be designed, executed, analyzed, and reported in APA format.</td>
<td>Prerequisites: PSYC 3100 and one of the following: PSYC 3210, 3240, or 4500.</td>
<td>3</td>
<td>6</td>
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<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
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</tbody>
</table>

Footnotes

1. May also be used to satisfy the General Education Requirement in Life Science.
2. May also be used toward satisfying the General Education Requirement in Mathematics.
3. May be taken CR/NC.
4. Students with appropriate background can go directly to MATH 1304. These students are excused from MATH 1300.
5. MATH 2304 is required as a prerequisite to PHYS 1003.
6. Although courses in the 4800-4808 series may be repeated for credit, two different courses are required for the psychology major.
Public Administration

- Department Information
- Program Description
- Undergraduate Courses

Department Information

Department of Public Affairs and Administration
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4122
Phone: (510) 885-3282
Website: http://class.csueastbay.edu/publicadmin

Associate Professor Emeritus
George F. Goerl, Ph.D. University of California, Davis

Professors
Linda Dalton, Ph.D. University of Washington
Jennifer L. Eagan, Ph.D. Duquesne University
O. Jombo ("Jay") Umeh, Ph.D. Texas Tech University

Associate Professors
Toni E. Fogarty (Chair), Ph.D. University of California, Berkeley
Frank E. Scott, D.P.A. University of La Verne

Assistant Professors
Michael Y. Moon, Ph.D. Teachers College, Columbia University

Program Description

The Department of Public Affairs and Administration offers primarily graduate courses. See the Health Care Administration and Public Administration chapters in the graduate section of this catalog. (Note: An undergraduate option in Public Affairs and Administration is offered by the Department of Political Science.)

Undergraduate Courses

Public Administration (Course prefix: PUAD)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
</table>
| 3999          | Issues in Public Administration (4)  
Readings, discussion, and research on contemporary and/or significant issues in public administration. May be repeated for credit when content varies, for a maximum of 8 units. |
| 4445          | Bureaucratic Politics and Administrative Law (4)  
(See POSC 4445 for course description.) |
| 4800          | Public Administration and Society (4)  
The historical and political context of public administration; politics and economics of public bureaucracy; managing governmental organizations; public finance and national economy; values, ethics, and public interest; interface between professional administrators and citizens. Prerequisite: "Classified Graduate" standing in the M.P.A. program. |
| 4830          | Organization Theory and Human Behavior (4)  
Classical and emerging theoretical perspectives on human organizations; organizational design and tomorrow's organizations; self and organization; environment and planned change; participative goalsetting and organizational effectiveness. Prerequisite: "Classified Graduate" standing in the MPA program. |
| 4840          | Fundamentals of Information Management in the Public Sector (4)  
Fundamentals of information technology, information policy, and management in the public and nonprofit sectors; computerized applications for the collection, analysis, and presentation of information; research using online databases. Ten hrs/week in computer lab. |
| 4900          | Independent Study (1-2)  
May be repeated for credit with consent of instructor, for a maximum of 12 units. |
Recreation

Department Information

Department of Hospitality, Recreation and Tourism
College of Education and Allied Studies
Office: Kinesiology and Physical Education Bldg. 130
Phone: (510) 885-3043

Professors
Melany Spielman (Chair), Ph.D. University of Oregon
Doris D. Yates, Ph.D. Michigan State University

Associate Professor
Mary F. Fortune, Ed.D. University of San Francisco
Zaher Hallab, Ph.D. Virginia Polytechnic Institute and State University

Assistant Professors
Christopher Chamberlain, D.M. University of Phoenix
Richard O. B. Makopondo, Ph.D. University of Illinois at Urbana-Champaign
Nancy B. White, Ph.D. University of New Mexico

Lecturers
Kenneth L. Hanley, M.S. California State University, Hayward
Michael S. Shumate, D.P.A. Golden Gate University
Margaret Zeiger, M.S., Golden Gate University
Janeen Hill, M.S., Guelph University
Lisa Smusz, M.F.T., California State University, East Bay
David Epperson, M.S., California State University, East Bay
Erick Kong, M.S., California State University, East Bay
Brian Hill, M.S., California State University, East Bay

Program Description

The Department of Hospitality, Recreation and Tourism prepares students to become leaders in the recreation, tourism and hospitality sectors where they work to create opportunities for people to experience the highest quality of life possible. The purpose of the curriculum is to develop understanding of the importance of leisure in today's fast paced world and how as professionals they can have a positive impact on people, programs and communities. Students are provided educational opportunities which will develop their ability to organize, plan, and manage leisure, hospitality, and tourism service resources in diverse communities.

Leisure is the second largest income-producing sector in the world's economy and is the world's largest employer. Students are professionals upon graduation gaining positions where responsibilities are varied and opportunities are endless.

The department's experiential learning philosophy creates experiences where learning content happens while actually creating programs, events, and experiences for the people they want to serve. Helping people achieve a more satisfying quality of life is the job of all leisure professionals. Managers in recreation and parks, and recreation therapy are just a few of the fields open to our majors.

Student Learning Outcomes

Students graduating with a B.S. in Recreation from Cal State East Bay should:

1. know the importance of psychological, social, spiritual, and physiological benefits of leisure, recreation, play, hospitality and community services;
2. demonstrate significant knowledge of innovative and creative program planning, leadership, program implementation and evaluation addressing the needs of participants and community;
3. be able to clearly articulate (speak and write), ethical, philosophical, historical, current best practices and administrative foundations of the profession;
4. be able to conduct research in the profession, analyze data and draw conclusions based on evidence and provide accurate referencing for all sources;
5. be able to treat all people with dignity and respect while promoting and encouraging individuals, communities and organizations to achieve the highest quality of life.

Career Possibilities

- After-school Director
- Recreation Program Coordinator
- Recreation Therapist
- Youth Sports Director
Features

Our student-centered department has programs designed for both on campus and online students. Our courses are offered in three formats: hybrid (one day a week in-class instruction with the remainder online), all instruction online, or in-class instruction on the weekends and between quarters. We are dedicated to helping you realize your dreams. Our friendly, accessible faculty will advise you about meeting all requirements in the most efficient manner. We have excellent industry contacts and can help connect you with professional part-time jobs to build your resume while in school. All our faculty have been Leisure and Hospitality industry professionals.

Major Requirements (B.S.)

Consult an advisor in your major department for clarification and interpretation of your major requirements. Some courses require prerequisites.

The major with an option in Recreation Management consists of 102 units; and the major with an option in Recreation Therapy consists of 95 units; the B.S. degree requires a total of 180 units.

I. Core Requirements (40 units)

- REC 1000 Introduction to Recreation (4)
- HOS 1100 Introduction to Hospitality and Tourism (4)
- REC 2050 Computers in Hospitality, Recreation and Tourism (2)
- REC 3000 Philosophy of Leisure (4)
- REC 3010 Service Learning in Hospitality, Recreation and Tourism (4)
- REC 3300 Leadership in Hospitality, Recreation and Tourism (4)
- REC 3701 Evaluation and Research in Hospitality, Recreation and Tourism (4)
- REC 4050 Social Justice in Hospitality, Recreation and Tourism (4)
- REC 4100 Professional Issues in Hospitality, Recreation and Tourism (2)
- REC 4501 Special Events Management 1 (4)
- HOS 4502 Special Events Management 2 (4)

II. Select an option from the following:

A. Recreation Management Option (62 units)

The Recreation Management Option prepares students for management and leadership professional positions in public settings where increasing the quality of life through people, parks and programs is the main objective. Jobs include program directors and coordinators for sports, after-school, seniors, youth development, aquatics, adult services, preschool and teens. Many of our graduates are upper management leaders in East Bay leisure services organizations including Concord, Livermore, Oakland, Pleasanton, San Ramon, and East Bay Regional Parks (a small sample).

Job duties are varied and are focused on providing quality of life services in municipal, special districts, county, state and national park and recreation organizations. Many majors also work in the non-profit sector for YMCA, Boys and Girls Club and other youth organizations. Emerging opportunities with active senior living organizations owned and managed by hospitality leaders like Marriott and Hilton offer the chance to increase the quality of life of our aging population.

Required Option Courses (46 units)

- HOS 4520 Promotion of Recreation, Hospitality and Tourism (4)
- HOS 4530 Principles of Meeting, Conventions and Special Events (4)
- REC 2200 Programming in Leisure Services (4)
- REC 3401 Leadership of Small Groups (4)
- REC 3510 Management and Supervision in Hospitality, Recreation and Tourism (4)
- REC 4000 Administration and Budgeting in Recreation (4)
- REC 4011 Youth Development Through Leisure (4)
- REC 4300 Facilities Management and Administration in Leisure (4)
- REC 4896 Recreation Management Internship Placement (2)
- REC 4910 Recreation Management Internship and Senior Project (4-12)

Electives (16 units)

- HDEV 3800 Human Development and Interaction (4)
- HOS 4530 Principles in Meetings, Conventions and Special Events (4)
- HOS 4540 Fiscal Leadership for Operational Managers (4)
- HOS 4550 Global Tourism (4)
- HOS 4560 Food and Beverage Management (4)
- MKTG 3495 Business Communication (4)
- PSYC 3420 Stress and Coping (4)
- PSYC 3500 Social Psychology (4)
- PSYC 3520 Interpersonal Processes (4)
- PSYC 3540 Groups and Organizations (4)
- PSYC 3550 Social Influence and Change (4)
B. Recreation Therapy Option (55 units)

The Recreation Therapy option is designed to prepare students to work as allied health professionals with people who have special needs in clinical, residential, and community-based agencies. This option is specifically designed to meet the standards developed by the National Council for Therapeutic Recreation Certification (NCTRC) and the California Board of Recreation and Park Certification. Successfully completing this curriculum will provide students with knowledge competencies necessary to qualify for both the National and State Therapeutic Recreation Certification Exams. Our program is accredited by the California Board of Recreation and Park Certification.

Many graduates of this option are leaders in Recreation Therapy in the San Francisco Bay Area. They work in rehabilitation hospitals, drug treatment programs, mental health clinics and inpatient programs, state hospitals, long term care facilities, prisons and schools to name just a few.

Required Option Courses (51 units)

- BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
- HDEV 3800 Human Development and Interaction or PSYC 4420 Developmental Psychology (4)
- PSYC 4410 Abnormal Psychology (4)
- REC 3800 Introduction to Recreation Therapy (4)
- REC 4600 Recreation Therapy Documentation and Assessment (4)
- REC 4601 Recreation Therapy Treatment and Program Planning (4)
- REC 4602 Advanced Recreation Therapy Modalities (4)
- REC 4603 Recreation Therapy Programming (4)
- REC 4605 Recreation Therapy: Diagnostic Groups (4)
- REC 4705 Outdoor Adventure Recreation (4)
- REC 4900 Independent Study (1-4)

Electives (4 units)

- HDEV 3301 Child Development (4)
- HDEV 3302 Foundational Aspects of Adolescent Development (4)
- HDEV 3303 Adult Development and Aging (4)
- HDEV 4110 Child Cognitive Development (4)
- HSC 3300 Medical Care in the U.S. (4)
- HSC 4010 Research and Program Evaluation in Health Science (4)
- PSYC 3250 Behavior Modification (4)
- PSYC 3420 Stress and Coping (4)
- PSYC 3500 Social Psychology (4)
- PSYC 3520 Interpersonal Processes (4)
- PSYC 3540 Groups and Organizations (4)
- PSYC 3550 Social Influence and Change (1)
- PSYC 4602 Advanced Recreation Therapy Modalities (1)
- PSYC 4603 Recreation Therapy Programming (4)
- SOC 3419 Death and Dying (4)
- SOC 3425 Prejudice and Discrimination (4)
- SOC 3520 Sociology of Minority Groups (4)
- SOC 3720 Human Behavior in Social Environment (4)
- SOC 3730 Juvenile Delinquency (4)
- SOC 3750 Alcohol and Drug Abuse (4)
- SOC 4720 Medical Sociology (4)
- SOC 4750 Child Welfare (4)
Minor Requirements
Recreation (28 units)

I. Core Courses (16 units)
- REC 1000 Introduction to Recreation (4)
- REC 2200 Programming in Leisure Services (4)
- REC 3000 Philosophy of Leisure (4)
- REC 4050 Social Justice in Hospitality, Recreation and Tourism (4)

II. Electives (12 units)
Select three courses from the following:
- REC 2400
- REC 2500
- REC 3010
- REC 3200
- REC 3202
- REC 3800
- REC 4000
- REC 4011
- REC 4100
- REC 4300

Recreation Therapy (29 units)

Required Courses:
- BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
- HDEV 3800 Human Development and Interaction
  OR PSYC 4420 Developmental Psychology (4)
- PSYC 4410 Abnormal Psychology (4)
- REC 3800 Introduction to Recreation Therapy (4)
- REC 4600 Recreation Therapy Documentation and Assessment (4)
- REC 4601 Recreation Therapy Treatment and Program Planning (4)
- REC 4605 Recreation Therapy: Diagnostic Groups (4)

Youth Services Administration
See Youth Services Administration chapter for minor requirements.

Certificate Program
Youth Services Administration
See Youth Services Administration chapter for certificate program requirements.

Undergraduate Courses
Recreation (Course Prefix: REC)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>Introduction to Recreation (4)</td>
</tr>
<tr>
<td></td>
<td>An introductory multi-disciplinary and multi-cultural investigation of the implications of how leisure contributes to the quality of life of individuals and communities. Survey of institutions and organizations providing recreational services, examining the effects of ethnicity, dominant culture, age and ability on service delivery. This is a prerequisite for all core courses.</td>
</tr>
<tr>
<td>1001</td>
<td>Leadership Development Through Outdoor Adventure (4)</td>
</tr>
<tr>
<td></td>
<td>Through experiential-based self-discovery, group dynamics and participation in individual and physical challenges, students develop team-building, goal-setting, problem-solving, decision-making skills, leadership, trust and self-esteem. Activities may include rock climbing, sea kayaking, orienteering, hiking, and camping. Awareness of psychological, emotional and cultural barriers. Oral and written assignments required. Priority Registration to Lower Division Students. Miscellaneous course fee. See quarterly Class Schedule for current fee. Three hrs. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>2050</td>
<td>Computers in Hospitality, Recreation and Tourism (2)</td>
</tr>
<tr>
<td></td>
<td>Competency based introduction to computers as a tool in leisure and hospitality. Must earn a grade of B- or better to earn credit for this course.</td>
</tr>
<tr>
<td>2100</td>
<td>Leadership Principles in Action (4)</td>
</tr>
<tr>
<td></td>
<td>Exploration and development of decision making skills, program design, and character education for youth and young adults. Effects of urban and suburban environments on discipline, cultural tolerance, and youth development will be explored. Class will require active learning while producing leisure experiences for student life on campus.</td>
</tr>
<tr>
<td>2200</td>
<td>Programming in Leisure Services (4)</td>
</tr>
<tr>
<td></td>
<td>Examination of factors influencing the planning processes of designing small and large activities or events. Planning and conducting activities for groups with attention to assuring social justice for ability, ethnic and cultural diversity. Active learning required.</td>
</tr>
<tr>
<td>2400</td>
<td>Leisure, Self, and Society (4)</td>
</tr>
</tbody>
</table>
|               | Multi-disciplinary, multi-cultural investigation of the impact of recreation, leisure, and learning on individual, community, and human
behavior and development, including ethnicity, dominant culture, age, and leisure behavior. Leisure's impact on society and the quality of life.

2500 Service Learning in Leadership, Hospitality and Leisure 1 (1-4)
Field experiences in leisure, hospitality and community services agencies. Supervision of students by agency and reporting to University supervisor via online. One hundred hours of field experience for 4 units. 25 hours of service per unit. May be repeated for credit with consent of department, for a maximum of 8 units. CR/NC grading only.

3000 Philosophy of Leisure (4)
Analysis of the roots of current practices, theories and philosophies in the fields of leisure, and hospitality. Introduction to leisure and its impact in the world's environment, the need to promote sustainable tourism and understanding cultural differences in leisure. Development of one's own philosophy, both personal and professional.

3010 Service Learning in Hospitality, Recreation and Tourism 2 (4)
Service learning in leisure, hospitality, clinical, school, college, and community settings. One hundred (100) hours of service with online reflection assignments connecting professional theories with professional service. May be repeated once for credit with consent of instructor, for a maximum of 8 units. CR/NC grading only.

3200 Wellness Through Leisure (4)
Theories and concepts of wellness, health and self-efficacy. The importance of leisure, recreation, the environment, education and culture in the development of wellness. Self-responsibility in the pursuit of holistic wellness through leisure.

3202 Women and Leisure (4)
Exploration of women and their leisure and recreation pursuits from a creative, historical and cultural perspective. Leisure's role in contributing to the quality of life of women. Women's leisure expression as a reflection of societal change.

3300 Leadership in Hospitality, Recreation and Tourism (4)
Examination of leadership theories, successful leadership techniques, and analysis of self in leadership roles. Emphasis is placed on group work and dynamics, communication, and cultural and ethnic diversity. Leadership supervision of employees, volunteers, and clients using cooperative team building techniques will be taught through active learning. Prerequisites: HOS 1100, REC 1000, 2050, 2400 or 3000 or permission of instructor.

3305 Outdoor Living Skills (4)
Introduction to backpacking equipment and clothing, map orientation, wilderness survival and first aid, trip planning and logistics. Practical outdoor experience in developing leadership, group dynamics, problem-solving, and team building skills. Requires one weekend backpacking trip. Miscellaneous course fee. See quarterly Class Schedule for current fee. Three hrs. lect., 2 hrs. act.

3401 Leadership of Small Groups (4)
Direct leadership techniques, incorporating programming principles to design and implement programs and activities for small groups. Students will be providing services to the University community.

3510 Management and Supervision in Hospitality, Recreation and Tourism (4)
The art and science of managing and supervising employees, including seasonal, contract and full time professionals with different bureaucratic constraints on job duties and responsibilities. Exploration of hiring, training, motivation, discipline, legal, ADA and ethical concerns in public leisure settings.

3701 Evaluation and Research in Hospitality, Recreation and Tourism (4)
Explore the use of data to make informed decisions as a manager in Leisure and Hospitality settings. Students will learn how to conduct a literature review, design surveys, collect and analyze data, and create reports using both quantitative and qualitative data. Community survey methods and techniques will be taught through active learning. Prerequisites: HOS 1100, REC 1000, 2050, 2400 or 3000 or permission of instructor.

3800 Introduction to Recreation Therapy (4)
Introduction to theory and techniques used in the practice of therapeutic recreation. Activity analysis, disability awareness, mainstreaming and integration, empowerment, learned helplessness, risk management, and quality assurance.

3999 Issues in Hospitality and Leisure Services (1-4)
Readings, discussion, and research on contemporary and/or significant issues in leisure and hospitality. May be repeated for credit when content varies, for a maximum of 8 units.

4000 Administration and Budgeting in Recreation (4)
Study of organizational management including human resources, financial strategies (including introduction to preparing budgets), strategic planning, organizational culture, risk management, ethics, and legal aspects of management. Prerequisites: HOS 1100, REC 1000, 2050, REC 2400 or 3000, REC 3300, REC 3510, or permission of instructor.

4011 Youth Development through Leisure (4)
Principles of working with elementary age children using sports and recreation to develop character and self-esteem. First part of course will encompass lecture/activities. Second part includes participation in youth programs. Written assignment required. May be repeated once for credit, for a maximum of 8 units.

4050 Social Justice in Hospitality, Recreation and Tourism (4)
Understanding our diverse society through an in-depth analysis of attitudes and beliefs about people, our differences and similarities (culture, ethnicity, disability) and how to treat everyone with dignity and respect. Prerequisites: HOS 1100, REC 1000, 2050, REC 2400 or 3000, or permission of instructor.

4100 Professional Issues in Hospitality, Recreation and Tourism (2)
Critical examination of issues including professional certification, accountability, ethics, diversity, environmental health and safety. Exploration of professional groups supporting the profession and the role of maintaining professional knowledge and personal responsibility. Prerequisites: HOS 1100, REC 1000, 2050, 2400 or 3000 or permission of instructor.

4300 Facilities Management and Administration in Leisure (4)
Management of leisure and hospitality areas and facilities: clientele considerations, facility and outdoor area site planning; day-to-day operations of common recreation areas and facilities. Agency visitation required. Two lectures, 3 days of field trips to recreation centers, aquatic center, and parks. Spring break class. Must attend all class sessions. Contact instructor for online requirements if necessary. Prerequisites: HOS 1100, REC 1000, 2050, 2400 or 3000 or permission of instructor.

4501 Special Events Management 1 (4)
Planning and implementing special events and conferences. Topics include event planning, coordination, research, marketing, logistics, themes, programming, volunteers, risk management, and evaluation. May be repeated once for credit, for a maximum of 8 units.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4600</td>
<td>Recreation Therapy Documentation and Assessment (4)</td>
<td>Assessment procedures and instruments used to assure competence in assessment of client function in leisure. Documentation, assessment, regulations in different settings (i.e., community, hospital, and clinical settings), protocols and development of individual treatment plans. Prerequisites: HOS 1100, REC 1000, 2050, 2400 or 3000 or permission of instructor.</td>
</tr>
<tr>
<td>4601</td>
<td>Recreation Therapy Treatment and Program Planning (4)</td>
<td>Theory, techniques and modalities used in recreation therapy. Foundations of leisure counseling and leisure education. Systems theory of program design including individual and group program plans, risk management and quality assurance. Fifty (50) hours of practicum required.</td>
</tr>
<tr>
<td>4602</td>
<td>Advanced Recreation Therapy Modalities (4)</td>
<td>Theory and application of leisure modalities including leisure education, activity adaptation, and equipment modification. May be repeated once for credit with consent of instructor, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4603</td>
<td>Recreation Therapy Programming (4)</td>
<td>Non-competitive activities to promote self-esteem and self efficacy. Active student learning and participation to demonstrate effective programming techniques. May be repeated once for credit with consent of instructor, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4605</td>
<td>Recreation Therapy: Diagnostic Groups (4)</td>
<td>In-depth study of disabling conditions recreation therapists work with including brain injury, spinal cord injury, mental illness, stroke, cognitive difficulties, and challenges of aging. The ramifications of the disabilities on a person's mental, physical, emotional, social, and spiritual well-being. Prerequisites: HOS 1100, REC 1000, REC 2050, REC 2400 or 3000, or permission of instructor. A-F grading only.</td>
</tr>
<tr>
<td>4702</td>
<td>Facilitating Adventure-Based Outdoor Leadership Programs (4)</td>
<td>Current principals, procedures, techniques and foundations in facilitating outdoor adventure-based counseling and leadership programs. Developing curriculum, group preparation, implementing and processing safe adventure experiences using low and high element ropes courses and natural resources. May be repeated once for credit, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4705</td>
<td>Outdoor Adventure Recreation (4)</td>
<td>Lecture, discussion, and participation in outdoor recreation activities. Includes rock-climbing, sailing, sea kayaking, orienteering, hiking, and mountain biking. Classes on five Saturdays, dates and locations to be announced. Miscellaneous course fee. See quarterly Class Schedule for current fee. Three hrs. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>4896</td>
<td>Recreation Management Internship Placement (2)</td>
<td>Internship placement in a traditional Parks and Recreation position. A-F grading only.</td>
</tr>
<tr>
<td>4897</td>
<td>Recreation Therapy Internship Placement (2)</td>
<td>To secure an internship placement in an approved site with a certified therapist, students must meet with advisor a minimum of two quarters before intended internship, interview with intern sites, get a signed contract. MUST successfully complete LiveSCAN, including background check and fingerprinting. Interviewing techniques, networking and professional expectations will be discussed with advisor. Written assignments are required to successfully complete this process. Students MUST successfully complete LiveSCAN, including background check and fingerprinting. Interviewing techniques, networking and professional expectations will be discussed with advisor. Online requirements are similar with interaction with faculty done virtually. Prerequisites: All major and department core classes complete or permission of the chair and the instructor. CR/NC grading only.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
</tr>
<tr>
<td>4910</td>
<td>Recreation Management Internship and Senior Project (4-12)</td>
<td>Field experience in recreation organizations in preparation of a professional role. Supervision by agency and university personnel. Minimum of 400 hours and senior project. Student must complete a minimum of 12 hours of credit and a total of 400 hours. Prerequisite: Completion of all core and elective classes, or permission of instructor. May be repeated six times for credit with consent of instructor, for a maximum of 24 units. CR/NC grading only.</td>
</tr>
<tr>
<td>4911</td>
<td>Recreation Therapy Internship and Senior Project (12)</td>
<td>Field experience in recreation therapy agency. Supervision by agency and university personnel. Minimum of 600 hours and senior project. Supervisor must be NCTRC certified. Prerequisite: Completion of all core and elective classes, or permission of instructor. May be repeated once for credit with consent of instructor, for a maximum of 24 units. CR/NC grading only.</td>
</tr>
<tr>
<td>4913</td>
<td>Senior Special Project (12)</td>
<td>Large special project designed with the interests of the students and the needs of the department, this project will make a significant contribution to the life of the department, the campus or a community. This is especially designed for those non-traditional students with full time employment who cannot complete our traditional internship. It is NOT for people wanting to pursue future employment in a traditional Parks and Recreation position. A-F grading only.</td>
</tr>
</tbody>
</table>
### Science

- **General Information**
- **Undergraduate Science (SCI) Courses**

#### General Information

The College of Science offers interdisciplinary science courses that meet a variety of needs (General Education, Writing Skills, etc.). For general information regarding Science courses, contact the College of Science Office (North Science 131); Tel. (510) 885-3441. For information on the Science Single Subject Matter Preparation Program, see the Single Subject Matter Preparation Program chapter in this catalog.

Website: [http://www.csueastbay.edu/csci](http://www.csueastbay.edu/csci)

#### Undergraduate Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 3010          | Writing in Sciences (4)  
Writing course designed to improve written composition of students majoring in science. Prerequisites: Junior standing; either C- (CR) or better in ENGL 3000 or 3001, or score of 7 or better on the Writing Skills Test, or satisfaction of the graduation writing assessment requirement (GWAR) at any CSU campus including the UWSR at East Bay. |
Single Subject Matter Preparation Programs

Single Subject Matter Preparation Programs approved by the California Commission on Teacher Credentialing (CCTC) are alternatives to the subject matter examinations and act as appropriate subject matter preparation for the Single Subject Teaching Credential. Please note the programs in Science are not alternatives to the required subject matter examinations. Rather, the courses in the Science programs prepare students to take the exams.

The CSUEB Single Subject Matter Preparation Program in Physical Education has been approved by the CCTC for students who began taking one or more of the courses listed below by June 1, 2010. The Physical Education program must be completed by June 1, 2015.

- Mathematics
- Physical Education
- Science (Programs to Prepare for Exams)
- Social Science

Mathematics

Completion of the Single Subject Matter Preparation Program in Mathematics is certified by the Department of Mathematics and Computer Science. A student need not be a mathematics major to complete this program; however, students who complete the mathematics major with Option C (Mathematics Teaching) should find it relatively easy to meet the requirements of the program, as noted in the description of Option C requirements in the undergraduate Mathematics chapter. In addition to the required mathematics courses, a year of education courses and practice teaching is required before the California Secondary Teaching Credential in Mathematics can be granted. Seventy-one quarter units are required in the Single Subject Matter Preparation Program in Mathematics. For additional information, contact the Department of Mathematics and Computer Science: North Science 337; 510-885-4011; e-mail: mathcs@csueastbay.edu; website: www.sci.csueastbay.edu/mathcs/.

I. Core Mathematics (48 units)

- MATH 1130 College Algebra (4)
- MATH 1300 Trigonometry and Analytic Geometry (4)
- MATH 1304 Calculus I (4)
- MATH 1305 Calculus II (4)
- MATH 2101 Elements of Linear Algebra (4)
- MATH 2304 Calculus III (4)
- MATH 3121 Abstract Algebra I (4)
- MATH 3215 Geometry I (4)
- MATH 3600 Number Theory (4)
- MATH 4040 History of Mathematics (4)
- MATH 4901 Senior Seminar (4)
- STAT 3401 Introduction to Probability Theory I (4)

II. Coursework Providing Breadth and Perspective (23 units)

Mathematics courses (12 quarter units):

- MATH 3000 Introduction to Abstract Mathematics and Proof (4)
- MATH 3300 Analysis I (4)
- MATH 3331 Differential Equations (4)

Statistics course (4 quarter units):

- STAT 3502 Statistical Inference (4)

Computer Science or discrete structures course (4 quarter units):

- CS 1160 Introduction to Computer Science I (4)

or

- MATH 2150 Discrete Structures (4)

Field Experience (0-3 quarter units):

- TED 3001 Exploring Education (3)

And/or other field experience approved by the Mathematics Subject Matter Preparation Adviser: At least 45 hours of classroom experience in an instructional capacity is required.

Electives (0-3 quarter units):

Additional courses not used above to bring the total Breadth and Perspective units to at least 23, chosen from the following list or from other related courses approved by the Mathematics Subject Matter Preparation Adviser:

- CHEM 1101 General Chemistry (5)
- CHEM 1102 General Chemistry (5)
- CHEM 1103 General Chemistry (5)
- CS 1160 Introduction to Computer Science I (4)
- CS 2360 Introduction to Computer Science II (4)
- CS 2430 Computer Organization and Assembly Language Programming (4)
- ECON 2301 Principles of Microeconomics (4)
- ECON 2302 Principles of Macroeconomics (4)
- MATH 3100 Linear Algebra (4)
Physical Education

Completion of the Single Subject Matter Preparation Program in Physical Education is certified by the Department of Kinesiology. The Single Subject Matter Preparation Program in Physical Education requires 98-102 units. This program is approved for students who began taking at least one of the listed courses before June 1, 2010 and who complete the entire program before June 1, 2015. A new program for students beginning coursework after July 1, 2015 is being developed by the department. For additional information, contact the Department of Kinesiology: Physical Education Bldg. 130; 510-885-3061; website: [www20.csueastbay.edu/ceas/departments/kin/index.html](http://www20.csueastbay.edu/ceas/departments/kin/index.html).

Required Courses (98-102 units)

- BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
- DANC 3235 Dance for Children (4)
- KIN 1610 Introduction to Kinesiology (4)
- KIN 2650 CPR and First Aid (2)
- KIN 3072 Individual and Dual Sports (3)
- KIN 3075 Aquatics and Outdoor Education (3)
- KIN 3079 Combatives and Fitness Activities (3)
- KIN 3080 Team Sports and Field Sports (3)
- KIN 3300 Measurement and Evaluation (5)
- KIN 3305 Structural Kinesiology (4)
- KIN 3310 Biomechanics (5)
- KIN 3320 Exercise Physiology (5)
- KIN 3330 Motor Learning and Control (5)
- KIN 3340 Motor Development (4)
- KIN 3350 Sport and Exercise Psychology (5)
- KIN 3700 History of Sport and Physical Education (4)
- KIN 3740 Philosophical Foundations of Kinesiology (4)
- KIN 3750 Sport in Contemporary Society (4)
- KIN 4004 Elementary School Physical Education (4)
- KIN 4006 Secondary School Physical Education (4)
- KIN 4008 Adapted Physical Activity (4)
- KIN 4031 Professional Field Experience II (2, 2)
- KIN activities (6-10)
  - At least one in each of swimming, combative, team, individual or dual, fitness activities.
  - One beginning course must be repeated at the intermediate level.

Science

Students can follow one of two pathways to fulfill the content requirements for a single subject credential in Science: 1) Complete a CCTC-approved Subject Matter Program from an accredited California University; or, 2) Pass the California Subject Examinations for Teachers (CSET). CSUEB currently does not have a CCTC-approved Single Subject Matter Preparation Program in Science. We do, however, offer degree programs and courses that prepare students to take the CSET exams.

Further information on obtaining a single subject credential in Science through CSUEB is available at the [STEM Education website](http://class.csueastbay.edu/history/).

Social Science

Completion of the Single Subject Matter Preparation Program in Social Science is certified by the Department of History. The program may be completed by students in any major, but overlaps major requirements in several Social Science fields such as History, Political Science, Geography, and Economics. The Single Subject Matter Preparation program in Social Science requires 84 units. This program has been designed to meet the new CCTC standards. For additional information, contact the Social Science Coordinator in the Department of History: Meiklejohn Hall 4031; 510-885-3207; website: [http://class.csueastbay.edu/history/](http://class.csueastbay.edu/history/).

I. Core Curriculum (48 units)

World History and Geography (16 units)

- HIST 1014 World Civilizations I (or 1017) (4)
- HIST 1015 World Civilizations II (4)
- HIST 1016 World Civilizations III (4)
- GEOG 2300 Cultural Geography (4)

U.S. History and Geography (12 units)

- HIST 1101 History of the United States to 1877 (4)
- HIST 1102 History of the United States Since 1877 (4)
- GEOG 3360 Historical Geography of North America (4)

California History (4 units)
- HIST 3500 History of California (4)

American Government (8 units)
- POSC 1201 American Political Institutions (4)
- POSC 1202 Public Policy/California Politics (4)

Economics (8 units)
- ECON 2301 Principles of Microeconomics (4)
- ECON 2302 Principles of Macroeconomics (4)

II. Breadth and Perspectives (35 units)

Historiography and Research Methods (4 units)
- HIST 3010 Historical Writing (4)

History/Social Science Teaching (3 units)
- TED 3001 Exploring Education (3)

American Democracy (12 units)
One of the following:
- HIST 3412 (4)
- HIST 3413 (4)
- HIST 3414 (4)

One of the following:
- HIST 3415 (4)
- HIST 3416 (4)
- HIST 3417 (4)

One of the following:
- POSC 3111 (4)
- POSC 3120 (4)
- POSC 3150 (4)
- POSC 3410 (4)
- POSC 3441 (4)
- POSC 3442 (4)

American Diversity (4 units)
One of the following:
- ES 3810 (4)
- HIST 3571 (4)
- HIST 3572 (4)
- POSC 3333 (4)
- POSC 3340 (4)
- SOC 3420 (4)
- SOC 3425 (4)
- SOC 3520 (4)
- WOST/ES 3420 (4)

Global Perspectives (12 units)
One of the following:
- GEOG 3515 (4)
- GEOG 3540 (4)
- GEOG 3550 (4)

One of the following:
- HIST 3017 (4)
- HIST 3160 (4)
- HIST 3170 (4)
- HIST 3223 (4)

One of the following:
- HIST 3305 (4)
- HIST 3312 (4)
- HIST 3313 (4)
- HIST 3325 (4)
- HIST 3345 (4)
- HIST 3605 (4)
III. Assessment Capstone (1 unit)

- HIST 4500 The California History/Social Science Framework (1)

No more than 8 units may be taken on a CR/NC basis. No more than 8 units with a grade below "C" may be submitted in fulfillment of any program requirement. To successfully complete the program, a student must have a minimum 2.5 GPA in courses taken to fulfill program requirements or complete additional coursework to be determined by the program advisor. Students must successfully complete the "capstone course" in the final quarter of their participation in the program.
Sociology

Department Information
- Department Information
- Program Description
- Career Opportunities
- Features
- Major Requirements (B.A.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses

Department of Sociology and Social Services
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 3095
Phone: (510) 885-3173
Website: [http://class.csueastbay.edu/sociology/](http://class.csueastbay.edu/sociology/)

Professors Emeriti
- Benjamin P. Bowser, Ph.D. Cornell University
- Willem W. Van Groenou, Ph.D. University of Illinois

Professors
- Efren N. Padilla, Ph.D. Michigan State University

Associate Professors
- Patricia Jennings (Chair), Ph.D. University of Kentucky
- Carl Stempel, Ph.D. University of Oregon

Assistant Professors
- Will L. Johnson, Ph.D. University of California, Berkeley
- Holly Vugia, Ph.D. University of California, Berkeley

Program Description
Cal State East Bay offers a major in Sociology that leads to the Bachelor of Arts degree. The major contains two options: (1) Sociology and (2) Social Services.

The Sociology option is designed for students with career interests in the public sector or business or entry into law school, public administration, or graduate work in a number of fields. Sociology option students must take three of five courses in the area of social diversity. Any of the upper division courses offered by the department may be used to complete the additional 28 required units.

The Social Services option is designed to prepare students for beginning practice in a social services agency or going on to graduate study in social work, counseling or public administration. In the Social Services option, students take a variety of courses including two quarters of field placement, where they work for credit in a social services agency.

The core requirements for all majors include courses in social theory and research methods. The research methods sequence includes training in applied social research and computer applications for the social sciences.

Student Learning Outcomes
Students graduating with a B.A. in Sociology from Cal State East Bay will: 1) be able to write a clear and concise sociological analysis of a social event, topic, issue, or problem; 2) be able to comprehend and apply sociological theories and concepts; 3) be able to employ sociological research methods to answer sociological questions.

Career Opportunities
- Correctional Officer
- Criminologist
- Employee Relations Representative
- Employment Counselor
- Human Resource Representative
- Industrial Sociologist
- Market Research Analyst
- Migration Specialist
- Occupational Analyst
- Parole Officer
- Public Health Statistician
- Public Relations Representative
- Research Assistant
- Social Ecologist
- Social Worker
- Teacher
- Urban Planner
Features

The department faculty includes both sociologists and social workers who have expertise in the areas of family and interpersonal relationships, social theory, drug and alcohol abuse, applied social research, demography, aging, urban sociology, sports and leisure, sexuality, social conflict and violence, crime, international development, culture, social psychology, emotions, medical sociology, and minority and immigrant groups.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 61 units: the B.A. degree requires a total of 180 units.

I. Lower Division (4 units)
   SOC 1000 Introduction to Sociology (or one of 1001, 1002, 2001, or 2002) (4)

II. Upper Division (52 units)
   A. Core Requirements (12 units)
      SOC 3310 Sociological Theory (4)
      SOC 4111 Methods of Sociological Research I (4)
      SOC 4112 Methods of Sociological Research II (4)
   B. Option Requirement (40 units)
      Elect Option 1 or Option 2
      1. Sociology Option (40 units)
         a. Three of the following diversity courses (12 units):
            SOC 3200 Social Demography (4)
            SOC 3420 Social Inequality (4)
            SOC 3425 Prejudice and Discrimination (4)
            SOC 3520 Sociology of Minority Groups (4)
            SOC 3710 Social Policy (4)
            SOC 4790 Social Control and Society (4)
         b. Option electives: complete 28 units from upper division Sociology courses. Up to 12 units of upper division Statistics, selected under advisement, may be counted as Sociology electives.
      2. Social Services Option (40 units)
         SOC 3425 Prejudice and Discrimination (4)
         or SOC 3520 Sociology of Minority Groups (4)
         SOC 3700 Introduction to Social Services (4)
         SOC 3710 Social Policy (4)
         SOC 3720 Human Behavior in the Social Environment (4)
         SOC 4716 Social Work Theories and Methods (4)
         SOC 4718 Field Practicum (must be repeated once for credit) (4), (4)
         SOC 4719 Field Practicum Seminar (must be repeated once for credit) (2), (2)
         Option electives: Complete 8 units from upper division Sociology courses. (Up to 8 units of upper division Statistics courses, selected under advisement, may be counted as Sociology electives.)
   III. Courses in Supporting Fields (5-17 units)
      STAT 1000 Elements of Probability and Statistics (5) Option Electives (see above for Statistics substitutions for Sociology electives) (0-12)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 28 units and must be declared by the end of Junior year.

I. Lower Division (4 units)
   SOC 1000 Introduction to Sociology (or one of 1001, 1002, 2001 or 2002) (4)

II. Upper Division (8 units)
   SOC 3000 Introduction to Sociological Research (4)
   SOC 3310 Sociological Theory (4)

III. Electives (16 units)
   Select 16 units from any other 3000 or 4000 level sociology courses. (Any Statistics course may be substituted for one Sociology course.)
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 1000 | Introduction to Sociology (4)  
  Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups; changes in (a) and (b). Not open to students with credit for SOC 1001, 1002, 2001, 2002 or 2255. |
| 1001 | Introduction to Sociology of Science and Technology (4)  
  Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups as affected by developments in science and technology; changes in (a) and (b). Not open to students with credit for SOC 1000, 1002, 2001, 2002 or 2255. |
| 1002 | Introduction to Sociology of Individual and Society (4)  
  Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups emphasizing influences on the individual; changes in (a) and (b). Not open to students with credit for SOC 1000, 1001, 2001, 2002 or 2255. |
| 2001 | Introduction to Urban Sociology (4)  
  Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups with an emphasis on urban and city issues; changes in (a) and (b). Not open to students with credit for SOC 1000, 1001, 1002, 2001 or 2255. |
| 2002 | Introduction to Sociology of Law and Society (4)  
  Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups with an emphasis on the influence of legal and ethical issues; changes in (a) and (b). Not open to students with credit for SOC 1000, 1001, 1002, 2001 or 2255. |
| 2255 | Introduction to Sociology Through Sports (4)  
  Introductory analysis of structure and functioning of human groups; focus on race, class and gender relations in sport. Topics include children's sports, nationalism, violence, and health promotion. Not open to students with credit for SOC 1000, 1001, 1002, 2001 or 2002. |
| 3000 | Introduction to Sociological Research (4)  
  Methodological problems in sociology in relation to the analysis of social organizations; research strategies; utilization of associated laboratory exercises to illustrate the important aspects of the research process in sociology. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). |
| 3100 | Seminar in Human Ecology (4)  
  Introduction to theory and research on human ecosystems, with their interrelated components of population, environment, technology, and organization. Forms of social organization which result from the interaction of the components. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). |
| 3200 | Social Demography (4)  
  Population growth, distribution and composition. Introduction to population theories and analytic techniques. Individually supervised student projects. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). Three hrs. lect., 2 hrs. lab. |
| 3230 | Sociology of Food (4)  
  Social processes in what, how and why we eat with emphasis on food production and consumption as instruments of social differentiation, identities and power. Prerequisite: SOC 1000 or consent of instructor. |
| 3310 | Sociological Theory (4)  
  Critical analysis of the works of leading sociological theorists from the middle of the 19th century to the present. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). |
| 3410 | Sociology of the Family (4)  
  The family with respect to its institutional, organizational and interactional character. Comparative study and analysis. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). |
| 3411 | Sociology of Gender (4)  
  Variations in sex roles with emphasis on sociological research. Social definitions of maleness and femaleness. Popular theories purporting the superiority of either gender. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). |
| 3412 | Marriage and Sex (4)  
  Social norms and practices surrounding marriage, love, and sex in American society. Emphasis on premarital sex, mate selection, marital compatibility, marital power, and marriage in the middle and later years. |
| 3413 | Sociology of Parenting (4)  
  Exploration of practical and theoretical issues in contemporary parenting. Various approaches to child rearing examined and critiqued from a sociological perspective. Parent-child interaction, working mothers, nurturing fathers, single parenting, joint custody, family systems, blended families, and society's impact on parenting. |
| 3415 | Sociology of the African American Family (4)  
  Sociological analysis of the African American family and family life. Emphasis on sociological theory and research focusing on African American families and family life. Application of social systems approach emphasizing the interrelationships of social and institutional structure with the various subsystems of the African American family. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). |
| 3419 | Death and Dying (4)  
  Trends and patterns in death and dying including historical perspectives, death in popular culture, demography of death, medical technology and dying, dying patient's perspective, survivors, and ethical dilemmas of death and dying. |
| 3420 | Social Inequality (4)  
  Nature, origins, forms, and consequences of structured inequalities. Focus on the material circumstances, life styles, and life chances of social classes, including minorities. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). |
| 3425 | Prejudice and Discrimination (4)  
  Nature, origins, forms, and consequences of structured inequalities. Focus on the material circumstances, life styles, and life chances of social classes, including minorities. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002). |
3890 Sociology of Organizations (4)
Critical review of social change and ideas about development as they affect villagers, the urban poor, ethnic and racial minorities, and military and industrial elites. The conflict between the rich and the poor in an international context.

3431 Seminar in World Development (4)
Readings, discussion, and research on contemporary and/or significant issues in sociology and social services. May be repeated for credit when content varies, for a maximum of 8 units. Prerequisites: at least a 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units.

3480 Violence and Conflict (4)
Conduct, causes, and consequences of violent conflicts between individuals, groups, organizations, communities, societies. Resolution techniques utilizing violence, nonviolence, mediation, peacekeeping. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).

3500 Social Psychology (4)
Current theory and research on the individual in society, small groups, complex organizations, and interpersonal interaction. Socialization, social structure, attitude formation, and group structure. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).

3507 Filipino American Communities (4)

3510 Sociology of Identity (4)
The social nature and bases of identity formation in groups and individuals, including the changing identities of race, ethnicity, nationality, gender, sexuality, consumption, and class. Historical perspective on the problematization of identity resulting from shifts in social, cultural, economic, technological, and power relations in the United States and the world including the phenomenon of transnationalism.

3520 Sociology of Minority Groups (4)
Sociological and social-psychological theories on minority status and minority relations with special emphasis on racial, ethnic and sexual minorities in the United States.

3555 Asian American Family Patterns (4)
(See ES 3555 for course description.)

3550 Filipino Labor/Immigration (4)
Sociological analysis of Filipino labor and immigration. The impact on work and employment of global restructuring and postmodern condition on Filipinos particularly in North America.

3560 Sociology of Religion (4)
Functions of religion in society, the interrelations between religion and social structure, religious authority and leadership, the nature of religious movements. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).

3610 Sociology of Education (4)
Institutional character of education, the relationship of education as a social institution to aspects of political, economic and family organization; social relations within the school; school culture and roles. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).

3700 Introduction to Social Services (4)
Introduction to the contemporary and historical nature of social service agencies in the United States, and the delivery of services to children, families, the elderly, and other populations in need. Direct and indirect roles of workers in the social services and the profession of social work.

3710 Social Policy (4)
Contemporary and historical nature of social policy in the United States, emphasizing at-risk populations and disenfranchised groups. Social problems such as homelessness, child abuse, poverty, and immigration.

3720 Human Behavior in the Social Environment (4)
Primary theories of human behavior and developmental stages across the life span. Special attention to the interplay between human development and social environment.

3730 Juvenile Delinquency (4)
Juvenile justice system and the theories seeking to explain juvenile delinquency. Various methods used to prevent, treat and rehabilitate youthful offenders. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).

3745 Social Deviance (4)
Formation and composition of various subcultures whose norms and values conflict with those of wider society. Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).

3750 Alcohol and Drug Abuse (4)
Social issues involved in alcohol and drug abuse with assessment of sociological theories of drug abuse and prevention. Social problems associated with misuse of alcohol, narcotics, and other drugs.

3880 Work and Professions (4)
Research and theory on the social transformation of work and professions, structure of labor markets, occupational choice, work and stratification, historical division of labor. Significance of race, ethnicity, gender, and age in relation to work and professions. Prerequisites: upper-division standing and SOC 1000 (or one of 1001, 1002, 2001, or 2002); or consent of instructor.

3890 Sociology of Organizations (4)
The structure and social dynamics of organizations. Social sources of stratification, cohesion, conflict and change within varying contexts such as business, government, religion, education, and politics. Prerequisites: upper-division standing and SOC 1000 (or one of 1001, 1002, 2001, or 2002); or consent of instructor.

3898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units. Only a maximum of 4 units may be applied to the Sociology major; only a maximum of 4 units may be applied to the Sociology minor. CR/NR grading only.

3999 Issues in Sociology and Social Services (4)
Readings, discussion, and research on contemporary and/or significant issues in sociology and social services. May be repeated once for credit when content varies, for a maximum of 8 units.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>4111</td>
<td>Methods of Sociological Research I (4)</td>
<td>The nature and application of the scientific method in social research. The use of different techniques for specific problems; descriptive and analytical procedures employing the statistical, the historical, and comparative methods. Use of such research instruments as the interview, the questionnaire, and observation. Analysis of data and reporting of results. Individual projects.</td>
<td>Prerequisites: SOC 1000 (or one of 1001, 1002, 2001, or 2002); STAT 1000. Two hours lect., 4 hrs. lab.</td>
</tr>
<tr>
<td>4112</td>
<td>Methods of Sociological Research II (4)</td>
<td>The design of sociological studies. Advanced problems of sampling and measurement. Individual projects and instruction.</td>
<td>Prerequisite: SOC 4111. Two hrs. lect., 4 hrs. lab.</td>
</tr>
<tr>
<td>4400</td>
<td>Sociology of Culture (4)</td>
<td>Sociological analysis of historical and contemporary culture with attention to issues of culture and power, production of culture, status and cultural consumption, audience reception, and social change.</td>
<td>Prerequisites: upper-division standing and SOC 1000 (or one of 1001, 1002, 2001, or 2002); or consent of instructor.</td>
</tr>
<tr>
<td>4450</td>
<td>Urban Sociology (4)</td>
<td>Development of metropolitan areas as distinctive patterns; problems presently facing this population in urban growth, transportation, race relations, poverty, housing, and education.</td>
<td>Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).</td>
</tr>
<tr>
<td>4716</td>
<td>Social Work Theories and Methods (4)</td>
<td>Methods and skills of professional practice in preparation for Field Practicum, with emphasis on individuals, small groups, and communities from a transcultural perspective. Techniques of casework, group work, and community organization.</td>
<td>Prerequisite: SOC 3700.</td>
</tr>
<tr>
<td>4718</td>
<td>Field Practicum (4)</td>
<td>Placement of students in suitable social services agencies with supervised instruction. Twelve hours per week required in placement.</td>
<td>Prerequisites: Senior standing, SOC 3700, SOC 4716, and consent of instructor. Co-requisite: SOC 4719. Only open to Sociology majors with Social Services Option. Must be repeated once. CR/NC grading only.</td>
</tr>
<tr>
<td>4719</td>
<td>Field Practicum Seminar (2)</td>
<td>Seminar to be taken concurrently with SOC 4718. Relates field practicum experiences to social work practice and principles.</td>
<td>Prerequisites: Senior standing, SOC 3700, SOC 4716, and consent of instructor. Co-requisite: SOC 4718. Only open to Sociology majors with Social Services Option. Must be repeated once.</td>
</tr>
<tr>
<td>4720</td>
<td>Medical Sociology (4)</td>
<td>Sociocultural and interactional components in the etiology and treatment of illness (physiological, psychosomatic and &quot;mental&quot;); medical and paramedical professions.</td>
<td>Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).</td>
</tr>
<tr>
<td>4730</td>
<td>Police and Society (4)</td>
<td>The role police play as agents of formal social control. Emphasis on the relationship between police management and social change.</td>
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</tr>
<tr>
<td>4740</td>
<td>Criminology (4)</td>
<td>Meaning of crime, its origins and its functions; current practices in respect to the identification and treatment of criminal behavior.</td>
<td>Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).</td>
</tr>
<tr>
<td>4750</td>
<td>Child Welfare (4)</td>
<td>Trends in public policy regarding programs for the protection and care of the child in American society. Conditions pertinent to the socialization of the child; the implications of these conditions for the development of such programs as foster care, adoptions, institutions, school social work, and corrections.</td>
<td>Prerequisite: SOC 1000 (or one of 1001, 1002, 2001, or 2002).</td>
</tr>
<tr>
<td>4790</td>
<td>Social Control and Society (4)</td>
<td>Methods and strategies by which societies regulate behavior. Variation in social control by social location, with an emphasis on race, class and gender. Implications for justice, equality and civil rights.</td>
<td>Prerequisite: SOC 1000 or consent of instructor.</td>
</tr>
<tr>
<td>4800</td>
<td>Topics Seminar (4)</td>
<td>Contributions of sociological theories, methods, and perspectives to selected topics beyond regular courses. Requires individual research.</td>
<td>Prerequisites: upper-division standing and SOC 1000 (or one of 1001, 1002, 2001, or 2002); or consent of instructor. May be repeated once for credit when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 12 units.</td>
<td></td>
</tr>
</tbody>
</table>
Speech Pathology and Audiology

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- Program Description
- Career Opportunities
- Features
- Major Requirements (B.S.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate courses

Department Information

Department of Communicative Sciences and Disorders
College of Letters, Arts, and Social Sciences
Office: Music and Business Bldg. 1099
Phone: (510) 885-3233

Associate Professors
Patricia Lohman-Hawk (Chair), Ph.D. Ohio University
Janet P. Patterson, Ph.D. Kent State University
Robert C. Peppard, Ph.D. University of Wisconsin, Madison

Assistant Professors
Shubha P. Kashinath, Ph.D. Florida State University
Nidhi Mahendra, Ph.D. University of Arizona

Program Description

Speech-language pathology and audiology are the professions which help adults and children overcome disabilities of speech, language, and hearing. These professions can satisfy a wide variety of career interests, including working in an allied medical profession, public service, government, education and private industry. Through research, these professions also contribute to our knowledge about human communication.

Many students select this degree program for professional training in speech-language pathology; others select this major because it seeks to develop student patterns of clear and logical thinking, planning, decision making and writing. Drawing from such academic disciplines as biology, psychology, sociology, linguistics, medicine, and the physical sciences, the program offers an interdisciplinary character that encourages and fosters an emphasis on acquiring the broad knowledge of a liberal arts general education, as well as developing expertise in a single discipline. Many of our undergraduate majors have used these attributes to successfully pursue careers other than speech-language pathology, and have gone on to fields of education, finance, business, and government services.

Student Learning Outcomes

Students graduating with a B.S. in Speech-Language Pathology from Cal State East Bay will: 1) complete academic courses in preparation for advanced professional training in speech-language pathology or in related disciplines; 2) synthesize knowledge from basic and behavioral sciences and humanities with current knowledge and theory in speech-language pathology; 3) demonstrate knowledge of communicative development and behavior across the lifespan and in individuals representing varied cultural groups.

Career Opportunities

- Audiologist
- Communications Specialist
- Consultant
- Professor/Teacher
- Research Assistant

Features

The department operates the Speech, Language and Hearing Clinic, an on-campus facility that provides clinical services to speech, language, and hearing impaired individuals from Bay Area Communities. Students who are enrolled in the program are able to observe, receive training, and do research in this fully-equipped facility. The program also maintains a fully equipped speech and hearing science laboratory for students who wish to pursue research interests.

The Department of Communicative Sciences and Disorders offers the coursework required to qualify as a registered audiometrist in the public schools of the State of California.

The Bachelor of Science degree major in Speech-Language Pathology provides students with a background in theoretical and clinical areas fundamental to the understanding and management of communicative disorders and serves as the pre-professional training necessary for admission to graduate studies.

Major Requirements (B.S.)

The B.S. degree in Speech-Language Pathology is designed to prepare the student to pursue graduate training in speech-language pathology or audiology, or for employment in related fields. Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 62 units of core courses plus a varying number of required units in each degree track: 11 units (93
total units) for the Honors Clinic Track; 8 units (90 total units) for the Non-Clinic Track; 17 units (99 total units) for the Au.D. Preparation Track. The B.S. degree requires a total of 180 units.

Students intending to seek the B.S. degree must apply for acceptance into the major. Application requirements are a cumulative grade point average of 3.0 on a 4 point scale; and submission of a letter of intent to major in speech-Language pathology.

I. Lower Division (20 units)
- BIOL 1001 Introduction to Biology (or 1005), and BIOL 1002 Introduction to Biology Lab (or 1004 or 1005) (5)
- BIOL 2010 Human Physiology and Anatomy I (or 2011) (5)
- PSYC 1000 General Psychology (or 1001 or 1005) (5)
- STAT 1000 Elements of Probability and Statistics (5)

II. Upper Division (62 units plus required units in track)
- SPPA 2850 Introduction to Communication Disorders (4)
- SPPA 3852 Speech, Language and Communication Development Across the Lifespan (4)
- SPPA 3854 Anatomy and Physiology of Speech (4)
- SPPA 3855 Phonetics (4)
- SPPA 3856 Observation of Clinical Procedures in Communicative Disorders (2)
- SPPA 3859 Theory and Practice of Audiology I (4)
- HDEV 4110 Child Cognitive Development
- or PSYC 4420 Developmental Psychology (4)
- SPPA 4852 Clinical Methods and Procedures in Communicative Disorders (3)
- SPPA 4859 Evidence-based Practice in Communicative Sciences and Disorders (4)
- SPPA 4861 Hearing Assessment: Instrumentation and Behavioral (5)
- SPPA 4862 Organic and Low Incidence Speech Disorders (4)
- SPPA 4863 Articulation and Phonological Disorders (4)
- SPPA 4865 Language Disorders in Children (4)
- SPPA 4866 Neurocognitive Communication Disorders (4)
- SPPA 4867 Speech Science (4)
- SPPA 4868 Cultural and Linguistic Diversity (4)

III. Track Requirements
Required for Honors Clinic Track (11 units)
- SPPA 4854 Diagnosis of Speech and Language Disorders (4)
- SPPA 4869 Neuroanatomy and Neurophysiology of the Speech, Language and Hearing Mechanism (4)
- SPPA 4856 Practicum in Speech Pathology and Audiology (3)

Required for Non-Clinic Track (8 units)
- SPPA 4869 Neuroanatomy and Neurophysiology of the Speech, Language and Hearing Mechanism (4) or Disorders course at 6000 level (4)
- SPPA 6080 Counseling Individuals with Speech, Language or Hearing Disorders (4)

Required for the Au.D. Preparation Track (17 units)
- MLL 1901 Elementary Sign Language I (4)
- PHYS 1700 Elementary Physics (4)
- PHYS 1780 Elementary Physics Laboratory (1)
- SPPA 3860 Theory and Practice of Audiology II (4)
- SPPA 4120 Aural Rehabilitation for Au.D. (4)

IV. Elective Courses (minimum unit requirement varies by track)

Each student enrolled in this major must complete upper division courses in related disciplines; these courses are subject to adviser approval. The minimum number of elective units is determined by the major track:
- Honors Clinic Track: 7 elective units
- Non-Clinic Track: 10 elective units
- Au.D. Preparation Track: 1 elective unit

Courses may be chosen from areas such as psychology, human development, linguistics and sign language. Students are responsible for any required prerequisites for elective courses.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

The minor consists of 32 units.
- COMM 1004 Interpersonal Communication (4)
- SPPA 3852 Speech, Language and Communication Development Across the Lifespan (4)
- SPPA 3854 Anatomy and Physiology of Speech (4)
Undergraduate Courses

Prerequisite Requirements: B.S. in Speech-Language Pathology majors must complete SPPA 3854, SPPA 3855 and SPPA 3859, each with a grade of "B" (3.0) or better, prior to enrolling in any 4000-level course in the major.

Speech Pathology and Audiology (Course prefix: SPPA)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
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<tbody>
<tr>
<td>2850</td>
<td>Introduction to Communication Disorders (4)</td>
</tr>
<tr>
<td>3005</td>
<td>Pronouncing American English (4)</td>
</tr>
<tr>
<td>3852</td>
<td>Speech, Language and Communication Development Across the Lifespan (4)</td>
</tr>
<tr>
<td>3854</td>
<td>Anatomy and Physiology of Speech (4)</td>
</tr>
<tr>
<td>3855</td>
<td>Phonetics (4)</td>
</tr>
<tr>
<td>3856</td>
<td>Observation of Clinical Procedures in Communicative Disorders (2)</td>
</tr>
<tr>
<td>3859</td>
<td>Theory and Practice of Audiology I (4)</td>
</tr>
<tr>
<td>3860</td>
<td>Theory and Practice of Audiology II (4)</td>
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<tr>
<td>3999</td>
<td>Issues in Speech Pathology and Audiology (4)</td>
</tr>
<tr>
<td>4120</td>
<td>Aural Rehabilitation for Au.D. (4)</td>
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<td>4852</td>
<td>Clinical Methods and Procedures in Communicative Disorders (3)</td>
</tr>
<tr>
<td>4854</td>
<td>Diagnosis of Speech and Language Disorders (4)</td>
</tr>
<tr>
<td>4856</td>
<td>Practicum in Speech-Language Pathology (3)</td>
</tr>
<tr>
<td>4859</td>
<td>Evidence-based Practice in Communicative Sciences and Disorders (4)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4861</td>
<td>Hearing Assessment: Instrumentation and Behavioral (5)</td>
</tr>
<tr>
<td>4862</td>
<td>Organic and Low Incidence Speech Disorders (4)</td>
</tr>
<tr>
<td>4863</td>
<td>Articulation and Phonological Disorders (4)</td>
</tr>
<tr>
<td>4865</td>
<td>Language Disorders in Children (4)</td>
</tr>
<tr>
<td>4866</td>
<td>Neurocognitive Communication Disorders (4)</td>
</tr>
<tr>
<td>4867</td>
<td>Speech Science (4)</td>
</tr>
<tr>
<td>4868</td>
<td>Cultural and Linguistic Diversity (4)</td>
</tr>
<tr>
<td>4869</td>
<td>Neuroanatomy and Neurophysiology of the Speech, Language and Hearing Mechanism (4)</td>
</tr>
<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>
Statistics

- Department Information
- Program Description
- Career Opportunities
- Preparation
- Honors in Statistics
- Major Requirements (B.S.)
- Other Degree Requirements
- Minor Requirements
- Undergraduate Courses
- Footnotes

Department Information

Department of Statistics and Biostatistics
College of Science
Office: North Science 229
Phone: (510) 885-3435

Professor Emerita
Julia A. Norton Ph.D. Harvard University

Professor
Eric A. Suess (Chair), Ph.D. University of California, Davis

Associate Professors
Lynn Eudey, Ph.D. University of California, Berkeley
Shenghua (Kelly) Fan, Ph.D. University of Minnesota
Mitchell R. Watnik, Ph.D. University of California, Davis

Assistant Professors
Joshua D. Kerr, Ph.D. University of California, Davis
YanYan Zhou, Ph.D. University of Maryland

Program Description

Statistics is the study of designing experiments and surveys, and evaluating the collected data. This rapidly growing science is widely used to make predictions about future events based on patterns observed in the past and to draw accurate inferences about large groups on the basis of a representative sample from the group. Economic forecasts and public opinion polls are examples of these kinds of statistical methods.

The methodology of statistics can be adapted to many types of problems. Due to the extensive development of computers and the collection of large databases, the need for statistical techniques has greatly expanded in the past few decades. A society like ours, which has become increasingly dependent on its data, has a growing need for statisticians.

Student Learning Outcomes

Students graduating with a B.S. in Statistics from Cal State East Bay will have:

1. interpretive and basic computational skill in descriptive statistics and graphical displays; hypothesis testing and confidence intervals; modeling and error analysis;
2. the ability to communicate to others results involving descriptive statistics and graphical displays; hypothesis testing and confidence intervals; modeling and error analysis;
3. the ability to use appropriate statistical computer software and to decipher standard computer results covering descriptive statistics and graphical displays; hypothesis testing and confidence intervals; modeling and error analysis.

Career Opportunities

- Actuary
- Biostatistician
- Business Executive
- Census Analyst
- Credit Analyst
- Data Analyst
- Economist
- Financial Modeling Specialist
- Forms Analyst
- Information Systems Analyst
- Insurance Agent
- Market Researcher
- Oddsmaker
- Quality Control Specialist
- Research Statistician
- Sales Analyst
- SAS Programmer
Preparation

For Advanced Placement course equivalencies, see the Registration chapter.

The theory of statistics rests on a mathematical foundation. Even for statisticians whose primary interest is in applications, challenging mathematical problems arise continually. Calculus and computer programming are required for the major. An elementary course in linear algebra is highly recommended.

Courses in areas to which statistics is applied will also be helpful. Examples are business, biology, chemistry, geography, social sciences, psychology, and physics.

Community college students are advised to complete the sequence of elementary calculus and analytic geometry courses before transferring to Cal State East Bay. Another excellent lower-division requirement to complete before transferring is a course in introductory computer programming.

Honors in Statistics

Students earning a GPA of 3.6 or higher in courses comprising their major in Statistics will be awarded Honors in the degree provided the coursework applied toward the degree includes the courses listed in areas I and II below.

I. Required Courses for Honors (16 units)

- MATH 2101 Elements of Linear Algebra (4)
- MATH 2304 Calculus III (4)
- MATH 3100 Linear Algebra (4) or MATH 3300 Analysis I (4)
- STAT 3402 Introduction to Probability Theory II (4)

II. Required Honors Course (4 units)

- STAT 4401 Introduction to Stochastic Processes (4) or STAT 4601 Regression (4) taken as a special honors course with permission of the instructor and the Director of the Honors Program.

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 68-77 units; the B.S. degree requires a total of 180 units.

I. Basic Requirements (16-25 units)

- MATH 1304, Calculus I (4)
- MATH 1305, Calculus II (4) [prerequisite: MATH 1300 (4) or equivalent]
- One of the following (4 units):
  - CS 1020 Introduction to Computers (4)
  - or CS 1160 Introduction to Computer Science I (4)
- One of the following (4-9 units including prerequisite course):
  - STAT 3010 Statistical Methods in the Social Sciences (4) [prerequisite, STAT 1000 (5)]
  - or STAT 3031 Statistical Methods in Biology (4)
  - or MGMT 3100 Decision Science (4) [prerequisite, STAT 2010 (5)]
  - or MATH 2101 Elements of Linear Algebra (4)
  - or MATH 2304 Calculus III (4)

II. Mathematical Statistics and Probability (32 units)

- STAT 3401 Introduction to Probability Theory I (4)
- STAT 3502 Statistics I (4)
- STAT 3503 Statistics II (4)
- STAT 3900 Data Analysis Using Statistical Packages (4)
- or STAT 4950 Advanced Statistical Packages for Data Analysis (4)
- STAT 4601 Regression (4)
- Any 3 of the following courses (12 units):
  - STAT 3402 Introduction to Probability Theory II (4)
  - STAT 3510 Sampling Procedures for Surveys (4)
  - STAT 3910 Statistical Software Usage (4)
  - STAT 4910 Advanced Statistical Package Usage (4)
  - STAT 4401 Introduction to Stochastic Processes (4)
  - STAT 4515 Applied Multivariate Analysis (4)
  - STAT 4610 Introduction to Nonparametric Statistical Methods (4)

III. Area of Emphasis (20 units)

  Complete one of the following:
  1. Twenty units of approved mathematics or statistics courses in addition to those used for the requirements in Sections I and II. MATH
3100, Linear Algebra, or MATH 3300, Intermediate Analysis, should normally be included in these 20 units. These courses are especially recommended for students taking the mathematical statistics pattern, or wishing to apply to the master's degree program in Statistics. MATH 3100 or 3300 is required for students in the departmental honors program.

2. Twenty units of approved courses in an approved area. Areas currently approved include the following: Anthropology, Biological Science, Business/Economics, Chemistry, Computer Science, Geography, Geological Sciences, History, Physics, Political Science, Psychology, Sociology. For a complete list of currently approved areas, contact the Department of Statistics. To gain departmental approval, these courses must include at least one upper division course and be judged to constitute a coherent program of study. (With the approval of the department, upper division Statistics courses, except STAT 3001, 3010, and 3031, may be applied toward these twenty units.)

Credit/No Credit Courses

It is the policy of the department that no course taken on a "CR/NC" basis may be applied toward any of the requirements of Section II above. Individual petitions for waiver of this policy will be treated according to the same procedures as petitions to waive other degree requirements.

Double Major

A knowledge of statistical methods is of increasing importance to students in many areas, especially the physical, computing, decision, environmental, biological, political, and social sciences and administrative studies (including business, health care, and education). A second major in statistics along with a major in one of these areas may result in better preparation for employment or graduate study. The following three factors combine to make such a double major feasible in many cases:

1. The Statistics major allows for a relatively large number of completely unrestricted elective units. The student may elect courses required for the other major among these.
2. Up to twenty units in certain areas outside of Statistics may be applied toward the Statistics degree. (See Area of Emphasis requirement, III.2.)
3. Some other majors require Statistics courses that also count towards the Statistics major (e.g., STAT 2010, 3010, 3031, 3401, 3502, etc.).

To obtain an illustrative program contact the Statistics Department.

Note: If a student simultaneously completes requirements for two majors leading toward different degrees (e.g., B.S. major in Statistics and B.A. major in Sociology), only one degree (student's choice) is awarded. However, in all cases, the student's transcript carries a notation that both sets of major requirements have been met. Students are eligible for scholarships in both programs.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor Requirements

Minor in Statistics

The minor consists of 24-25 units; six courses not involving calculus prerequisites approved for all students in the minor are as follows:

One of the following courses:

- STAT 1000 Elements of Probability and Statistics (5)
- STAT 2010 Elements of Statistics for Business and Economics (5)
- STAT 3031 Statistical Methods in Biology (4)

Five of the following:

- STAT 3010 Statistical Methods in the Social Sciences (4)
- STAT 3050 Statistics: from Data to Decisions (4)
- STAT 3415 Introduction to Decision Theory (4)
- STAT 3510 Sampling Procedures for Surveys (4)
- STAT 3900 Data Analysis Using Statistical Packages (4)
- STAT 3910 Statistical Software Usage (4)
- STAT 4000 Analysis of Variance in the Behavioral Sciences (4)
- STAT 4515 Applied Multivariate Analysis (4)
- STAT 4601 Regression (4)
- STAT 4610 Introduction to Nonparametric Statistical Methods (4)

With the consent of a Statistics Department advisor, any upper division Statistics course with a calculus prerequisite may be substituted for any of the above courses.

Minor in Biostatistics

The minor consists of 24 units. Note that some courses require prerequisites not required in the minor.

Required Courses (16 units)

- STAT 3031 (4) and 4000 (4)
  or STAT 3502 and 3503 (8)
  (second sequence is preferred; however, it requires calculus.)
- STAT 4601 (4)
- STAT 4950 (4)

Elective courses (8 units)

Two upper division courses in statistics not included in required coursework.
Undergraduate Courses

Information about Elementary Statistics Courses

Prerequisite: All introductory statistics courses require as a prerequisite completion of the Entry Level Math (ELM) requirement.

First Statistics Course: The courses STAT 1000/3010 form a sequence and so STAT 1000 is the appropriate first course in many cases. Biology majors should take STAT 3031 as their first Statistics course. Business and Economics majors should take STAT 2010. Sociology majors who elect to take only one Statistics course should take STAT 1000. STAT 3401, STAT 3502, and STAT 3601 may be taken with no previous background in Statistics and are open to students with the appropriate Mathematics prerequisites.

Prohibitions: Students will NOT receive credit toward graduation for both STAT 1000 and 2010. STAT 1000 may not follow any upper division Statistics course. Business and Economics majors require STAT 2010 or STAT 3502 and so must not take STAT 1000 (unless substitution of 1000/3010 for 2010 or 3502 has been approved by the major department).

Substitutions: Some departments permit students with appropriate background or interests to substitute a more advanced course or pair of courses for a course(s) specified as required in the Catalog. Get advance written permission from your department before making any of the following substitutions: 2010 for 1000; 1000/3010 for 2010; 3401/3502 for 3601; 3502 for 3031; 3502 (plus 5 elective units) for 1000/3010; 3503 for 4000.

Statistics (Course prefix: STAT)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>1000</td>
<td>Elements of Probability and Statistics (5) Descriptive statistics (measures of central tendency, dispersion, correlation), elementary discrete probability distributions. Introduction to tests of statistical hypotheses. <strong>Prerequisite: completion of ELM requirement. Not open to students with credit for STAT 2010 or 2008. Must complete course with a grade of &quot;C-&quot; or better in order to earn General Education, Area B4, credit.</strong></td>
</tr>
<tr>
<td>2008</td>
<td>Introductory Statistics Through Sports (5) Descriptive statistics (measures of central tendency, variation, correlation). Elementary probability (including binomial and normal distributions and &quot;independence&quot;). Introduction to statistical inference (hypothesis testing and confidence intervals). <strong>Prerequisite: completion of ELM requirement. Not open to students with credit for STAT 1000 or 2008. Must complete course with a grade of &quot;C-&quot; or better in order to earn General Education, Area B4, credit.</strong></td>
</tr>
<tr>
<td>2010</td>
<td>Elements of Statistics for Business and Economics (5) Introduction to modern probability, descriptive statistics, estimation, hypothesis testing, and linear regression. Applications to business and economics. <strong>Prerequisite: completion of ELM requirement. Not open to students with credit for STAT 1000 or 2008. Must complete course with a grade of &quot;C-&quot; or better in order to earn General Education, Area B4, credit.</strong></td>
</tr>
<tr>
<td>3010</td>
<td>Statistical Methods in the Social Sciences (4) Standard scores, t scores, ranked data, linear regression, correlation, measures of association, the normal distribution and its uses, paired comparisons, the uses of chi-squared, and introduction to design of experiments. <strong>Prerequisite: STAT 1000 or equivalent.</strong></td>
</tr>
<tr>
<td>3031</td>
<td>Statistical Methods in Biology (4) Basic probability and statistical concepts. Introduction to the analysis of variance, correlation, and simple linear regression. Nonparametric techniques with application to biology. <strong>Prerequisite: MATH 1130 or consent of instructor.</strong></td>
</tr>
<tr>
<td>3050</td>
<td>Statistics: from Data to Decisions (4) Fundamentals of statistical reasoning illustrated with real data from such fields as biology, psychology, geology, anthropology, physics, medical technology. How to decide on an appropriate statistical method. Graphical methods, computer assisted analysis of data. Drawing conclusions. Projects with written reports. <strong>Not for credit in Statistics B.S. degree. Acceptable for credit in statistics minor. Prerequisite: STAT 1000 or equivalent.</strong></td>
</tr>
<tr>
<td>3088</td>
<td>Gambling and Games of Chance (4) A survey of popular gambling games, including dice games, card games, and horse racing. Discussion of odds and probabilities, and how to turn those into gambling strategies. <strong>Not for credit in Statistics B.S. degree. Prerequisite: lower division quantitative reasoning. General Education Area B4, satisfied.</strong></td>
</tr>
<tr>
<td>3401</td>
<td>Introduction to Probability Theory I (4) The theory of probability with applications to science and engineering. Sample spaces; random variables; joint, marginal, conditional distributions; expectations; important distributions (binomial, Poisson, normal, etc.); and moment generating functions. <strong>Prerequisite or concurrent: MATH 1305.</strong></td>
</tr>
<tr>
<td>3402</td>
<td>Introduction to Probability Theory II (4) Generating functions and multivariate distributions. Conditioning, Chebyshev inequality and limit theorems. Multidimensional transformations of random variables. Derivation of t and F distributions. Uses of probability theory in mathematical statistics. <strong>Prerequisite: STAT 3401 or STAT 4412.</strong></td>
</tr>
<tr>
<td>3502</td>
<td>Statistical Inference I (4) Random variables, sampling distributions (binomial, Poisson, normal, exponential), conditional probability. Estimation, hypothesis testing. Computer-aided computations. Topics include: t-tests, correlation, regression; proportions, chi-squared; ANOVA. <strong>Prerequisite: MATH 1305.</strong></td>
</tr>
<tr>
<td>3503</td>
<td>Statistical Inference II (4) General linear hypothesis with emphasis on design and analysis of experiments. Data from science, engineering, and quality management. Factorial designs: random effects, nesting. Optional topics: incomplete blocks, missing data, analysis of covariance. Computer-aided analysis. <strong>Prerequisite: STAT 3502 or 3601.</strong></td>
</tr>
<tr>
<td>3510</td>
<td>Sampling Procedures for Surveys (4) Detailed investigation of sampling methods. Design and comparisons of stratified, systematic, and cluster sampling procedures. Techniques of multistage and multiphase sampling. Emphasis on applications to social science. <strong>Prerequisite: STAT 1000 or equivalent.</strong></td>
</tr>
<tr>
<td>3601</td>
<td>Statistics and Probability for Science and Engineering I (4) Basic probability rules (independence, Bayes' Theorem), distributions (binomial, Poisson, normal, exponential), reliability.</td>
</tr>
</tbody>
</table>
Footnotes

1. These courses are especially recommended for students taking the mathematical statistics pattern.
2. Refer to "Information about Elementary Statistics Courses" section at the beginning of "Undergraduate Courses."
Teacher Education

Department Information

Department of Teacher Education
College of Education and Allied Studies
Office: Art and Education Bldg. 242
Phone: (510) 885-3027 FAX: (510) 885-4632
Website: www.csueastbay.edu/teach

Professor Emeritus
David R. Stronck, Ph.D. Oregon State University

Professors
Joan D. Davenport, Ph.D. University of Pittsburgh
Phillip E. Duren, Ph.D. Ohio State University
Bijan B. Gillani, Ed.D. University of Southern California
Lettie Ramirez, Ph.D. University of Texas at Austin
James J. Zarrillo, Ph.D. Claremont Graduate School

Associate Professors
Jeanette M. Bicais (Chair), Ph.D. University of California, Berkeley
Li-Ling Chen, Ph.D. University of Texas at Austin
Denise M. Fleming, Ph.D. University of California, Berkeley
Valerie A. Helgren-Lempesis, Ed.D. University of Miami
Shira Lubliner, Ed.D. University of San Francisco
James M. Mitchell, Ph.D. University of Minnesota, Minneapolis
Catherine F. Reed, Ph.D. University of Virginia (FERP)

Assistant Professors
Maliika Chambers, Ed.D. Mills College
Eric Engdahl, Ph.D. University of California, Los Angeles
Michele Korb, Ph.D. Marquette University
Felipe H. Razo, Ph.D. Claremont Graduate School/San Diego State University
Craig B. Wilson, Ph.D. University of California, Berkeley (FERP)

General Information

The Department of Teacher Education offers primarily post-baccalaureate and graduate courses. See Teacher Education in the graduate section of this catalog.

Minor Requirements

The minor in Early Childhood Education consists of 24 units.

Required Courses:

- TED 4070 Early Childhood Education: Language & Literacy Development (4)
- TED 4071 Early Childhood Education: Integrated Language Arts & Social Studies (4)
- TED 4072 Early Childhood Education: Integrated Math & Science (4)
- TED 4073 Early Childhood Education: Integrated Arts (2)
- TED 4074 Early Childhood Education: Children With Special Needs (4)
- TED 4075 Early Childhood Education: Professional Seminar & Practicum (6)

Undergraduate Courses

These undergraduate courses may be taken to enhance teaching skills and give potential master's degree or teaching credential candidates additional experience working with children and young adults.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>3001</td>
<td>Exploring Education (3) Introduction to the field of teaching. Reports and discussions related to directed observations of preschool, elementary and secondary classrooms, and non-school educational settings. Examination of changing issues in education and their implications for future teaching practices and theories. Two hrs. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>3005</td>
<td>Intermediate Field Experience in the Elementary School A (1) Observation and participation in an elementary school classroom in second quarter of blended Multiple Subject Credential/Liberal</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>3006</td>
<td>Intermediate Field Experience in the Elementary School B (1)</td>
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<tr>
<td></td>
<td>Observation and participation in an elementary school classroom in third</td>
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<td></td>
<td>quarter of blended Multiple Subject Credential/Liberal Studies Major</td>
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<tr>
<td></td>
<td>program. Reports and discussion on issues raised. Focus on classroom</td>
</tr>
<tr>
<td></td>
<td>management. Prerequisite: T ED 3005. CR/NC grading only. Two hrs. act.</td>
</tr>
<tr>
<td>3007</td>
<td>Intermediate Field Experience in the Secondary School A (1)</td>
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<tr>
<td></td>
<td>Observation and participation in a middle or high school classroom. Reports</td>
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<tr>
<td></td>
<td>and discussion of issues raised during field experience. Prerequisite:</td>
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<tr>
<td></td>
<td>Admission to Bachelors Plus Single Subject Credential Program. CR/NC</td>
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<tr>
<td></td>
<td>grading only. Two hrs. act.</td>
</tr>
<tr>
<td>3008</td>
<td>Intermediate Field Experience in the Secondary School B (1)</td>
</tr>
<tr>
<td></td>
<td>Observation and participation in a middle or high school classroom. Reports</td>
</tr>
<tr>
<td></td>
<td>and discussion of issues raised during field experience. Prerequisite:</td>
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<tr>
<td></td>
<td>T ED 3007 and admission to Bachelors Plus Single Subject Credential Program.</td>
</tr>
<tr>
<td></td>
<td>CR/NC grading only. Two hrs. act.</td>
</tr>
<tr>
<td>3898</td>
<td>Cooperative Education (1-4)</td>
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<td>Supervised work experience in which student completes academic assignments</td>
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<td>integrated with off campus paid or volunteer activities. Prerequisites:</td>
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<td></td>
<td>at least 2.75 GPA; departmental approval of activity. May be repeated for</td>
</tr>
<tr>
<td></td>
<td>credit, for a maximum of 8 units.</td>
</tr>
<tr>
<td>3999</td>
<td>Issues in Teacher Education (4)</td>
</tr>
<tr>
<td></td>
<td>Readings, discussion, and research on contemporary and/or significant issues</td>
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<td></td>
<td>in teacher education. May be repeated for credit when content varies, for</td>
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<tr>
<td></td>
<td>a maximum of 8 units.</td>
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<tr>
<td>4041</td>
<td>Advanced Tutoring Methods in Reading, Writing and Learning Skills (4)</td>
</tr>
<tr>
<td></td>
<td>An introduction to the theories and methods of tutoring reading, writing,</td>
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<td></td>
<td>and learning skills at the college level. Analysis of receptive and</td>
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<td>expressive language and learning skills and their application to the content</td>
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<td></td>
<td>areas. Development of tutor communication skills and diagnostic/prescriptive</td>
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<tr>
<td></td>
<td>tutoring methods. Prerequisite: T ED 4040. Two hrs. lect., 4 hrs. tutoring.</td>
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<tr>
<td>4042</td>
<td>Advanced Tutoring Methods in Mathematics and Science (4)</td>
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<tr>
<td></td>
<td>An introduction to the theories and methods of tutoring mathematics and</td>
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<td>science at the college level. Analysis of the critical thinking, learning</td>
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<td>skills, and problem solving strategies required in math and science.</td>
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<tr>
<td></td>
<td>Development of tutor communication skills and diagnostic/prescriptive</td>
</tr>
<tr>
<td></td>
<td>tutoring methods. Prerequisite: T ED 4040. Two hrs. lect., 4 hrs. tutoring.</td>
</tr>
<tr>
<td>4070</td>
<td>Early Childhood Education: Language and Literacy Development (4)</td>
</tr>
<tr>
<td></td>
<td>Curriculum and instruction for language and literacy development in pre-</td>
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<tr>
<td></td>
<td>school programs. Focus on cognition, comprehension, vocabulary, concepts</td>
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<tr>
<td></td>
<td>about print, phonemic awareness, needs of English Language Learners, and</td>
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<td>family literacy. Field Component. Prerequisite: Junior-year status and</td>
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<tr>
<td></td>
<td>concurrent enrollment in the B.A. in Human Development, Early Childhood</td>
</tr>
<tr>
<td></td>
<td>Option; or 12 quarter units of courses in child development; or a Multiple</td>
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<tr>
<td></td>
<td>Subject Teaching Credential.</td>
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<tr>
<td>4071</td>
<td>Early Childhood Education: Integrated Language Arts and Social Studies (4)</td>
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<tr>
<td></td>
<td>Curriculum and instruction for integrated language arts and social studies</td>
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<tr>
<td></td>
<td>in pre-school programs. Focus on literature and play, a framework for</td>
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<td></td>
<td>promoting diversity, social skills, and young children's understanding of</td>
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<td>themselves in relationship to others. Field component. Prerequisite: Junior-</td>
</tr>
<tr>
<td></td>
<td>year status and concurrent enrollment in the B.A. in Human Development,</td>
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<td></td>
<td>Early Childhood Option; or 12 quarter units of courses in child development;</td>
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<td></td>
<td>or a Multiple Subject Teaching Credential.</td>
</tr>
<tr>
<td>4072</td>
<td>Early Childhood Education: Integrated Math and Science (4)</td>
</tr>
<tr>
<td></td>
<td>Curriculum and instruction for integrated math and science in pre-school</td>
</tr>
<tr>
<td></td>
<td>programs. Focus on inquiry based math and science instruction, emergent</td>
</tr>
<tr>
<td></td>
<td>numeracy, concepts of number and pattern, and science concepts. Field</td>
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<tr>
<td></td>
<td>component. Prerequisite: Junior-year status and concurrent enrollment in</td>
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<td>the B.A. in Human Development, Early Childhood Option; or 12 quarter units</td>
</tr>
<tr>
<td></td>
<td>of courses in child development; or a Multiple Subject Teaching Credential.</td>
</tr>
<tr>
<td>4073</td>
<td>Early Childhood Education: Integrated Arts (2)</td>
</tr>
<tr>
<td></td>
<td>Curriculum and instruction for integrated arts education in pre-school</td>
</tr>
<tr>
<td></td>
<td>programs. Focus on the integration of the visual and performing arts across</td>
</tr>
<tr>
<td></td>
<td>the curriculum. Field component. Prerequisite: Junior-year status and</td>
</tr>
<tr>
<td></td>
<td>concurrent enrollment in the B.A. in Human Development, Early Childhood</td>
</tr>
<tr>
<td></td>
<td>Option; or 12 quarter units of courses in child development; or a Multiple</td>
</tr>
<tr>
<td></td>
<td>Subject Teaching Credential.</td>
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<tr>
<td>4074</td>
<td>Early Childhood Education: Children With Special Needs (4)</td>
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<tr>
<td></td>
<td>Curriculum and instruction for children with special needs in pre-school</td>
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<tr>
<td></td>
<td>programs. Focus on spectrum of needs, assessment and legal issues, early</td>
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<td>intervention, service delivery approaches for developmental delays and those</td>
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<td></td>
<td>at-risk. Field component. Prerequisite: Junior-year status and concurrent</td>
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<td></td>
<td>enrollment in the B.A. in Human Development, Early Childhood Option; or 12</td>
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<td>quarter units of courses in child development; or a Multiple Subject</td>
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<td>Teaching Credential.</td>
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<tr>
<td>4075</td>
<td>Early Childhood Education: Professional Seminar and Practicum (6)</td>
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<tr>
<td></td>
<td>Culminating course in Early Childhood Education Minor. Focus on pre-school</td>
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<td>models, standards-based instruction, positive classroom environments,</td>
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<td>characteristics of effective programs, working with colleagues and families.</td>
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<tr>
<td></td>
<td>Supervised field practicum. Prerequisites: Completion of all of the</td>
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<td>following courses: T ED 4070, T ED 4071, T ED 4072, T ED 4073, and T ED</td>
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<td>4074 or permission of instructor.</td>
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<tr>
<td>4320</td>
<td>Art Skills for Teachers (4)</td>
</tr>
<tr>
<td></td>
<td>Designed specifically for teachers with little or no art experience. Work</td>
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<tr>
<td></td>
<td>in drawing, printmaking, weaving, paper maché, puppets, masks, batik,</td>
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<tr>
<td></td>
<td>tie dyeing, lettering. Suggestions for translating teacher skills into</td>
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<td></td>
<td>activities for children. May be repeated once for credit, for a maximum of 8</td>
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<tr>
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<td>units. Miscellaneous course fee. See quarterly Class Schedule for current</td>
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<tr>
<td>4900</td>
<td>Independent Study (1-4)</td>
</tr>
<tr>
<td></td>
<td>May be repeated for credit with consent of instructor for a maximum of 12</td>
</tr>
<tr>
<td></td>
<td>units.</td>
</tr>
</tbody>
</table>
Department Information

Department of Theatre and Dance
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3118

Professor Emerita
Regina D. Cate, M.F.A. Stanford University

Professors
Thomas C. Hird (Chair), M.F.A. University of California, Los Angeles
Rhoda Hellman Kaufman, Ph.D. University of California, Berkeley

Associate Professor
Danyl V. Jones, M.F.A. The Boston University School of Theatre Arts

Assistant Professors
Ann Fajilan, M.F.A. University of California, Davis
Nina O. Haft, M.F.A. University of Wisconsin
Marc Jacobs, M.F.A. California State University, Long Beach
Eric Kupers, M.F.A. University of California, Davis

Program Description

The Department of Theatre and Dance provides comprehensive pre-professional training in the areas of acting, directing, dance, design, theatre technology, and musical theatre. The primary goal of the program is to develop artists whose performance skills and creativity are supported by a sound background in history, literature, and aesthetics. In an environment designed to encourage creativity and self expression, each student has opportunities to participate in various specializations within the major--acting, costuming, dance, directing, scenery, lighting design, or management. Students perform regularly in a variety of theatre and dance productions.

Theatre Arts graduates acquire a range of skills. This enables them to pursue different professional options. Many have entered advanced studies in nationally recognized universities and conservatories. Some have chosen careers in teaching, while others have gone directly into theatre or dance performance. Employers in other professions desire Theatre Arts graduates for their team skills, their imaginative approach to problems, and their ability to communicate creatively.

Student Learning Outcomes

Knowledge

Awareness: Students will possess a foundational knowledge of dramatic literature and/or dance performance, including the key developments of dramatic literature, theatre, and/or dance in the U.S.; and a knowledge of world history, especially how political and social forces have influence over artists and art.

Research: Students will know how to use research techniques to understand literature, styles, visual art, and historical periods when they are confronted with production problems new to them, including how to use research in the analysis of dramatic literature for creating roles, designs, and concepts for stage production.

Skills

Analysis: students will analyze dramatic literature, research, and practical problems to assist them in solving problems in production situations.

Technique: students will possess technical skills for creating a complete performance and/or fulfilling creative duties in at least two of the department's production modes.

Professional Vocabulary: students will possess a standard and transferable vocabulary for conducting themselves in two or more production modes.

Imagination and Creativity: students will develop a creative system of work, including the ability to develop and explore a succession of solutions to production problems.

Communication: students will develop means of expression, including written, oral, visual, and performance, to present their ideas in production situations, especially artistic conferences, production meetings, and rehearsals; visual expression will include the ability to translate both from floor plan to stage and vice versa.

Articulation: students will articulate and defend production ideas and choices in two or more production modes.
Application: students will be able to conduct their production related business affairs and show respect for the rights of other artists and the audience.

Self-Assessment: students will be able to assess their own classroom and production work.

Mind-Set

Collaboration: students will appreciate the process of producing collaborative art.

Art: students will be able to articulate and defend the cultural justification for their art.

Practice: students will develop a practice of attending theatre and dance performances; as part of this practice, they will be able to comment on the techniques used successfully in a performance.

 Appreciation: students will appreciate the contributions of both American and world artists to the development of traditional and avant-garde theatre and dance.

Standards: when students participate in production, they will raise the standards of performance.

Leadership: students will be able to teach and/or lead others in two or more production modes.

Career Opportunities

- Actor/Actress
- Broadcast Technician
- Business Agent
- Choreographer
- College Student Services
- Comedian
- Corporate Officer
- Costume Designer
- Costume Technician
- Dancer
- Director
- Drama or Dance Teacher/Professor
- Dramaturg
- Lighting Technician
- Make-Up Artist/Specialist
- Non-profit Manager
- Performing Arts Fundraiser
- Playwright
- Producer
- Recreation Supervisor
- Sales Manager
- Set Decorator
- Set Designer
- Sound Technician
- Stage Manager
- Theatre Critic
- Theatre Technician
- Theatre Manager

Features

The Department of Theatre and Dance produces approximately 9-11 plays and dance concerts during the year (including summer). The selection of plays exposes students to design, acting, dance, singing, directing, stage management, and technical theatre suitable to a wide variety of styles, periods, and genres from Shakespeare to David Mamet and from Greek Tragedy to Modern Drama.

The department has several ensemble groups, including Musical Theatre, Dance, Acting, and Design/Technology, that add to a varied and challenging performance schedule.

The Highlands Summer Theatre program is designed to give students a chance to test themselves and their art. The fully functioning theatre environment becomes a career choice experiment for the beginning artist, a proving ground for artist-in-training, and a place for both to develop and refine skills. All company members register for the 8 unit Summer Theatre course. Since 1990 sixteen department productions have toured to the Edinburgh Festival Fringe in Scotland and three other countries.

The Theatre and Dance Department is fortunate to have excellent facilities including the 480 seat University Theatre, scene shop, costume shop, twelve-station drafting room, two studio classrooms, green room, make-up room, dressing rooms with lockers and showers, and a spacious Dance Studio.

Major Requirements (B.A.)

The Theatre Arts major consists of 75-110 units, depending upon whether or not students choose an option. The Theatre Arts major without an option consists of 75 units. The B.A. degree requires a total of 180 units.

I. Beginning Electives (16 units)

Complete ten units in ONE of the following areas of emphasis: Dance, Acting, or Technology and Design. Unless specified, courses should be numbered below 2999, and listed in the Subject Area Course List.
A. **Dance (10 units)**

Five Beginning or Intermediate dance technique courses (5) (Limited to Ballet, Hip Hop, Modern, Musical Theatre, or Jazz)

One course (2) from

- THEA 2061-63 Musical Theatre Show Choir A-C

Three technology and design courses (3)

- THEA 2422 Costume Technique
- THEA 2423 Lights: Hanging and Focus
- THEA 2424 Sound: Recording

B. **Acting (10 units)**

THEA 2031-2032 Stage Voice A, B

One course (2) from

- THEA 2061-63 Musical Theatre Show Choir A-C

At least three units (3) from

- DANC 1191-93 Beginning Ballet
- DANC 2120-25 Musical Theatre Dance A-F

Three technology and design courses (3)

- THEA 2422 Costume Technique
- THEA 2423 Lights: Hanging and Focus
- THEA 2424 Sound: Recording

C. **Technology and Design (10 units)**

Five technology and design courses (5) from

- THEA 2421-31 Fundamental Backstage Technology
- THEA 1020 Discover Acting (3)

Two units (2) from

- DANC 1191-93 Beginning Ballet
- DANC 1141-43 Beginning Modern

Complete three show assignments (6 units) in the first two years as follows: three Production and Performance courses (THEA 1490 through 1499 and THEA 2490 through 2499) as defined by the Subject Area Course List.

II. **Common Core (30 units)**

- A lower division DANC course with consent of advisor (4)
- DANC 3251 Movement Analysis (4)
- DANC 3252 Dance Through the Ages (4)
- THEA 3253 Theatre Through the Ages (4)
- THEA 3254 Scenery, Lighting, and Sound Concepts (4)
- THEA 3255 Costumes and Makeup Concepts (4)
- THEA 3256 Directing: Text to Stage (3)
- THEA 3257 Design for Stage (3)

III. **Advanced Electives (19 units)**

Theatre History and Literature Elective (4 units)

One additional course in Theatre History and Literature (or) Dance History. Students who intend to complete the Dance Option should take DANC 4201.

Advanced Technique Elective (6 units)

Two additional courses in advanced technique. Take courses numbered 3000 or above in ONE area of emphasis: Acting, Dance, or Technology and Design.

Production and Performance (9 units)

At least three Production and Performance courses, numbered 3000 and above, covering at least three show assignments during the final two years.

IV. **Culmination and Assessment (10 units)**

Each student must complete a Senior Culmination Project to include either a performance project in the Senior Festival, a written thesis, or a substantial internship. Students may substitute internship credit or thesis-related Independent Study credit for their Senior Festival courses.

- THEA 4151 Senior Festival Preproduction (3)
- THEA 4152 Senior Festival Performance (3)
- THEA 4155 Career Management Issues in Theatre Arts (4)

**Options (13-35 units)**

An Option is not required. Options provide the opportunity to explore a specialized mode of theatre arts beyond the level of the basic emphasis required to graduate. Options allow sufficient depth of study to prepare for graduate school or entry-level work in a semi-professional company and involve additional work beyond the major requirements listed above. The department's graduates have found work in professional nonprofit companies after completing an internship as part of their CSUEB program. The additional work required for an option will prove useful in obtaining a quality internship or graduate school placement, so we recommend that students complete most of their option before seeking an
A. Acting (20 units)

Total major units with this option: 95.

- Complete three (3) Acting Technique courses from the Subject Area Course Lists (SACL) ¹
  - THEA 2061 Musical Theatre Show Choir A (2) ¹
  - THEA 2062 Musical Theatre Show Choir B (2) ¹
  - THEA 2063 Musical Theatre Show Choir C (2) ¹
  - THEA 2031 Stage Voice A (1) ¹
  - THEA 2032 Stage Voice B (1) ¹
  - THEA 2035 Fundamentals of Acting (3)
  - THEA 2037 Performing 20th Century Drama and Diversity (3)
  - THEA 2055 Intermediate Acting I (2)

- Complete two (2) of the following:
  - THEA 3052 Acting for the Camera (3)
  - THEA 4032 Period Acting Style: Restoration and Moliere (3)
  - THEA 4034 Period Acting Style: Shakespeare (3)

- THEA 3056-7 Intermediate Acting II, III (2 each)

- THEA 3064-5 Audition Techniques and Talent Analysis I, II (1 each)

- THEA 4038-9 Acting Studio I, II (3 each) ¹, ²

- Complete a third course in Theatre History and Literature from the SACL (4) ²

Performance requirements:
Beginning in Year Two, Acting Option students must audition for and accept roles in at least two department productions per year. These six productions will be applied to the major, three to the Beginning Electives and three to Advanced Electives requirements.

Notes

1. Courses marked ¹ above are applicable to the major as Beginning Electives to meet Acting, Dance, and Performance requirements.

2. Courses marked ² above are applicable to the major as Advanced Electives to meet Literature/History, Emphasis, and Performance requirements.

B. Dance (15-30 units)

Total major units with this option: 90-105.

- Five Beginning or Intermediate dance technique courses (5) ¹
  Limited to Ballet, Hip Hop, Modern, Musical Theatre, or Jazz

- Three technology and design courses (3) ¹
  - THEA 2422 Costume Technique (1)
  - THEA 2423 Lights: Hanging and Focus (1)
  - THEA 2424 Sound: Recording (1)

- Production: Majors must participate in three productions for credit in the first two years. ³

- One course from the following:
  - THEA 2061 Musical Theatre Show Choir A (2) ¹
  - THEA 2062 Musical Theatre Show Choir B (2) ¹
  - THEA 2063 Musical Theatre Show Choir C (2) ¹

- Three of the following: (6)
  - DANC 2020 Rhythm and Music for Dance (2)
  - DANC 2341 Improvisation in Art and Life (2)
  - DANC 2342 Integrating Theatre and Dance (2)
  - DANC 2343 Body and Mind Training for Performance (2)
  - DANC 2344 Site-Specific Performance (2)

- If necessary, students should take additional technique courses from the SACL at the beginning and intermediate levels to qualify for the following third/fourth year advanced technique courses.

- Dance majors must take advanced technique courses from the following list every quarter of the third and fourth year. Complete a minimum of six courses in at least three styles. Students in these courses must pass a placement audition in the first class meeting.
  - DANC 3101 Dance Ensemble Technique A (1)
  - DANC 3102 Dance Ensemble Technique B (1)
  - DANC 3103 Dance Ensemble Technique C (1)
  - DANC 3104 Dance Ensemble Technique D (1)
  - DANC 3105 Dance Ensemble Technique E (1)
  - DANC 3106 Dance Ensemble Technique F (1)
  - DANC 4131 Advanced Hip Hop Dance I (2)
  - DANC 4132 Advanced Hip Hop Dance II (2)
  - DANC 4133 Advanced Hip Hop Dance III (2)
  - DANC 4135 Advanced Breakdance I (2)
  - DANC 4136 Advanced Breakdance II (2)
  - DANC 4137 Advanced Breakdance III (2)
  - DANC 4141 Advanced Modern Dance I (2)
  - DANC 4142 Advanced Modern Dance II (2)
  - DANC 4143 Advanced Modern Dance III (2)
  - DANC 4171 Advanced Jazz Dance I (2)
  - DANC 4172 Advanced Jazz Dance II (2)
DANC 4173 Advanced Jazz Dance III (2)
DANC 4191 Advanced Intermediate Ballet Dance I (2)
DANC 4192 Advanced Intermediate Ballet Dance II (2)
DANC 4193 Advanced Intermediate Ballet Dance III (2)

- Complete 3-6 courses of advanced ensemble by agreement with advisor.² (3-12)
  - DANC 3451 Dance ensemble A (3)²
  - DANC 3452 Dance ensemble B (3)²
  - DANC 3453 Dance ensemble C (3)²
  - DANC 3454 Dance ensemble D (3)²
  - DANC 3455 Dance ensemble E (3)²
  - DANC 3456 Dance ensemble F (3)²

- Majors must participate in three productions for credit in the last two years.³
- DANC 3251 Movement Analysis (4)⁴
- DANC 3252 Dance Through the Ages (4)⁴
- DANC 4201 Dance in Modern Society (4)²

**Endorsements**

Students may fulfill assignments, projects, performances, internships and service learning experiences to enhance preparation for specific careers in dance such as choreography, teaching, or performance. Students who have completed a prearranged plan will qualify for an endorsement upon graduation. Endorsement plans should be arranged in Year Three with the major advisor, dance faculty, and Chair. An endorsement plan might involve alternative assignments or additional requirements. Taking the courses in their plan qualifies a student for consideration. The dance faculty will make endorsements for superior achievement. Achievement goals should be spelled out in the plan. Endorsements will not appear on the transcript or diploma, but will be kept on file by the department. Students may plan for one or more of the following endorsements: 1) Choreography Endorsement; 2) Technique & Performance Endorsement; 3) Teaching Endorsement.

**Notes**

1. Courses marked ¹ apply to major in the Beginning Electives category (total 12 units).
2. Two courses marked ² apply to major in the Advanced Electives category (total 6 units).
3. Courses to meet Production requirements marked ³ apply to major in Beginning and Advanced Electives categories (6 units Beginning, 9 units Advanced). Majors must participate in at least six productions for credit, three in the first two years and three in the last two years. Credit for up to three productions may be transferred with the consent of the major advisor and Chair.
4. Courses marked ⁴ apply to the major Core category (total 10 units).

**C. Directing (22-26 units)**

Total major units with this option: 97-101.

- History and Literature (8 units)
  Complete two additional courses in Theatre History and Literature. Selections must be approved by chair and advisor in advance.
- Foundational Technique (2 units)
  Complete one additional Acting Technique course numbered 2999 or below (1)
  Complete one additional Technology and Design Foundation Technique course numbered 2999 or below (1)
- Advanced Technique (6-8 units)
  Complete two additional Technology and Design Advanced Technique courses numbered 3000 or above (6-8).
- Production and Performance (6-8 units)
  Complete two additional Production and Performance assignments. Selections must be approved by the chair and advisor in advance.

**D. Musical Theatre (31 units)**

Total major units with this option: 106 units.

- THEA 2031 Stage Voice A (1) ¹
- THEA 2032 Stage Voice B (1) ¹
- Optional: Audition for winter musical production in first year.
- Complete five additional quarters of musical dance from the following: (10)
  - DANC 2120 Musical Theatre Dance A (2)¹, 6
  - DANC 2121 Musical Theatre Dance B (2)¹, 6
  - DANC 2122 Musical Theatre Dance C (2)¹, 6
  - DANC 2123 Musical Theatre Dance D (2)¹, 6
  - DANC 2124 Musical Theatre Dance E (2)¹, 6
  - DANC 2125 Musical Theatre Dance F (2)¹, 6
- Complete one course from the following:
  - THEA 2061 Musical Theatre Show Choir A (2) ¹
  - THEA 2062 Musical Theatre Show Choir B (2) ¹
  - THEA 2063 Musical Theatre Show Choir C (2) ¹
  - THEA 2035 Fundamentals of Acting (3)
  - THEA 2045 Applied Singing for Theatre A (1)
  - THEA 2046 Applied Singing for Theatre B (1)
  - THEA 2047 Applied Singing for Theatre C (1)
  - THEA 2055 Intermediate Acting I (2)
- Audition for and take winter musical production for credit in second through fourth year.
  - THEA 2491 Musical Theatre Production B (4) ¹, 2
  - THEA 3491 Musical Theatre Production C (4) ¹, 2
THEA 4491 Musical Theatre Production D (4) 1, 2
THEA 2044 Fundamental Musical Theatre Techniques (3)
THEA 3041 Advanced Applied Singing for Musical Theatre I (1)
THEA 3042 Advanced Applied Singing for Musical Theatre II (1)
THEA 3043 Advanced Applied Singing for Musical Theatre III (1)
THEA 3048 Musical Theatre Technique I (3) 2
THEA 3049 Musical Theatre Technique II (3) 2
THEA 3216 History of Musical Theatre (4) 2
THEA 4040 Musical Theatre Journal Review (1)
THEA 4048 Advanced Musical Ensemble A (3)
THEA 4049 Advanced Musical Ensemble B (3)

Notes
1. Courses marked 1 apply to major in Beginning Electives category for Acting, Dance, and Production courses (total 12 units).
2. Courses marked 2 apply to major in Advanced Electives category for History/Literature, Emphasis, and Production (total 14 units).
3. Applied singing courses (lessons) are by audition and might require a course fee. Option students are required to take regular singing lessons.
4. Option students are required to perform twice each year in Year Two through Four. As shown above, option students must audition for the winter musical three years and perform in three department musicals. Off campus productions allowed by agreement with an advisor. Journal required for each production.
5. The following Music courses are highly recommended, but not required. Note that success in sightsinging requires experience reading music or concurrent enrollment in Music Theory. Without experience, consider taking a basic musicianship class for non-majors first:
   - MUS 1027 Sightsinging I (1)
   - MUS 1028 Sightsinging II (1)
   - MUS 1029 Sightsinging III (1)
   - MUS 1031 Music Theory II (4)
   - MUS 1032 Music Theory II (4)
   - MUS 1033 Music Theory III (4)
6. Musical Theatre Dance marked 6. Six quarters required, one applies to Beginning Electives. Summer attempts may be applied to replace offerings in the Option timeline.

E. Technology and Design (20-22 units)
Total major units with this option: 95-97.
- History and Literature (4 units)
  Complete a third course in Theatre History and Literature (4)
- Foundational Technique (2 units)
  Complete two additional Technology and Design courses, numbered 2999 and below (2).
- Advanced Technique (8 units)
  Complete two additional Technology and Design courses, numbered 3000 or above (8).
- Production and Performance (6-8 units)
  Complete two additional Production and Performance assignments (6-8). Selections must be approved by the chair and advisor in advance.

F. Theatre and Dance for Children and Community (24 units)
Total major units with this option: 99.
- Emphasis Courses (20 units)
  Complete five courses from the related Subject Area Course List (20).
- Production and Performance (4 units)
  Complete one additional production assignment in Technology and Design (4). Selections must be approved by the chair and advisor in advance.

G. Theatre: History and Literature (24 units)
Total major units with this option: 99. All selections must be approved by the chair and advisor in advance.
- History and Literature (8 units)
  Complete two additional courses in Theatre History and Literature (8).
- English (8 units)
  Complete two English History and Literature courses from the sequence: ENGL 3400-3770 (8).
- Production and Performance (8 units)
  Complete two additional Production and Performance assignments (8)

Other Degree Requirements
In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Students can find academic advising on GE and graduation requirements at Academic Advising and Career Education (AACE) as well as career development including resume writing and job search assistance.

http://www.csueastbay.edu/aace
Subject Area Course Lists (SACL)

Acting

Technique Courses

- THEA 2031 Stage Voice A
- THEA 2032 Stage Voice B
- THEA 2035 Fundamentals of Acting
- THEA 2037 Acting 20th Century Drama and Diversity
- THEA 2055 Intermediate Acting I
- THEA 2061 Musical Theatre Show Choir A
- THEA 2062 Musical Theatre Show Choir B
- THEA 2063 Musical Theatre Show Choir C
- THEA 3052 Acting for the Camera
- THEA 3056 Intermediate Acting II
- THEA 3057 Intermediate Acting III
- THEA 3064 Audition Techniques and Talent Analysis I
- THEA 3065 Audition Techniques and Talent Analysis II
- THEA 4032 Period Acting Style: Restoration and Moliere
- THEA 4034 Period Acting Style: Shakespeare
- THEA 4038 Acting Studio I
- THEA 4039 Acting Studio II

Dance

- DANC 2023 Dance Fitness
- DANC 2341 Improvisation in Art and Life
- DANC 2342 Integrating Theatre and Dance
- DANC 2343 Body and Mind Training for Performance
- DANC 2344 Site Specific Performance
- DANC 3426 Collaborative Dance Theatre

Beginning Technique Courses

- DANC 1131 Beginning Hip Hop Dance I
- DANC 1132 Beginning Hip Hop Dance II
- DANC 1133 Beginning Hip Hop Dance III
- DANC 1141 Beginning Modern Dance I
- DANC 1142 Beginning Modern Dance II
- DANC 1143 Beginning Modern Dance III
- DANC 1171 Beginning Jazz Dance I
- DANC 1172 Beginning Jazz Dance II
- DANC 1173 Beginning Jazz Dance III
- DANC 1181 Beginning Ballroom Dance I
- DANC 1182 Beginning Ballroom Dance II
- DANC 1183 Beginning Ballroom Dance III
- DANC 1191 Beginning Ballet Dance I
- DANC 1192 Beginning Ballet Dance II
- DANC 1193 Beginning Ballet Dance III

Intermediate Technique Courses

- DANC 2131 Intermediate Hip Hop Dance I
- DANC 2132 Intermediate Hip Hop Dance II
- DANC 2133 Intermediate Hip Hop Dance III
- DANC 2141 Intermediate Modern Dance I
- DANC 2171 Intermediate Jazz Dance I
- DANC 2172 Intermediate Jazz Dance II
- DANC 2173 Intermediate Jazz Dance III
- DANC 2181 Intermediate Ballroom Dance I
- DANC 2182 Intermediate Ballroom Dance II
- DANC 2183 Intermediate Ballroom Dance III
- DANC 2191 Intermediate Ballet Dance I
- DANC 2192 Intermediate Ballet Dance II
- DANC 2193 Intermediate Ballet Dance III

Advanced Technique Courses

- DANC 4131 Advanced Hip Hop Dance I
- DANC 4132 Advanced Hip Hop Dance II
- DANC 4133 Advanced Hip Hop Dance III
- DANC 4135 Advanced Breakdance I
- DANC 4136 Advanced Breakdance II
- DANC 4137 Advanced Breakdance III
- DANC 4141 Advanced Modern Dance I
- DANC 4142 Advanced Modern Dance II
- DANC 4143 Advanced Modern Dance III
- DANC 4171 Advanced Jazz Dance I
DANC 4172 Advanced Jazz Dance II  
DANC 4173 Advanced Jazz Dance III  
DANC 4191 Advanced Intermediate Ballet Dance I  
DANC 4192 Advanced Intermediate Ballet Dance II  
DANC 4193 Advanced Intermediate Ballet Dance III  

Dance History Course  
DANC 4201 Dance in Modern Society  

Musical Theatre  
THEA 2041 Musical Theatre Techniques A  
THEA 2042 Musical Theatre Techniques B  
THEA 2043 Musical Theatre Techniques C  
THEA 2044 Fundamental Musical Theatre Techniques  
THEA 2045 Applied Singing for Theatre A  
THEA 2046 Applied Singing for Theatre B  
THEA 2047 Applied Singing for Theatre C  
THEA 2061 Musical Theatre Show Choir A  
THEA 2062 Musical Theatre Show Choir B  
THEA 2063 Musical Theatre Show Choir C  
THEA 3041 Advanced applied Singing for Musical Theatre I  
THEA 3042 Advanced applied Singing for Musical Theatre II  
THEA 3043 Advanced applied Singing for Musical Theatre III  
THEA 3048 Musical Theatre Techniques I  
THEA 3049 Musical Theatre Techniques II  
THEA 3216 History of Musical Theatre  
THEA 4040 Musical Theatre Journal Review  
THEA 4048 Advanced Musical Ensemble A  
THEA 4049 Advanced Musical Ensemble B  
DANC 2120 Musical Theatre Dance A  
DANC 2121 Musical Theatre Dance B  
DANC 2122 Musical Theatre Dance C  
DANC 2123 Musical Theatre Dance D  
DANC 2124 Musical Theatre Dance E  
DANC 2125 Musical Theatre Dance F  

Production and Performance  
THEA 1490 Costume or Backstage Activity A  
THEA 2490 Costume or Backstage Activity B  
THEA 3490 Costume or Backstage Activity C  
THEA 4490 Costume or Backstage Activity D  
THEA 1491 Musical Theatre Production Activity A  
THEA 2491 Musical Theatre Production Activity B  
THEA 3491 Musical Theatre Production Activity C  
THEA 4491 Musical Theatre Production Activity D  
THEA 1492 Stage Crew Activity A  
THEA 2492 Stage Crew Activity B  
THEA 3492 Stage Crew Activity C  
THEA 4492 Stage Crew Activity D  
THEA 1493 Production Staff Activity A  
THEA 2493 Production Staff Activity B  
THEA 3493 Production Staff Activity C  
THEA 4493 Production Staff Activity D  
THEA 1494 Festival Activity A  
THEA 2494 Festival Activity B  
THEA 3494 Festival Activity C  
THEA 4494 Festival Activity D  
THEA 1495 Studio Production Activity A  
THEA 2495 Studio Production Activity B  
THEA 3495 Studio Production Activity C  
THEA 4495 Studio Production Activity D  
THEA 1497 Special Workshop or Production A  
THEA 2497 Special Workshop or Production B  
THEA 3497 Special Workshop or Production C  
THEA 4497 Special Workshop or Production D  
THEA 3496 International Touring Activity C  
THEA 4496 International Touring Activity D  
THEA 1498 Summer Theatre Practicum A  
THEA 2498 Summer Theatre Practicum B  
THEA 3498 Summer Theatre Practicum C  
THEA 4498 Summer Theatre Practicum D  
THEA 1499 Production Practicum A  
THEA 2499 Production Practicum B  
THEA 3499 Production Practicum C
Technology and Design

Foundation Technique Courses

- THEA 2421 Wood Scenery: Walls and Levels
- THEA 2422 Costume Technique
- THEA 2423 Lights: Hanging and Focus
- THEA 2424 Sound: Recording
- THEA 2425 Stage Effects
- THEA 2428 Sound: PA
- THEA 2429 Practical Drafting and Model Building
- THEA 2430 Practical Make-up
- THEA 2450 Vectorworks CADD for Lights and Scenery

Advanced Technique Courses

- THEA 3422 History of Costume
- THEA 3423 Non-Western Costume
- THEA 3424 Scene Painting and Graphic Language
- THEA 3426 The Art of the Kimono
- THEA 3427 Fashion History
- THEA 3428 Fashion Design
- THEA 4418 Advanced Makeup and Maskmaking

Theatre and Dance for Children and Community

- DANC 2020 Rhythm and Music for Dance
- DANC 2341 Improvisation in Art and Life
- DANC 2342 Integrating Theatre and Dance
- DANC 2343 Body and Mind Training for Performance
- DANC 2344 Site-Specific Performance
- DANC 3235 Dance for Children
- THEA 3610 Interpretation of Children's Literature and Story Telling
- THEA 3650 Dramatic Activities for Children
- THEA 3660 Children's Theatre Performance
- REC 1000 Introduction to Recreation
- REC 3000 Philosophy of Leisure Studies

Theatre History and Literature

- ENGL 2040 Introduction to Creative Writing on Poetry
- ENGL 2050 Introduction to Creative Writing on Drama
- ENGL 3650 Women and Literature
- ENGL 3760 Literature of the Twentieth Century
- ENGL 4251 Introduction to Shakespeare or ENGL 4720 Mythology
- ENGL 4637 Studies in 20th-Century American Literature
- ENGL 4840 The Short Story
- THEA 3203 Modern European Drama
- THEA 3207 Modern American Theatre
- THEA 4375 Ethnic and Immigrant Theatre in the United States

Minor Requirements

I. Theatre (34 units)
   A. Fundamental Courses (9 units)
      - THEA 2035 Fundamentals of Acting (3)
      - Take six courses from the following. Transfers may substitute one course of up to three units on a course-for-units basis. (6)
        - THEA 2421-2430 Fundamental Backstage Technology (1 each)
   B. Core Courses (19 units)
      - One introductory course with consent of advisor (4)
        - THEA 3253 Theatre Through the Ages (4)
      - THEA 3254 Scenery, Lights and Sound Concepts (4)
      - THEA 3255 Costumes and Makeup Concepts (4)
      - THEA 3256 Directing: Text to Stage (3)
   C. Performance and Production Courses (minimum 6 units)
      - Three production assignments/courses required. For each assignment, enroll for a minimum of two (2) units each from Theatre Production Activity courses by advisement. Transfers may apply only one production course taken at another institution.

II. Children's Theatre and Dance (32-33 units)
   A. Fundamental Courses (7 units)
      - DANC 2020 Rhythm and Music for Dance (2)
      - Two units from the following (2):
        - Select 2 units of lower division course covering the topic of Basic Theatre Techniques, with consent of department (2)
        - THEA 2421-2428 Fundamental Backstage Technology (1 each)
Three units from the following: one unit must be at intermediate level (3):
- DANC 1141 Beginning Modern Dance I
- DANC 1142 Beginning Modern Dance II
- DANC 1143 Beginning Modern Dance III
- DANC 1171 Beginning Jazz Dance I
- DANC 1172 Beginning Jazz Dance II
- DANC 1173 Beginning Jazz Dance III
- DANC 1191 Beginning Ballet Dance I
- DANC 1192 Beginning Ballet Dance II
- DANC 1193 Beginning Ballet Dance III
- DANC 2171 Intermediate Jazz Dance I
- DANC 2172 Intermediate Jazz Dance II
- DANC 2173 Intermediate Jazz Dance III
- DANC 2191 Intermediate Ballet Dance I
- DANC 2192 Intermediate Ballet Dance II
- DANC 2193 Intermediate Ballet Dance III

B. Core Courses (19-20 units)
- One lower division course with consent of advisor (4)
  - DANC 3235 Dance for Children (4)
  or
  - THEA 3256 Directing: Text to Stage (3)
- DANC 3251 Movement Analysis (4)
  or
  - THEA 3254 Scenery, Lights and Sound Concepts (4)
  or
  - THEA 3255 Costumes and Makeup Concepts (4)
- THEA 3610 Interpretation of Children's Literature and Story Telling (4)
  or
  - THEA 3650 Dramatic Activities for Children (4)

C. Performance and Production Courses (6 units)
- ONE additional production assignment required. Enroll for a minimum of two (2) units from Theatre Production Activity courses by advisement.

III. Dance Minor (34 units)
A. Fundamental Courses (6 units)
- DANC 2020 Rhythm and Music for Dance (2)
- DANC 2341 Improvisation in Art and Life (2)
- DANC 2342 Integrating Theatre and Dance (2)
- DANC 2343 Body and Mind Training for Performance (2)
- DANC 2344 Site-Specific Performance (2)
- Complete four units from the following (4):
  - Two lower division units in basic theatre techniques (2)
  - THEA 2421-2430 Fundamental Backstage Technology (1 each)

B. Core courses (18 units)
- One lower division course with consent of advisor (4)
  - DANC 3251 Movement Analysis (4)
  - DANC 3252 Dance Through the Ages (4)
  or
  - DANC 4201 Dance in Modern Society (4)
- Complete at least six units of electives from the following by advisement. Do not repeat a course applied to the Fundamental Courses area above (6): if
  - DANC 2020 Rhythm and Music for Dance (2)
  - DANC 2341 Improvisation in Art and Life (2)
  - DANC 2342 Integrating Theatre and Dance (2)
  - DANC 2343 Body and Mind Training for Performance (2)
  - DANC 2344 Site-Specific Performance (2)
  - DANC 3330 The Digital Stage: Dance on Camera (4)
- Complete at least six units of electives from the following by advisement. Do not repeat a course applied to the Fundamental Courses area above (6):
  - DANC 2020 Rhythm and Music for Dance (2)
  - DANC 2341 Improvisation in Art and Life (2)
  - DANC 2342 Integrating Theatre and Dance (2)
  - DANC 2343 Body and Mind Training for Performance (2)
  - DANC 2344 Site-Specific Performance (2)
  - DANC 3330 The Digital Stage: Dance on Camera (4)
  - DANC 3451-56 Dance Ensemble A, B, C, D, E, F (3 each)

C. Technique Competencies (6 units)
Students must take a minimum of five courses, all with a minimum grade of B, to demonstrate competency in two of the following techniques at the beginning and intermediate level, as well as one of the same techniques at the advanced level: hip hop, modern, jazz, and ballet. At least one advanced course must be taken at CSUEB.

D. Performance and Production Courses (4 units)
Two production assignments required. For each assignment, enroll for a minimum of two (2) units from Theatre Production Activity courses by advisement.

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Undergraduate Courses

Theatre (Course prefix: THEA)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1005</td>
<td>How to See a Play (4)</td>
</tr>
</tbody>
</table>

An introduction to contemporary drama on the stage. How the printed play is translated into visual and aural images. Attendance at
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1013</td>
<td>Ancient World Theatre (4)</td>
<td>Dramatic texts of ancient theatre, especially ancient Greek and Roman periods. Special emphasis on performance space, costumes, and masks. Exercises to reveal how theatre artists analyze literature.</td>
<td>4</td>
</tr>
<tr>
<td>1016</td>
<td>All the World’s a Stage: Theatre for Social Change (4)</td>
<td>Ethnic, racial, and gender obstacles to creative expression in theatre; artists as outlaws, rebels and people outside the mainstream. Plays of artists working for social change in the U.S. Play attendance required. Not open to students with credit for THEA 1010.</td>
<td>4</td>
</tr>
<tr>
<td>1020</td>
<td>Discover Acting (3)</td>
<td>Introduction to acting techniques to improve self-expression and observation skills. An introductory acting course designed for non-majors. Suitable as an elective for those who work with people of all ages in education, recreation, business and mass communication.</td>
<td>3</td>
</tr>
<tr>
<td>1021</td>
<td>Black Experience in Performance (4)</td>
<td>Study of slave journals, blues, plays, poetry, and various performance traditions created by African Americans and their effect on artistic development in the United States and abroad. Exercises in script and manuscript analysis, acting, and directing.</td>
<td>4</td>
</tr>
<tr>
<td>1022</td>
<td>Keeping It Real: How Race Matters in Pop Culture (4)</td>
<td>The role race plays in the creation of American Pop Culture. The influence of artists of color on popular culture. Project involving creation of a script based on personal experience with issues of color.</td>
<td>4</td>
</tr>
<tr>
<td>2031, 2032</td>
<td>Stage Voice A, B (1 each)</td>
<td>Fundamentals of voice production; 2031 includes warm-ups, resonance, relaxation, projection, and breath control; 2032 introduces articulation, emphasis, and Standard American Speech in use in classic repertoire. May be taken out of sequence with permission of instructor. Each may be repeated once, for a maximum of 2 units each. Only 2 units may be applied to Beginning Electives and/or an Option in the major. Two hrs. act.</td>
<td>1</td>
</tr>
<tr>
<td>2035</td>
<td>Fundamentals of Acting (3)</td>
<td>Emphasis on scene specific improvisation, text analysis, identification of objectives, actions, and obstacles. Attention also given to freeing character through animal imagery, inanimate imagery, body centers, character analysis, given circumstances, and personalization. Prerequisites: Majors—one year of stage voice; Others—THEA 1020 or instructor approval. Six hrs. act.</td>
<td>3</td>
</tr>
<tr>
<td>2037</td>
<td>Acting 20th Century Drama and Diversity (3)</td>
<td>Exploration of acting, movement, and vocal technique through scripts from contemporary playwrights of various races, ethnicities, and cultures. Emphasis on character development. Exercises for connecting to personal experience, freeing the imagination, and personal discovery. Prerequisites: THEA 2035 and 2055 or instructor approval. Six hrs. act.</td>
<td>3</td>
</tr>
<tr>
<td>2041, 2042</td>
<td>Musical Theatre Techniques A, B, C (3 each)</td>
<td>Exploring the complexity of musical theatre performance. Focuses on embodying a song for stage. Combining singing, acting and dance skills to illuminate character intention, emotion, and mood. Musicality and basic audition technique. Techniques for different vocal types, including belting, falsetto, and falsetto. Six hrs. act.</td>
<td>1</td>
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<tr>
<td>2043</td>
<td>Song interpretation for musical theatre.</td>
<td>Concentrates on dialogue to song transition, phrasing, emphasis, and focus. Includes basic moves of vaudeville, jazz, and ballroom dance. Introduction to musical theatre scores. Six hrs. act.</td>
<td>2</td>
</tr>
<tr>
<td>2044</td>
<td>Fundamental Musical Theatre Techniques (3)</td>
<td>Introduces the fundamental techniques of musical theatre performance. How to embody a song for stage. Combining singing, acting and dance skills to illuminate character intention, emotion, and mood. Musicality and basic audition technique. Concludes with juried showcase of performance skills and progress. Prerequisites: THEA 2035 or instructor approval. A-F grading only. Six hrs. act.</td>
<td>3</td>
</tr>
<tr>
<td>2045, 2046</td>
<td>Applied Singing for Musical Theatre A, B, C (1 each)</td>
<td>Introduction to scores, exercises, vocalization, and basic musicianship. Breathing technique; jaw, tongue and soft palate placement; placing the sound in the mask or head resonators; and expanding vocal range. Building solo repertoire from a range of musicals. A-F grading only. Six hrs. act.</td>
<td>1</td>
</tr>
<tr>
<td>2047</td>
<td>Musical Theatre Show Choir A, B, C (2 each)</td>
<td>Performance of songs from the American and British musical theatre repertoire; skills in various musical theatre styles, both solo and group, including song interpretation, dance, and acting skills. Class performs on and off campus. Four hrs. act.</td>
<td>2</td>
</tr>
<tr>
<td>2055</td>
<td>Intermediate Acting I (2)</td>
<td>Exploration of personal behavior under a variety of circumstances. Self-observation to create a reality. Selecting pertinent behavior and finding meaningful actions. Given circumstances, objectives, fourth wall, concentration, sense of self, and moment to moment involvement. Prerequisite: THEA 2035 or instructor approval. Four hrs. act.</td>
<td>2</td>
</tr>
<tr>
<td>2061-2063</td>
<td>Musical Theatre Show Choir A, B, C (2 each)</td>
<td>Performance of songs from the American and British musical theatre repertoire; skills in various musical theatre styles, both solo and group, including song interpretation, dance, and acting skills. Class performs on and off campus. Four hrs. act.</td>
<td>2</td>
</tr>
<tr>
<td>2072, 3072</td>
<td>Cultural Groups in Performance (4)</td>
<td>Production, rehearsal, and performance of a show that focuses on a specific cultural theme. Only 4 units credit from 2072 or 3072 is applicable to the Theatre Arts major. THEA 2072 and 3072 may be repeated for credit, for a combined maximum of 16 units. Eight hrs. act.</td>
<td>4</td>
</tr>
<tr>
<td>2073, 3074</td>
<td>Beginning Solo Plays from Personal Experience A, B, C (3 each)</td>
<td>Making your point using personal experiences. Writing and performance techniques that maximize impact for your audience. Two hrs. disc., 2 hrs. act.</td>
<td>3</td>
</tr>
<tr>
<td>2075</td>
<td>Solo Performance: Production (4)</td>
<td>Production, rehearsal, and performance of a touring performance or show that focuses on plays developed in the Solo Performance series. May be repeated once for credit, for a maximum of 8 units. Only 4 units credit from THEA 2078 or 3078 may be applied to meet a department Production and Performance requirement. Two hrs. disc., 4 hrs. act.</td>
<td>4</td>
</tr>
<tr>
<td>2211</td>
<td>Asian Thought in Theatre (4)</td>
<td>Asian thought as portrayed in Asian Performance and the role of Asian thought and performance techniques in U.S. and world theatre.</td>
<td>4</td>
</tr>
<tr>
<td>2212</td>
<td>From Stage to Screen: Dramas and the Films They Inspired (4)</td>
<td>Great works of dramatic literature from Classical Greece to modern times compared with films based on them. Exploration of intellectual, social, political, and personal issues raised in these works. Stage and film methods compared.</td>
<td>4</td>
</tr>
<tr>
<td>2214</td>
<td>The Plays of Arthur Miller (4)</td>
<td>The major plays of Arthur Miller and their social, political, and philosophical significance for American lives and culture. Students will perform key scenes. Field trips may be required.</td>
<td>4</td>
</tr>
<tr>
<td>2222</td>
<td>Sexual Imagery and Performance (4)</td>
<td>How works of Western and American theatre both illuminate and are defined by contemporary American intellectual and cultural issues, such as censorship, gender identity, body image, legal definitions of obscenity, social relationships, and privacy.</td>
<td>4</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Prerequisites</td>
<td>Credits</td>
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<td>2223</td>
<td>Queering the Stage: Gay, Lesbian, Bisexual and Transgender Theatre in America (4)</td>
<td>How foundational works in GLBT Theatre both illuminate and are defined by contemporary American intellectual and cultural concerns, such as identity, navigating dual identity, confronting oppression, prejudice, violence, and negotiating a place in the traditional social framework.</td>
<td>4</td>
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<tr>
<td>2226</td>
<td>Women in Performance (4)</td>
<td>Roots of U.S. culture in roles of women artists, including traditional gender-based performance forms. The female body in theatre. Includes some women artists of Europe, Africa, and Pacific Rim who have influenced or been influenced by U.S. culture.</td>
<td>4</td>
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<tr>
<td>2310</td>
<td>Oral Interpretation of Literature (4)</td>
<td>The artistic process of studying literature through performance. The critical analysis of texts and guided practice in the effective use of voice and body to communicate poetry, prose, and dramatic texts.</td>
<td>4</td>
</tr>
<tr>
<td>2421-2430</td>
<td>Fundamental Backstage Technology (1 each)</td>
<td>Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with consent of department, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major. Two hrs. act.</td>
<td>3</td>
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<tr>
<td>2421</td>
<td>Wood Scenery: Walls and Levels</td>
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<tr>
<td>2422</td>
<td>Costume Technique</td>
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<td>1</td>
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<tr>
<td>2423</td>
<td>Lights: Hanging and Focus</td>
<td></td>
<td>1</td>
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<tr>
<td>2424</td>
<td>Sound: Recording</td>
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<tr>
<td>2425</td>
<td>Stage Effects</td>
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<tr>
<td>2428</td>
<td>Sound: PA</td>
<td></td>
<td>1</td>
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<tr>
<td>2429</td>
<td>Practical Drafting and Model Building</td>
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<tr>
<td>2430</td>
<td>Practical Make-up</td>
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<tr>
<td>2450</td>
<td>Vectorworks CADD for Lights and Scenery (1)</td>
<td>Extends basic drafting skills into the digital domain of CADD. Especially for light and scenery designers, but skills are applicable to other careers. Techniques sufficient to create plans for a set or to draw a light plot and stage cross section. May be repeated once for credit, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major. Two hrs. act.</td>
<td>1</td>
</tr>
<tr>
<td>3000</td>
<td>Theory of Theatre Performance (4)</td>
<td>A series of theatre activities to demonstrate the nature and execution of theatre performance. Combines improvisation, physicalization of subtext, creative dramatic techniques, and explorations of collaborative performance. Three hrs. lect., 2 hrs. act.</td>
<td>4</td>
</tr>
<tr>
<td>3041</td>
<td>Advanced Applied Singing for Musical Theatre I (1)</td>
<td>Continued development of healthy singing technique. Emphasis on song interpretation, approaching the song as a monologue, using personal identification to the text, and visualizing imaginary images while singing. Prerequisites: THEA 2045, 2046, 2047, or instructor approval. May be repeated once for credit for a maximum of 2 units, only one attempt applicable to major option. A-F grading only.</td>
<td>1</td>
</tr>
<tr>
<td>3042</td>
<td>Advanced Applied Singing for Musical Theatre II (1)</td>
<td>Continued development of healthy singing technique. Emphasizes song interpretation, approaching the song as a monologue, personal identification with the text, and visualization of imaginary images while singing. Prerequisites: THEA 2045, 2046, 2047, 3041, or instructor approval. Not for credit in the Theatre major but required for progress in the Technique and Ensemble classes. May be repeated once for credit for a maximum of 2 units, only one attempt applicable to major option. A-F grading only.</td>
<td>1</td>
</tr>
<tr>
<td>3043</td>
<td>Advanced Applied Singing for Musical Theatre III (1)</td>
<td>Continued development of healthy singing technique. Emphasizes song interpretation and telling a complete short story with a song. Song repertoire will consist of cabaret story songs from the works of Charles Aznavour, Kander and Ebb, Kurt Weill, and others. Prerequisites: THEA 2045, 2046, 2047, and 3041, 3042, or instructor approval. May be repeated once for credit for a maximum of 2 units, only one attempt applicable to major option. A-F grading only.</td>
<td>1</td>
</tr>
<tr>
<td>3048</td>
<td>Musical Theatre Technique I (3)</td>
<td>Acting while singing, including character development, revealing psychological intention, and moving the plot forward. Analyzing scenes with two or more characters that segue into songs. Breaking down scenes for actions, objectives and obstacles. Prerequisites: THEA 2044 or instructor approval. A-F grading only. Six hrs. act.</td>
<td>3</td>
</tr>
<tr>
<td>3049</td>
<td>Musical Theatre Technique II (3)</td>
<td>Acting while singing and scene to song transition. Scenes with three or more characters that segue into musical trios, quartets, and larger groups. Character development, moving plot forward, and revealing psychological intention. Concludes with juried showcase to evaluate progress. Prerequisites: THEA 3048 or instructor approval. A-F grading only. Six hrs. act.</td>
<td>3</td>
</tr>
<tr>
<td>3052</td>
<td>Acting for the Camera (4)</td>
<td>Acting in television drama: preparation for interviews and other television appearances. Prepares students for acting and production opportunities in CSUEB creative video courses. Recommended preparation: THEA 1020, COMM 3100, or ENGL 3077. May be repeated once for credit, for a maximum of 8 units.</td>
<td>4</td>
</tr>
<tr>
<td>3056, 3057</td>
<td>Intermediate Acting II, III (2 each)</td>
<td>Using personal behavior and self-observation to create a reality. Selecting pertinent behavior and finding meaningful actions. Establishing given circumstances, clarifying objectives, creating fourth wall, strengthening concentration, expanding sense of self, and increasing moment to moment involvement. Prerequisites: THEA 2055 or instructor approval. Four hrs. act.</td>
<td>3</td>
</tr>
<tr>
<td>3061</td>
<td>Period Acting (2)</td>
<td>Stylized acting technique applicable to works from selected periods and locales. Emphasis on Western, but includes content from at least one non-Western genre. Consult instructor about specific content. Prerequisite: any lower-division acting course. May be repeated once for credit, for a maximum of 4 units. A maximum of 4 units are applicable to the major. Four hrs. act.</td>
<td>2</td>
</tr>
<tr>
<td>3064, 3065</td>
<td>Audition Techniques and Talent Analysis I, II (1 each)</td>
<td>Audition techniques using monologues, scene work, and cold reading. Developing head shots and resumes. Self-marketing based on analysis of personal talents and type. Co-requisites: One of THEA 1494, 2494, 3494, 4494, 2055, 3042, or 3043. A-F grading only. Two hrs. act.</td>
<td>1</td>
</tr>
<tr>
<td>3070</td>
<td>Leadership in Cultural Production (2)</td>
<td>Practical production planning for theatre and dance shows that focus on specific cultural groups. Staffing, resources, and scripting. Course does not meet a department Production and Performance requirement. May be repeated two times for credit, for a maximum of 6 units. Four hrs. act.</td>
<td>2</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
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<tr>
<td>3071</td>
<td>Creating a Cultural Production (2)</td>
<td>Practical playwriting for shows that focus on specific cultural groups. Course does not meet a department Production and Performance requirement. May be repeated two times for credit, for a maximum of 6 units. Four hrs. act.</td>
<td></td>
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<tr>
<td>3073</td>
<td>Solo Performance: Research Methods (3)</td>
<td>Research methods for enhancing solo plays that are based on personal experiences. Using science, social science, and humanities scholarship to make a convincing case for the lessons in your play. Course does not meet a department Production and Performance requirement. Two hrs. disc., 2 hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3074</td>
<td>Solo Performance: Talk Story Techniques (3)</td>
<td>Techniques for making a play from primary sources and interviews. Writing and performance techniques that maximize impact for your audience. Course does not meet a department Production and Performance requirement. Two hrs. disc., 2 hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3075</td>
<td>Solo Performance: Writing about Political and Social Issues (3)</td>
<td>Techniques for making a play based on political and social issues. Writing and performance techniques that maximize impact for your audience. Course does not meet a department Production and Performance requirement. Two hrs. disc., 2 hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3021</td>
<td>Classical Greek and Roman Drama (4)</td>
<td>The historic development of early classical drama from the Greek period through the Roman, including the study of representative plays, theatre architecture, and production. Individual research on selected topics.</td>
<td></td>
</tr>
<tr>
<td>3022</td>
<td>European Medieval and Renaissance Drama (4)</td>
<td>The historic development of European drama from the Medieval period through the Italian Renaissance, Elizabethan period, and 17th Century, including the study of representative plays, theatre architecture, and production. Individual research on selected topics.</td>
<td></td>
</tr>
<tr>
<td>3023</td>
<td>Modern European Drama (4)</td>
<td>The historic development of European drama from 1800 to the present, including study of representative plays, physical aspects of the theatre, and production practices. Individual research on selected topics.</td>
<td></td>
</tr>
<tr>
<td>3027</td>
<td>Modern American Theatre (4)</td>
<td>Study of representative American playwrights and their theatre from 1920 to the present. Individual research on selected topics.</td>
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</tr>
<tr>
<td>3028</td>
<td>Postmodern Theatre (4)</td>
<td>Development of postmodern theatre with its emphasis on the mixing of different styles and periods, its interspersing of multiple meanings in a text performance, and its self-consciousness about performance itself. Individual research on selected topics.</td>
<td></td>
</tr>
<tr>
<td>3029</td>
<td>History of Musical Theatre (4)</td>
<td>Musical theatre from 1866 to the present; 19th-century minstrel and variety shows; the theatre of social change in the 20's and 30's; and “concept” musicals after 1970. Requires theatre attendance.</td>
<td></td>
</tr>
<tr>
<td>3030</td>
<td>The History of Black Theatre (4)</td>
<td>Influence of twenty-five centuries of African Diaspora on theatre of Europe and North America. Black influence on playwriting, movies and television; Ancient Greek, Medieval, and Shakespearean performance styles; Minstrel theatre; the Harlem Renaissance; and the Black Arts Movement.</td>
<td></td>
</tr>
<tr>
<td>3025</td>
<td>Theatre Today (4)</td>
<td>Methods for developing a critical viewpoint on theatrical production through observation and analysis of production elements. Includes historical perspective. Attendance at a variety of theatre events is required. May be used as major elective by advisement only.</td>
<td></td>
</tr>
<tr>
<td>3031</td>
<td>Shakespeare on Film (4)</td>
<td>Selected plays of Shakespeare shown on film in class. Discussion of literature, interpretations, techniques and concepts of plays as adapted for film and historic setting. Attendance at one live performance may be required for comparative purposes.</td>
<td></td>
</tr>
<tr>
<td>3035</td>
<td>Theatre Through the Ages (4)</td>
<td>Historical development of classical drama of a specific period, usually either Greek/Roman or Medieval/Renaissance/Shakespeare; the evolving performance space and production technique; representative literature and its influence on world theatre; research on selected topics.</td>
<td></td>
</tr>
<tr>
<td>3034</td>
<td>Scenery, Lights, and Sound Concepts (4)</td>
<td>Techniques and principles of sets, lighting, and sound for the performing arts. Emphasizes design basics, tools, construction methods, reading plans, hanging and focusing lights, sound PA and production, props, drafting floor plans, and practical projects. Two hrs. lect., 4 hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3036</td>
<td>Costumes and Makeup Concepts (4)</td>
<td>Techniques and principles of costumes and makeup for the performing arts. Emphasizes design basics, clothing construction, research methods, rendering techniques, makeup theory, and practical projects. Two hrs. lect., 4 hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3038</td>
<td>Design for Stage (3)</td>
<td>Aesthetics and practice of scenography, lighting, and costume in the performing arts. Techniques of drawing, painting, model building, research, and light plots. Prerequisite: THEA 2001 or consent of instructor. Six hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3039</td>
<td>Interpretation of Women’s and Ethnic Literature (4)</td>
<td>Research, selection, and analysis of literature contributing to U.S. culture by women and ethnic minorities. Rehearsal and performance as Readers’ Theatre. Three hrs. lect., 2 hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3040</td>
<td>Filipino Theatre (4)</td>
<td>A beginning to intermediate practicum in theatre of the Philippines. Literature, acting, and theatrical aspects; includes a performance. May be repeated once for credit, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.</td>
<td></td>
</tr>
<tr>
<td>3041</td>
<td>Multicultural Theatre Troupe (4)</td>
<td>Techniques for performing before multicultural audiences. Oriented for non-majors. Involves off-campus shows. Two hrs. discussion, 4 hrs. act.</td>
<td></td>
</tr>
</tbody>
</table>
| 3042        | Ethnic Women Playwrights and Performers (4)      | The contributions of ethnic women to contemporary American theatre; the playwright as agent for broader social change through...
3422 History of Costume (4)
The historic development of Western costume from Egyptian to modern styles.

3423 Non-Western Costume (4)
The development of non-Western clothing and costume. The important influences of Chinese, Japanese, Indonesian, Indian, and African clothing on all cultures. Recommended for nonmajors.

3424 Scene Painting and Graphic Language (4)
Exploration of methods of scenic painting. Problems in rendering, models, and full scale painting using scenic color media, texture treatment, and light and shadow techniques. Two hrs. lect., 4 hrs. act.

3426 The Art of the Kimono (4)
Study of the Japanese kimono as costume in traditional Noh, Kabuki, and Bunraku drama, as well as its influence on Western fashion and theatre design. Includes history of the Kimono and construction techniques. Two hrs. lect., 4 hrs. act.

3427 Fashion History (4)
Overview of fashionable clothing throughout history with a focus on the 20th Century. Mainly western perspective, but includes world influences on fashion especially since the 19th Century.

3428 Fashion Design (4)
Design and technical practices in fashion from conception to the runway. Includes activities such as developing concepts, color sketching, selecting fabrics, garment construction, and dressing the model. Two hrs. lect., 4 hrs. act.

3487 Voice for Shakespearean and Period Theatre (2)
Vocal techniques required for speaking in Shakespearean and other period plays. Four hrs. act.

3999 Issues in Theatre (4)
Readings, discussion, and research on contemporary and/or significant issues in theatre. May be repeated two times for credit, for a maximum of 12 units. Majors may substitute 8 units of THEA 3660 for THEA 3181. Two hrs. lect., 4 hrs. act.

4032 Period Acting Style: Restoration and Moliere (3)
Technique and physical style for British Restoration and Moliere. Exercises and scene work to increase skills repertoire. Using costumes, mannerisms, body positions, and commedia stock characters. Political and social changes that gave rise to classic theatrical visions of satire. Prerequisites: THEA 2035 and 2055, or instructor approval. Six hrs. act.

4034 Period Acting Style: Shakespeare (3)
Understanding meter, meaning, and motivation in Shakespeare. Exploration of imagery and psychological motivation in bringing the bard’s characters to life. Soliloquy and scenes. Prerequisites: THEA 2035 and 2055, or instructor approval. Six hrs. act.

4041 Musical Theatre Ensemble (3)
Character and scene study for musical theatre. Concentrates on duets, trios, and group numbers. Introduction to musical theatre literature. Six hrs. act.

4048 Advanced Musical Ensemble A (3)
Focus on rehearsal technique and performance. Small ensemble musicals or musical revues to be performed on campus and at local high schools. Attention given to effective rehearsal technique, working as an ensemble, heightened lyricism, and acting technique. Prerequisites: THEA 3048 and 3049, or instructor approval. A-F grading only. Six hrs. act.

4049 Advanced Musical Ensemble B (3)
Focus on rehearsal and audition technique in preparation for beginning a career as a professional artist. Exercises to prepare for the audition setting. Making strong movement choices; learning and performing songs and scenes quickly. Prerequisites: THEA 3048 and 3049, or instructor approval. A-F grading only. Six hrs. act.

4151 Senior Festival Preproduction (3)
Preparation for senior culmination performing arts project. May substitute full-time internship in professional environment. Open to non-major performers and technicians with some experience. Prerequisite: Majors - THEA 2001; others - consent of instructor. May be repeated once for credit, for a maximum of 6 units. Applying repeat units to major requires Chair exception. Six hrs. act.

4152 Senior Festival Performance (3)
Performance of senior culmination performing arts project. May substitute full-time internship in professional environment. Open to
### Dance (Course prefix: DANC)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
</table>
| 1121-1193     | Beginning Technique Classes (1 each)  
Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series. Two hrs. act. |

#### 1121-3-3
Beginning Latin Dance I, II, III

#### 1131-2-3
Beginning Hip Hop Dance I, II, III

#### 1135-6-7
Beginning Breakdance I, II, III

#### 1141-2-3
Beginning Modern Dance I, II, III

#### 1151-2-3
Beginning Tap Dance I, II, III

#### 1161-2-3
Beginning Capeoeira I, II, III

#### 1171-2-3
Beginning Jazz Dance I, II, III

#### 1181-2-3
Beginning Ballroom Dance I, II, III

#### 1191-2-3
Beginning Ballet Dance I, II, III

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### Activity Courses (Course prefix: THEA)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1490-4499</td>
<td>Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499.</td>
</tr>
</tbody>
</table>

- **1490, 2490, 3490, 4490** Costume or Backstage Activity A, B, C, D (2 each) May be repeated two times for credit, for a maximum of 6 units for this series. Four hrs. act.
- **1491, 2491, 3491, 4491** Musical Theatre Production Activity A, B, C, D (4 each) Co-requisites: Concurrent enrollment in a section of DANC 2120-2125 Musical theatre Dance A B, C, D, E, F as designated by the director of the current musical production. May be repeated two times for credit for a maximum of 12 units for this series. Twelve hrs. act.
- **1492, 2492, 3492, 4492** Stage Crew Activity A, B, C, D (2 each) May be repeated two times for credit, for a maximum of 6 units for this series. Four hrs. act.
- **1493, 2493, 3493, 4493** Production Staff Activity A, B, C, D (3 each) May be repeated two times for credit, for a maximum of 9 units for this series. Six hrs. act.
- **1494, 2494, 3494, 4494** Festival Activity A, B, C, D (2 each) May be repeated two times for credit, for a maximum of 6 units for this series. Four hrs. act.
- **1495, 2495, 3495, 4495** Studio Production Activity A, B, C, D (4 each) May be repeated two times for credit, for a maximum of 12 units for this series. Eight hrs. act.
- **1497, 2497, 3497, 4497** Special Workshop or Production Activity A, B, C, D (1-12 each) Prerequisite: Consult department to confirm participation, assignment, course, and units. Only THEA 4497 may be applied to the major. May be repeated once for credit. CR/NC grading only for THEA 1497, 2497, and 3497. A-F grading only for THEA 4497. Two to Twenty-four hrs. act.
- **1498, 2498, 3498, 4498** Summer Theatre Practicum A, B, C, D (8 each) Sixteen hrs. act.
- **1499, 2499, 3499, 4499** Production Practicum A, B, C, D (4 each) May be repeated two times for credit, for a maximum of 12 units for this series. Eight hrs. act.
- **2496, 3496, 4496** International Touring Activity A, B, C, D (6 each) Sixteen hrs. act.

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### Dance (Course prefix: DANC)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
</table>
| 1201           | Dance for All Bodies and Abilities (4)  
Study of personal identity, community and body image. The role of the arts in understanding gender, race, sexual orientation, disability, age, and culture. The creative expression of themes of social change through dance. Composition exercises that include theatre and music. Not open to students with credit for DANC 1202 or 1203. |

| 1202           | World Dance: Oral Traditions and the Stage (4)  
An exploration of cultural dances from around the world and the oral traditions and storytelling from which they come. Individual projects on movement and literature of world cultures. Not open to students with credit for DANC 1201 or 1203. |

| 1203           | Exploring the Creative and Spiritual (4)  
Theory of creative means used by artists throughout history to make art. Solo and collaborative stage performance exercises directed at releasing creative energies, expanding mental boundaries, and increasing the range of expressive means. Not open to non-major performers and technicians with some experience. Prerequisite: Majors - THEA 2001; others - consent of instructor. May be repeated once for credit, for a maximum of 6 units. Applying repeat units to major requires Chair exception. Six hrs. act. |
<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Intermediate Folk Dance (1)</td>
<td>May be repeated once, for a maximum of 2 units. Two hrs. act.</td>
</tr>
<tr>
<td>2020</td>
<td>Rhythm and Music for Dance (2)</td>
<td>Study and exploration of common rhythmic and musical forms used for dance accompaniment. Composition of and improvisation to simple rhythmic scores. One hr. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>2023</td>
<td>Dance Fitness (2)</td>
<td>Conditioning the body through the use of weights, both free and Nautilus. Proper stretching techniques and dietary considerations. May be repeated two times for credit, for a maximum of 6 units. Four hrs. act.</td>
</tr>
<tr>
<td>2111-2193</td>
<td>Intermediate Technique Classes (1 each)</td>
<td>Intermediate dance techniques. Requires one year of beginning technique or instructor’s permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series. Two hrs. act.</td>
</tr>
<tr>
<td>2120-2125</td>
<td>Musical Theatre Dance A, B, C, D, E, F (2 each)</td>
<td>Dance techniques, interpretation, and choreography applicable to musical theatre. Might concentrate on dance related to current production, but will expand to other fundamentals. May be taken in any order. Prerequisite: one quarter of Jazz Technique or consent of instructor. Four hrs. act.</td>
</tr>
<tr>
<td>2221-2223</td>
<td>World Folk Dance A, B, C (1 each)</td>
<td>Introduction to traditional folk dances from around the world as a means of experiencing dance as a community-building art form and a celebration of diversity. Accessible dances taught in groups, partners and individual movement patterns, including improvisation techniques. 2 hrs. act.</td>
</tr>
<tr>
<td>2331-2333</td>
<td>Mixed Ability Dance A, B, C (2 each)</td>
<td>Methods for including all physical abilities and disabilities, body types, and experience levels in the creation of artistic dance performance. Trust exercises, improvisation, and technique. Informal presentations and performance videos. 4 hrs. act.</td>
</tr>
<tr>
<td>2336-2337</td>
<td>Sex, Race, and Body Politics in Dance B, C (2 each)</td>
<td>Contemporary approaches to dance that address diversity in sexual identity, gender, race, body image, and culture. Special focus on cutting-edge Bay Area artists and trends. Techniques for combining dance, theatre, personal narratives, cultural forms, and current technology. 4 hrs. act.</td>
</tr>
<tr>
<td>2341</td>
<td>Improvisation in Art and Life (2)</td>
<td>Improvisation as a vehicle for deepening artistic expression, performance skills, body awareness, health, and communication. Integrates techniques from modern dance, music, dance theatre, martial arts, sports and more. Inclusive for people of all sizes, shapes, ages and abilities/disabilities. May be repeated once for credit, for a maximum of 4 units. Theatre majors/minors and Dance minors must take their first attempt for a letter grade only. Four hrs. act.</td>
</tr>
<tr>
<td>2342</td>
<td>Integrating Theatre and Dance (2)</td>
<td>Techniques for integrating movement, text, sound, and personal experience with diverse styles to create inclusive and vital contemporary performance. Fosters creative and innovative problem-solving. Inclusive for people of all sizes, shapes, ages and abilities/disabilities. May be repeated once for credit for a maximum of 4 units. Theatre majors/minors and Dance minors must take their first attempt for a letter grade only. Four hrs. act.</td>
</tr>
<tr>
<td>2343</td>
<td>Body and Mind Training for Performance (2)</td>
<td>Overview of somatic approaches to training for dance, theatre, music, sports, public speaking and more. Combines modern dance and martial arts with diverse approaches to understanding and harnessing the full range of body systems for increased efficiency and health. May be repeated once for credit for a maximum of 4 units. Theatre majors/minors and Dance minors must take their first attempt for a letter grade only. Four hrs. act.</td>
</tr>
<tr>
<td>2344</td>
<td>Site Specific Performance (2)</td>
<td>Overview of techniques and approaches for performing outside the context of a fully furnished theatre. Covers movement, sound, text, image, design, improvisation and composition. Opportunities for studying, experimenting, and performing in multiple styles and settings. May be repeated once for credit for a maximum of 4 units. Theatre majors/minors and Dance minors must take their first attempt for a letter grade only. Four hrs. act.</td>
</tr>
<tr>
<td>3021</td>
<td>Cultural Dance Forms (3)</td>
<td>Provides research skills and movement activities to inspire cross-cultural appreciation through dance. Audio-visual used to analyze, compare and contrast elements such as rhythm, symbolism, religion, dress, form, and function. Students share personal experiences and customs. May be repeated once for credit, for a maximum of 6 units. Two hrs. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>3022</td>
<td>Improvisation and Beyond (3)</td>
<td>Exploration of movement through improvisational techniques leading to dance making. Stepping stones to the development of choreography and performance. Fosters a supportive atmosphere while crafting dances through an individual approach. Six hrs. act.</td>
</tr>
<tr>
<td>3026</td>
<td>Jazz and Modern Dance (2)</td>
<td>Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter. Four hrs. act.</td>
</tr>
<tr>
<td>3101-3106</td>
<td>Dance Ensemble Technique A, B, C, D, E, F (1 each)</td>
<td>Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter. Four hrs. act.</td>
</tr>
<tr>
<td>3153</td>
<td>Advanced Technique Classes (see units below)</td>
<td>Advanced dance techniques. Requires one year each of beginning and intermediate technique or instructor’s permission. Audition</td>
</tr>
</tbody>
</table>
### 3135 Advanced Breakdance I, II, III (4 hrs. act.)
- Designed for advanced dance technique students.
- Prerequisites: Beginning level dance course (e.g., DANC 1000 series) or consent of instructor.
- Three hrs. lect., 2 hrs. act.

### 3151 Advanced Tap Dance I, II, III (2 hrs. act.)
- Designed for advanced dance technique students.
- Prerequisites: Beginning level dance course (e.g., DANC 1000 series) or consent of instructor.
- Three hrs. lect., 2 hrs. act.

### 3235 Dance for Children (4)
- Theory and techniques for developing movement and expressive capabilities of the child through dance participation. Opportunities to work with children are provided. Prerequisite: beginning level dance course (e.g., DANC 1000 series) or consent of instructor.
- Three hrs. lect., 2 hrs. act.

### 3241 The Dance Experience (3)
- Study of dance theory and its development as a creative form and process; exploration of various dance forms, techniques and methods. Two hrs. lect., 2 hrs. act.

### 3251 Movement Analysis (4)
- How movement communicates and functions in society. Observation, analysis, coaching, and recording of movement; functional alignment (Feldenkrais, Ideokinesis); movement theory (Laban, Bartenieff); cross-cultural models. Helpful for actors, dancers, athletes, coaches, animators, and teachers. Prerequisites: THEA 2001, two quarters of any technique, or consent of instructor.
- Three hrs. lect., 2 hrs. act.

### 3252 Dance Through the Ages (4)
- The history and evolution of dance from preliterate cultures and ancient civilizations to medieval and Renaissance periods, including anthropological and religious sources. Not open to students with credit for DANC 4200.

### 3300 Sex, Race, and Body Politics in Dance (4)
- Questions of identity, such as "Who am I?" and "Why can’t I?", are explored through examples from the dance world. Focus on groups marginalized because of race, gender, sexual orientation, age, body size, disability, lifestyle. Arts for empowerment.

### 3330 The Digital Stage: Dance on Camera (4)
- Students direct, perform, shoot, edit and distribute dance and theatre works in digital format. Includes history and aesthetics of dance for the camera; video production, editing, marketing and podcasting of live performance; portfolio development and design.
- Two hrs. lect., 4 hrs. act.

### 3426 Collaborative Dance and Theatre (3)
- Collaborative theatre techniques to develop and produce a Spring Concert. Dance, music, and theatre utilized in the production with attention to the development of original score, choreography and text. May be repeated twice for credit, for a maximum of 9 units.
- One hr. lect., 4 hrs. act.

### 3451-3456 Dance Ensemble A, B, C, D, E, F (3 each)
- Dance stylizations and composition. Content varies with instructor; may include improvisation, dance theatre, production problems, etc. Course sequence may be taken in any order. Open to all by audition in any technique course. Concurrent enrollment in Dance Ensemble Technique recommended.
- 6 hrs. act

### 3999 Issues in Dance (4)
- Readings, discussion, and research on contemporary and/or significant issues in dance. May be repeated for credit when content varies, for a maximum of 8 units.

### 4131-2-3 Advanced Hip Hop Dance I, II, III
### 4135-6-7 Advanced Breakdance I, II, III
### 4141-2-3 Advanced Modern Dance I, II, III
### 4171-2-3 Advanced Jazz Dance I, II, III
### 4191-2-3 Advanced/Intermediate Ballet Dance I, II, III

### 4201 Dance in Modern Society (4)
- The development of dance from the post-Renaissance period to the present, i.e., modern dance, black dance, men in dance, social dance, musical theatre and avant garde. Social, political, psychological, and spiritual influences.

### 4900 Independent Study (1-4)
Undeclared Major

- Department Information
- Introduction
- Advising
- Choosing a Major

Department Information

Academic Advising and Career Education
Student Services and Administration Building, 2nd Floor
Phone: (510) 885-3621
Fax: (510) 885-2398

Director: Diana M. Balgas (Acting)

Introduction

Academic Advising and Career Education (AACE) is the academic advising home for undergraduate students who have not yet declared a major at California State University, East Bay. It is common for students to explore their interests, major areas of study and career options during their first two years of college. We encourage students to meet with an AACE counselor on an ongoing basis throughout their research. We are here to support student exploration and guide them through the process of declaring a major. Research indicates that students often change their majors one or more times before completing their degrees.

Advising

Academic advising is important for the long-term academic success of undeclared students. AACE provides students with individualized advising appointments to assist them in choosing a major, selecting courses, making progress toward a degree, and understanding academic policies and procedures. Undeclared students should concentrate on satisfying their General Education requirements until a major is selected. Students should keep in mind, however, that no course with the same prefix as their declared major may be applied to General Education requirements, with the exceptions noted in the B.A./B.S. Degree Requirements chapter. Courses that cannot be used to fulfill G.E. requirements are normally applicable to the major, so nothing has been lost.

Choosing a Major

AACE provides a variety of resources and knowledgeable staff to help students make well informed decisions about major and career options. AACE Counselors encourage students to research the available majors by consulting the University Catalog, speaking with faculty, staff and/or advisors in major departments, and enrolling in introductory courses offered in the major programs of interest.

Undeclared students should consider all possibilities, as most major programs may not prepare students for a specific job, but instead will get them ready for the job market by developing transferable skills. AACE provides additional resources which include self-assessment testing to better understand personal interest, values, and abilities; and a career library to aid research on majors and careers. AACE counselors are also available to assist students narrow down the focus on majors that lead to specific careers.

What is important for undeclared majors to understand is that choosing a major is a process. Students must actively pursue experiences that will give them the information they need to choose their major. Also, choosing a major and a career are not the same. Many college graduates are employed in fields not directly related to their majors, and most people change careers more than once in their lifetime. Remember, the ultimate goal is graduation in a major and AACE counselors are available to help students complete the process.
Minor In Urban Studies

The minor in Urban Studies consists of a minimum of 24 units of work selected from the following lists of courses. No more than 9 units of work in a single department may be applied to the minor. With the approval of an Urban Studies advisor, a maximum of 2 other appropriate courses, including independent study or directed research, may be substituted for those below.

- ANTH 4310 Field Course in Ethnography (5)
- CRJA 4700 Community Based Corrections (4)
- ECON 3370 Public Sector Economics (4)
- ECON 3500 Regional and Urban Economics: Survey (4)
- ENVT 4100 Environmental Impact Analysis (4)
- ENVT 4300 Environmental Field Studies (5)
- ES 3290 Community Development (4)
- GEOG 3330 Urban Geography (4)
- GEOG 4325 Field Course in Cultural-Urban Geography (4)
- HIST 3503 History of the San Francisco Bay Area (4)
- HIST 3567 African American History (4)
- POSC 3120 State and Local Politics and Government (4)
- POSC 3130 Urban Politics (4)
- POSC 3150 Politics of California (4)
- POSC 3800 Public Policy Analysis (4)
- REC 4300 Facilities Management and Administration in Leisure (4)
- SOC 3520 Sociology of Minority Groups (4)
- SOC 3700 Introduction to Social Services (4)
- SOC 3710 Social Policy (4)
- SOC 4450 Urban Sociology (4)

Any new or transfer course judged by an Urban Studies advisor to have a significant urban studies content.

At least 18 units in the minor must be outside the student's major department
Women's Studies

Department Information

Department of Human Development and Women's Studies
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 3069
Phone: (510) 885-3076

Website: http://class.csueastbay.edu/womensstudies

Professors
Rainer Bauer, Ph.D. Stanford University
Patricia Guthrie, Ph.D. University of Rochester
Jiansheng Guo, Ph.D. University of California, Berkeley

Associate Professors
Lynn Comerford, Ph.D. (Director) State University of New York, Albany
Keri K. O'Neal, Ph.D. Texas Tech University

Assistant Professors
Steve Borish, Ph.D. Stanford University
Maxwell Davis, Ph.D. University of Southern California
Patricia Drew, Ph.D. University of California, Santa Barbara
Christina Chin-Newman Ph.D. University of California, Santa Cruz
D. Xeno Rasmusson, Ph.D. University of Georgia

Program Description

Mission Statement

Women's Studies explores theoretical and empirical approaches to the study of women across a range of contexts. Courses connect academic work with the social and political world outside the University, educate our students about a range of social issues and problems that relate to sexism, racism, classism, heterosexism, and ethnocentrism; and link knowledge, research, teaching, and social activism. We immerse students in the discovery and production of knowledge that emerges from multiple perspectives. We engage students in the study of gender and the intersection of gender with other substantive categories of analysis and identity, including race, sexuality, class, (dis)ability, and nationality. We promote responsible citizenship in a diverse local and global environment. We empower students to think more critically about their own lives and to critique social, cultural, and institutional structures, policies and practices.

Undergraduate courses in Women's Studies ensure that B.A. students receive an interdisciplinary education that bridges theory and practice, and focuses on the intersections of gender, race, class, sexuality, and nationality in all areas of research. Electives in the social sciences, sciences, and humanities increase the interdisciplinary strength of the program.

A two-quarter field-study seminar, taken in the senior year, and a two-quarter senior capstone course bring majors together to think through connections among the diverse theoretical and methodological approaches they have encountered as well as between scholarship and social action.

Goals

To provide students with the theoretical and methodological tools needed to examine the intersections of gender with other forms of difference and power, such as sexuality, race, class, and nation, in local and transnational contexts
To provide a forum for intellectual debate and a catalyst for students committed to social action which addresses various forms of social injustice
To provide fieldwork placements which culminate in a senior thesis
To build supportive local community environments for women by disseminating fieldwork research findings back to the community

Student Learning Outcomes:

Graduates will be able to:
- understand feminist theoretical and methodological perspectives
- critique social inequalities founded on the intersections of gender, race, ethnicity, class, sexuality, and nation
- critically reflect upon their own lives from a feminist perspective
- comprehend the challenges of dismantling sexism and other oppressive beliefs

Career Opportunities

The Women's Studies major is excellent preparation for life, and careers and graduate study in a wide range of fields, including government and public policy, non-profit and social justice organizations, law, educational institutions, and many other professional and human-service fields.
Features

Women's Studies is an interdisciplinary area of scholarship and research and raises questions which have often been ignored or marginalized in traditional academic disciplines. Our Program builds on several decades of feminist work in women's studies and deliberately integrates theory, research methods and service learning.

The courses in Women's Studies emphasize participatory education in which student involvement, critical thinking, and personal insight are encouraged and made relevant in the learning process. In this Program, theory and practice are combined creatively and productively. Research, fieldwork, and service are central to the process of learning and applying knowledge. The Program stresses the importance of social responsibility, political activism, and community outreach. The curriculum explores how institutionalized sexism, racism, classism, and heterosexism limit human achievement and dignity. Local service learning fieldwork provides an opportunity to examine first-hand the changes necessary to eliminate these limitations.

Service learning fieldwork enables majors to create richly detailed accounts of women as social agents whose identities and experiences are shaped by social, political and economic forces. Service learning is incorporated into the major through fieldwork in community agencies focused on advocacy, law and policy, reproductive rights and health, support services for survivors of violence and abuse, and U.S. politics.

As part of its mission to educational access for all students, particularly to students with paid work and care work commitments, the Program incorporates a broad range of educational formats including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The Program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact P.A.C.E. for further information.

Major Requirements (B.A.)

This degree was pending implementation at the time of catalog production for this Catalog. Please check with the department for the status of this degree.

The major in Women's Studies requires a minimum of 17 upper-division courses for a total of 68 units. Students will be required to take 15 courses in the Women's Studies Program and 2 electives from the Women's Studies Program or from the Approved Elective Courses list located on the Women's Studies CSUEB website and in the Human Development/Women's Studies Department office (MI 3069).

The Women's Studies major consists of a total of 80 units: 12 lower-division units and 68 upper-division units. The B.A. degree requires a total of 180 units.

I. Lower Division (12 units)

Select three 4-unit lower division courses from the following categories, with no more than one course from each category.

A. Anthropology
B. Communication Studies
C. Economics
D. English
E. Ethnic or area studies
F. History
G. Philosophy
H. Political Science
I. Psychology
J. Sociology
K. Additional categories may be approved by the department.

II. Upper Division (68 units)

Students are required to take 17 upper-division courses for a total of 68 units. (Note: Students with a specific interest/emphasis may, with Program approval, substitute courses in other departments.)

- WOST 3110 Theories of Feminism I (4)
- WOST 3200 Theories of Feminism II (4)
- WOST 3300 Women, Law, Policy and Activism in the Contemporary U.S. (4)
- WOST 3440 Women and Social Constructions of Sexuality (4)
- WOST 3545 Women's Health and Health Care (4)
- WOST 3600 Women and Work in the U.S. (4)
- WOST 3700 Comparative Perspectives on Global Feminisms (4)
- WOST 3810 Domestic Discontents in the Contemporary U.S. (4)
- WOST 3850 Research Practices and Methods for Feminist Scholarship (4)
- WOST 3900 Violence Against Women (4)
- WOST 4500 Feminist Thought into Action (4)
- WOST 4600 Action Research Seminar I (4)
- WOST 4700 Action Fieldwork in Women's Studies I (4)
- WOST 4800 Action Fieldwork in Women's Studies II (4)
- WOST 4910 Action Research Seminar II (4)

Choose two upper-division electives. The specific upper division courses to satisfy the 8 unit requirement are selected with advisor approval from the Program’s subject area course list, which will include appropriate courses from other disciplines.

Approved Electives for Women's Studies’ Majors:

Women's Studies’ majors are encouraged to take up to 8 units (2 classes) from departments across campus. We encourage, but do not require, students to take 8 units listed under one of the themes.

Additional courses, not found on this list, may be approved on a case-by-case basis.

- Social Justice and Community Activism
  - CRJA 4124 Sex Crime Investigation
» CRJA 4125 Women in Criminal Justice
» PHIL 3503 Philosophy and Law
» PHIL 3510 Human Rights and Social Justice: Cultural Groups and Women in the U.S.
» PHIL 3515 Race and Social Justice
» POSC 3333 Ethnic and Minority Politics
» POSC 3340 Women and Politics
» POSC 3360 Culture and Politics in the United States
» POSC 3170 Public Policy and the Family
» POSC 3419 Labor Policy and Law
» POSC 3715 The State and the Family
» SOC 3710 Social Policy
» SOC 4450 Urban Sociology

» Resources, Technology and Globalization
» BIOL 3800 Achievements of Women in Science
» COMM 4500 Women in Media
» NURS 3404 Care of Childbearing Families
» PHIL 3511 Philosophy of Human Rights and Global Justice
» POSC 3500 World Problems and Global Response
» POSC 3521 Politics of the Global Economy
» POSC 3418 U.S. Immigration Policy and Law
» SOC 3431 Seminar in World Development
» SOC 3700 Introduction to Social Services

» Arts, Humanities and Society
» ANTH 3750 Women in Cross-Cultural Perspective
» ART 3227 Women in Art
» COMM 4650 Gender and Communication
» ENGL 3050 Language and Gender
» ENGL 3071 Writing Women's Lives: A Workshop
» ENGL 3650 Woman and Literature
» ENGL 3770 Gay and Lesbian Literature
» ENGL 4650 Studies in American Women's Literature
» ES 3030 Immigrant and Refugee Women
» ES 3730 Women of Color Genders and Sexualities
» ES 4300 Queer of Color Subjects and Critical Theory
» ES 3210 Latinas in the United States
» HIST 3570 The Family and Sexuality in American History
» HIST 3571 Women in American History
» HIST 3572 American Women in the Twentieth Century
» HDEV 3304 Girls and Women Across the Lifespan
» HDEV 4440 Lesbian and Gay Lifespan Development
» MLL 3938 Italian American Women Through Literature
» PHIL 3161 Philosophy and Sex
» PHIL 3720 Feminist Philosophy
» PSYC 3410 Psychology of Women
» REC 3202 Women and Leisure
» SOC 3410 Sociology of the Family
» SOC 3411 Sociology of Gender
» SOC 3412 Marriage and Sex
» SOC 3413 Sociology of Parenting
» SOC 3420 Social Inequality
» SOC 3425 Prejudice and Discrimination
» SOC 3510 Sociology of Identity
» SOC 3520 Sociology of Minority Groups
» SOC 3880 Work and Professions
» THEA 3310 Interpretation of Women's and Ethnic Literature
» THEA 3326 Ethnic Women Playwrights and Performers
» THEA 3300 Sex, Race, and Body Politics in Dance

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Minor in Women's Studies

No more than six units in the major department, nor more than 8 units of lower division courses may be applied to the minor. No more than four units may be taken on a "CR/NC" basis. Altogether, 24 units are required. Students who wish to minor in Women's Studies should see the coordinator as soon as possible.

I. Core Courses (8-12 units)
II. Electives in Women's Studies (8-12 units)
Two or three courses with special reference to the status and problems of women selected from:
- COMM 4500 Women in Media (4)
- ENGL 3650 Women and Literature (4)
- HIST 3124 Women in Classical Antiquity (4)
- HIST 3571 Women in America to 1890 (4)
- POSC 3170 Public Policy and the Family (4)
- POSC 3340 Women and Politics (4)
- PSYC 3410 Psychology of Women (4)
- SOC 3411 Sociology of Gender (4)
- WOST 3050 Feminist Theory (4)
- WOST 3400 Women and Careers (4)
- WOST 3420 Minority Women in America (4)
- WOST 3500 Portrayal of Women in the Movies (4)
- WOST 3520 Mothers Daughters and Sons (4)
- WOST 3530 Women and Their Bodies (4)
- WOST 4900 Independent Study (1-4)

III. Elective in a Related Field
Four units should be selected with an advisor in Women's Studies from the following:
- COMM 4500; ENGL 3650; HIST 3124, 3571; POSC 3170; PSYC 3410; SOC 3411; WOST 3400, 3420, 3500, 3520, 3530, or 4900 if not used to complete requirement II above.
- ANTH 3110 Primate Social Behavior (4), 3400 Social Anthropology (4), 3740 Cross-Cultural Studies in Child-Rearing (4), 3745 Human Sexuality: Anthropological Perspectives (4); BIOL 3060 Human Sexuality (4); E S 3000 Ethnic Writers (4) (when emphasis is on women writers); 3810 History of Minority Education (4); HIST 4710 History and Trends in Nursing (4); KPE 1018 Self Defense--Women (4); MLL 4495 A Single Movement, Country, or Theme: Spanish American Literature (4) (when the theme focuses on women);
- PHIL 3510 Human Rights and Social Justice: Cultural Groups and Women in the U.S. (4), 3720 Feminist Philosophy (4); PSYC 3520 Interpersonal Processes (4); 3540 Groups and Organizations (4), 4420 Developmental Psychology (4), 4610 Psychology of Personality (4); SOC 3410 Sociology of the Family (4), 3415 Sociology of the African American Family (4), 3416 Sociology of the Mexican American Family (4), 3500 Social Psychology (4)

It is recommended that all students in the minor take at least one course that has a primary focus on minority women in America.

Other Elective Courses
Other elective courses (with appropriate content) may be approved by the Women's Studies Committee as they are developed by departments.

Undergraduate Courses

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<td>Women in Contemporary Society (4)</td>
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<td>1100</td>
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<td>4600</td>
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<td>4800</td>
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<td>4910</td>
<td>Action Research Seminar II (4)</td>
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Youth Services Administration

- Department Information
- Program Information
- Minor Requirements
- Certificate Program

Department Information

Department of Hospitality, Recreation and Tourism 
College of Education and Allied Studies 
Office: Kinesiology and Physical Education Bldg. 130 
Phone: (510) 885-3043

Professor
Melany A. Spielman, Ph.D. University of Oregon

Program Information

The programs in Youth Services Administration are intended to prepare students for roles of professional leadership in voluntary youth and human services organizations. These organizations include, but are not limited to: American Red Cross, Big Brothers/Big Sisters, Boys Clubs, Boy Scouts, Camp Fire, 4-H, Girls Clubs, Girl Scouts, Junior Achievement, YMCA, and YWCA.

Students pursuing a baccalaureate degree may have the program recorded on their records as a minor; those who have no degree objective can receive a certificate for completion of the program. A person may not receive both the minor and the certificate.

Minor Requirements

The minor consists of 36-44 units and must be part of a baccalaureate degree.

A. Core Requirement (16 units)

- REC 2200 Programming in Leisure Services (4)
- REC 4100 Professional Issues in Hospitality, Recreation and Tourism (4)
- SOC 3700 Introduction to Social Services (4)

An appropriate internship course (4 units minimum):

- REC 2500 Service Learning in Leadership, Hospitality and Leisure (1-4)
- SOC 4718 Field Practicum (4)

B. Management Requirement (4 units)

One of the following:

- MGMT 3600 Theories of Management (4)
- PUAD 4830 Organization Theory and Human Behavior (4)
- REC 4000 Administration and Budgeting in Recreation (4)

C. Communication Requirement (4-12 units, including completion of the University Writing Skills Requirement, UWSR)

One of the following:

- COMM 1000 Public Speaking (or 2400) (4)
- COMM 1004 Interpersonal Communication (4)
- COMM 3411 Argumentation and Debate (4)
- COMM 3510 Small Group Communication (4)
- COMM 4830 Intercultural Communication (4)
- ENGL 3005 Study of Language (4)

Completion of the University Writing Skills Requirement (UWSR) by passing the Writing Skills Test (WST) or, if you fail the WST, completion of the necessary coursework as specified by your essay score (0-8).

D. Human Understanding Requirements (12 units)

One of the following (4 units):

- ES 1001 Ethnic Experience in America I: Minorities (4)
- ES 2200 Introduction to Latino/a Studies (4)
- ES 1300 Introduction to Native American Studies (4)
- ES 2100 Blacks in the Americas (4)
- ES 3105 African American Identity (4)
- ES 3305 Contemporary American Indian Life (4)
- SOC 3520 Sociology of Minority Groups (4)

One of the following (4 units):

- ES 4290 Latino Politics and Public Policy (4)
- REC 1000 Introduction Recreation (4)
- SOC 4450 Urban Sociology (4)

One of the following (4 units):

- HDEV 4400 Adolescence (4)
Certificate Program

The certificate program in Youth Services Administration consists of the same 36 units as the Youth Services Administration minor, but may be earned without a degree.
Graduate Majors and Options

Cal State East Bay offers a strong academic course of study with a real-world curriculum to prepare you for a lifetime of personal achievement and career success.

The University Catalog lists the program description, course names, numbers, descriptions, degree requirements, and career opportunities. The Department website gives detailed information about the academic department including degrees and programs, careers for majors, faculty information, course descriptions and departmental information.

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<th>Link to College</th>
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<td>Department of Anthropology</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
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<td>Biological Science, M.A., M.S.</td>
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<td>Department of Statistics and Biostatics</td>
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<td>• Operations and Supply Chain Management Option (M.B.A.)</td>
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<td>• Strategy and International Business Option (M.B.A.)</td>
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<td>College of Letters, Arts &amp; Social Sciences</td>
</tr>
<tr>
<td>Sociology, M.A.</td>
<td>Department of Sociology and Social Services</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
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<tr>
<td>Special Education, M.S.</td>
<td>Department of Educational Psychology</td>
<td>College of Education &amp; Allied Studies</td>
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<tr>
<td>Mild-Moderate Disabilities Option (M.S.)</td>
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<td>Moderate-Severe Disabilities Option (M.S.)</td>
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<tr>
<td>Speech-Language Pathology, M.S.</td>
<td>Department of Communicative Sciences and Disorders</td>
<td>College of Letters, Arts &amp; Social Sciences</td>
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<tr>
<td>Statistics, M.S.</td>
<td>Department of Statistics and Biostatistics</td>
<td>College of Science</td>
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<tr>
<td>Actuarial Science Option (M.S.)</td>
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<tr>
<td>Applied Statistics Option (M.S.)</td>
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<td>Computational Statistics Option (M.S.)</td>
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<tr>
<td>Mathematical Statistics Option (M.S.)</td>
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<tr>
<td>Taxation, M.S.</td>
<td>Department of Accounting and Finance, Economics, Management, Marketing and Entrepreneurship</td>
<td>College of Business and Economics</td>
</tr>
</tbody>
</table>

**Footnotes**

1. It is not necessary to select an option for these degrees.
Online Master's Degree Programs

- About Online Learning at CSUEB
- Online Classes Offered This Quarter
- Online Master's Degrees

About Online Learning at CSUEB

California State University, East Bay offers a number of online learning options. These include:

I. Selected online classes for enrolled students in one of two differing formats:
   - Online classes, in which 100% of the class communications and coursework are online, and exams are delivered either online via the Internet, on campus, or proctored at an off-site location.
   - Hybrid classes, in which some classroom meetings are replaced by online activities.

II. Master's Degrees, offered 100% online, designed expressly for students seeking a completely online program - regardless of geographic location.

Success in online learning requires certain computer skills, as well as certain learning and class participation styles. Students should be:

- knowledgeable about creating, saving, uploading, and downloading electronic files and documents;
- experienced in the use of e-mail and the Internet;
- able to read and follow written directions carefully;
- willing to log into class at least three to four times a week;
- equipped with an up-to-date firewall and virus protection program installed on their personal computer;
- motivated self-starters with good time-management skills.

See the links below for more specific information about online classes and degrees.

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Online Classes Offered this Quarter

You can view current online and hybrid course offerings at MyCSUEB.

Note: Please be sure to check the individual class "notes" for other possible important information about the class. To see the class "notes":

1. Click the green arrow for the class you wish to view;
2. Click the bright blue section number hyperlink [for example: 02-LEC(1234)] and scroll down to "Notes".

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Online Master's Degrees

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<th>Link to Department</th>
<th>Link to College</th>
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</thead>
<tbody>
<tr>
<td>Education, M.S.</td>
<td>Online Teaching and Learning Degree Program</td>
<td>College of Education &amp; Allied Studies</td>
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<tr>
<td>Online Teaching and Learning Option</td>
<td>Department of Educational Leadership</td>
<td>College of Education &amp; Allied Studies</td>
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<tr>
<td>Educational Leadership, M.S.</td>
<td>Department of Public Affairs and Administration</td>
<td>College of Letters, Arts, and Social Sciences</td>
</tr>
<tr>
<td>Health Care Administration, M.S.*</td>
<td>Department of Hospitality, Recreation and Tourism</td>
<td>College of Education &amp; Allied Studies</td>
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<tr>
<td>Recreation and Tourism, M.S.</td>
<td>Department of Accounting and Finance, Economics, Management, Marketing and Entrepreneurship</td>
<td>College of Business and Economics</td>
</tr>
<tr>
<td>Taxation, M.S.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Implementation pending. Please check with the Department.
Cal State East Bay offers a variety of credential programs.

**Credential Programs**

- Fast Track Liberal Studies/ Multiple Subject Teaching
- Education Specialist, Levels I and II
  - Mild-Moderate Disabilities
  - Moderate-Severe Disabilities
- Education Specialist Internship, Level I
  - Mild-Moderate Disabilities
  - Moderate-Severe Disabilities
- Internship in Administrative Services
  - Multiple Subject Teaching
  - Multiple Subject with Bilingual, Cross-Cultural, Language, and Academic Development Emphasis (BCLAD)
  - Preliminary Administrative Services
  - Professional Administrative Services
  - Pupil Personnel
    - School Counseling
    - School Psychology
  - Reading and Language Arts Specialist
  - Single Subject Teaching
  - Speech-Language Pathology Services Credential

**Credential Programs, Concord Campus**

- Multiple Subject Teaching
- Single Subject Teaching

For more information about the state licensure process at Cal State East Bay, please visit the [Credential Student Service Center](#).
Graduate Certificate Programs

A certificate program is a coherent set of academic courses, considerably narrower in scope and objectives than a degree or major, which leads to a certificate. A certificate program is normally oriented toward occupations and/or career skills. It contains a minimum of 12 units of courses numbered 3000 and above and a minimum of 20 total units unless the program consists entirely of 5000- and/or 6000-level courses, in which case the required minimum is 15 units. Each certificate program contains a required core of at least three courses and 12 units.

Some certificate programs have admission requirements that are described in the appropriate catalog chapter. (See the chapter describing the major most closely associated with the certificate.) To receive a certificate, you must earn a grade of "C" or better in each course applied to the program which is numbered below 6000 and a grade of "B" or better in each course applied to the program which is numbered 6000 and above. One course numbered below 6000 may be applied to a certificate program with a "CR" grade; no course numbered 6000 or above may be applied with a "CR" grade. At least 75% of the courses in a certificate program and all 5000- and 6000-level courses must be taken at Cal State East Bay for you to receive the certificate. You may meet this requirement with coursework taken at Cal State East Bay in matriculated or extension status. Prerequisites which are part of a regular degree major need not be included within the certificate program, but must be clearly identified. No academic certificate program can have a title that is identical or similar to that of a legal license or certificate unless it meets the requirements for that license or certificate. You may not receive a certificate with the same title as the degree major, option, or minor that you have already received.

Certificate programs are designed to serve students who have a limited time to spend at Cal State East Bay and/or who wish to learn specific subjects, concepts, skills, and competencies. Most certificate programs add a specific occupational skill to an academic major that was previously completed or is being completed concurrently. Such programs are compatible with the related major and contain no prerequisites not included in the major and/or required G.E. Some certificate programs are designed to provide the preprofessional background for students contemplating transfer to other universities offering programs not available at CSUEB. These certificate programs have been made compatible with the professional program by including all prerequisite or strongly recommended preparatory courses that are offered by Cal State East Bay. Still other certificate programs are the equivalent of minors that can be earned without a degree. These are normally completed by students who already possess a baccalaureate degree and want to add some skills in a new field without completing another entire degree. Such certificate programs meet at least the minimum requirements for an academic minor in the discipline. A Special Certificate Program is also available. See the Interdisciplinary Studies chapters.

Graduate Certificate Programs

- **Applied Statistics**, Department of Statistics and Biostatistics
- **Biotechnology**, Department of Biological Sciences
- **Children's Literature**, Department of Teacher Education
- **Cross-Cultural, Language, and Academic Development (CLAD)**, Department of Teacher Education
- **Educational Technology Leadership**, Department of Teacher Education
- **Engineering Management**, Department of Engineering
- **Graduate Economics Studies**, Department of Economics
- **Mathematical Statistics**, Department of Statistics and Biostatistics
- **Quality Management (Engineering)**, Department of Engineering
- **Taxation**, Department of Accounting and Finance
California State University, East Bay is organized into four colleges: Letters, Arts and Social Sciences (CLASS); Business and Economics; Education and Allied Studies; and Science. Each college has significant responsibility for its own curricula, faculties, students, and budgets. The college dean, aided by an associate dean and an administrative assistant, is the chief administrative officer of each college. (The names of these officers appear in the University Administration section.) The Deans' offices are located as follows: Letters, Arts, and Social Sciences, first floor of the Music and Business Building (885-3161); Business and Economics, fourth floor of the Valley Business and Technology Building (885-3291); Education and Allied Studies, first floor of the Art and Education Building (885-3072); and Science, first floor of the North Science Building (885-3441). The M.A./M.S. Interdisciplinary Studies programs are administered by the Associate Vice President of Academic Programs and Graduate Studies, in the Student Services and Administration Building, Suite 4500 (885-3271).

College of Letters, Arts and Social Sciences

The College of Letters, Arts and Social Sciences is the largest in the university and includes 18 departments. It embraces the creative arts, the humanities, the social and behavioral sciences, and several applied disciplines.

Master's Degrees
- Anthropology (M.A.)
- Communication (M.A.)
- English (M.A.)
- Geography (M.A.)
- Health Care Administration (M.S.)
- History (M.A.)
- Multimedia (M.A.)
- Music (M.A.)
- Public Administration (M.P.A.)
- Social Work (M.S.W.)
- Sociology (M.A.)
- Speech-Language Pathology (M.S.)

Credentials
- Fast-Track Liberal Studies/Multiple Subject Teaching
- Clinical Rehabilitative Services in Language Speech and Hearing

College of Business and Economics

Mission Statement:
The mission of the College of Business and Economics is to prepare students to make ethical choices and succeed in a dynamic business environment shaped by the challenges of a competitive global economy, emerging technologies, and diverse stakeholders.

Values
The College of Business and Economics values learning in an academic environment that is inclusive and student-centered. We value engagement in the business and economic life of the communities we serve - locally, regionally, and globally. We value research, critical and creative thinking, effective communication, ethical decision-making, and multi-cultural competence. We value the open exchange of ideas and viewpoints.

Vision
We strive to be known for:
- Outstanding academic programs, recognized for their excellence
- Outstanding faculty scholarship
- Curricula that foster active student participation through applied learning, research, and community service
- High academic standards along with services and support that ensure each student the opportunity for success
- A learning-centered experience where teaching is lively and engaging and individual differences are appreciated
- Dedication to open-minded inquiry, especially with regard to major business, economic and global issues
- Programs and opportunities for students to pursue international business programs
- A welcoming college atmosphere that is responsive to the unique needs of our CBE community
- An inclusive CBE community where students, faculty, and staff from vastly different backgrounds collaborate - creating and sustaining a vibrant learning community
- An array of activities that promote students' success and professional development
- Graduates who are innovative and effective problem solvers, skilled in organizing and expressing their ideas
- Engagement in and essential contributions to the economic well-being of our region and communities

All degree programs in the College of Business and Economics are accredited by the AACSB International - The Association to Advance Collegiate Schools of Business.

Please contact the College of Business and Economics Director of Graduate Programs regarding the availability of the programs listed below.

Master's Degrees
- Business Administration (M.B.A.)
- Business Administration (M.S.)
- Economics (M.A.)
- Taxation (M.S.)

Certificate Programs
- Graduate Economics Studies
College of Education and Allied Studies

The mission of the College of Education and Allied Studies is to prepare collaborative leaders, committed to social justice and democracy, who will influence a highly technological and diverse world.

The college offers programs for the professional preparation of teachers and service personnel in schools, colleges, and community agencies. Advanced preparation and graduate degrees are designed to expand the knowledge base of students, upgrade professional skills, and/or prepare students for doctoral study.

The professional education programs of the college are accredited by the California Commission on Teacher Credentialing, the National Council for Accreditation of Teacher Education, and the National Association of School Psychologists.

The College also offers programs at the Concord Campus in Concord through the Departments of Educational Leadership, Educational Psychology, and Teacher Education. Specific program information may be obtained by contacting these departments.

Doctoral Program
- Educational Leadership (Ed.D.)

Master's Degrees
- Counseling (M.S.)
- Education (M.S.)
- Educational Leadership (M.S.)
- Kinesiology (M.S.)
- Recreation and Tourism (M.S.)
- Special Education (M.S.)

Credentials/Licenses

Programs to prepare teachers, marriage and family therapists (M.F.T.), counselors, school psychologists, school counselors, special educators, supervisors and administrators have been approved by the State Commission on Teacher Credentialing. Information regarding specific requirements for each credential is available through the appropriate department.

1. Basic Teaching Credential Programs
   - Multiple Subject
     The multiple subject program enables credential holders to teach all subjects in elementary or middle school. In addition, a Blended Liberal Studies/credential program is offered.
   - Single Subject, which enables the credential holder to teach one or more of the approved single subjects
   - TED/SPED
     Joint Multiple Subject and Education Specialist Credential in the areas of Mild-Moderate or Moderate-Severe Disabilities

2. Specialist Credential Programs. These credentials are to be obtained concurrent with, or subsequent to, obtaining a basic credential.
   - Reading and Language Arts Specialist Credential
   - Education Specialist Credentials, Levels I and II
     Mild-Moderate Disabilities
     Moderate-Severe Disabilities
   - Education Specialist Internship Credential, Level I
     Mild-Moderate Disabilities
     Moderate-Severe Disabilities

3. Bilingual, Cross-Cultural, Language, and Academic Development (BCLAD) Credential Program

4. Service Credential Programs
   - Preliminary Administrative Services
   - Internship Credential in Administrative Services
   - Professional Administrative Services
   - Pupil Personnel
     a. School Counseling Internship Credential
     b. School Counseling Credential (M.F.T.)
     c. School Psychology Internship Credential
     d. School Psychology Credential (M.F.T.)
     e. Marriage and Family Therapist (M.F.T.)

Certificate Programs
- Children's Literature
- Cross-Cultural, Language, and Academic Development (CLAD)
- Educational Technology Leadership
- Reading

College of Science

The College of Science offers programs that provide a broad education in the physical, life, and health sciences; and in mathematics, statistics, and computer science. The career flexibility available to science students is one of the main advantages of a degree in the science area. The Master of Science programs are designed to allow students who possess appropriate qualifications to deepen their level of knowledge, upgrade their professional skills, and prepare for doctoral study.

Master's Degrees
- Biological Science (M.S.)
- Biological Science (M.A.)
- Biostatistics (M.S.)
- Chemistry (M.S.)
• Computer Networks (M.S.)
• Computer Science (M.S.)
• Construction Management (M.S.)
• Engineering Management (M.S.)
• Geology (M.S.)
• Marine Science (M.S.)
• Mathematics (M.S.)
• Statistics (M.S.)

Certificate Programs
• Applied Statistics
• Biotechnology
• Engineering Management
• Mathematical Statistics
• Quality Management (Engineering)

Interdisciplinary Programs
The interschool graduate interdisciplinary programs are administered by the Associate Vice President of Academic Programs and Graduate Studies.

Master's Degrees
• Interdisciplinary Studies (M.A.)
• Interdisciplinary Studies (M.S.)

Certificate Program
• Special Certificate
Course Number and Description Key

Course Numbering Key

The numbering of courses is intended to describe the level at which they are offered. Any student, however, may enroll for any course if he or she has completed the listed prerequisites, except for certain graduate courses.

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<tr>
<th>Course Number</th>
<th>Description</th>
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<tr>
<td>0800-0999</td>
<td>Remedial courses (not for baccalaureate degree credit)</td>
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<td>1000-1999</td>
<td>Freshman level</td>
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<tr>
<td>2000-2999</td>
<td>Sophomore level</td>
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<tr>
<td>3000-3999</td>
<td>Junior level</td>
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<td>4000-4999</td>
<td>Senior level</td>
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<tr>
<td>5000-5999</td>
<td>Post baccalaureate and professional level</td>
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<td>6000-6999</td>
<td>Graduate level</td>
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<tr>
<td>7000-7699</td>
<td>Upper division level continuing education</td>
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<tr>
<td>7700-7999</td>
<td>Graduate level continuing education</td>
</tr>
<tr>
<td>8000-8999</td>
<td>Doctoral level</td>
</tr>
</tbody>
</table>

Course Units

( ) - Unit credits appear in parentheses following title of course

Class Hours per Week

The number of class hours a course meets per week equals the number of units listed for the course, unless otherwise indicated in the course description. (A "class hour" is 50 minutes.) Supervision courses (e.g., independent study, project, thesis) have no prescribed correspondence between class hours per week and units.

Footnote

1. See quarterly schedule or website (www.ce.csueastbay.edu) of Continuing and International Education for classes offered each quarter.
Graduate Chapters

- Anthropology
- Biological Science
- Biostatistics
- Business Administration
- Chemistry
- Communication
- Computer Networks
- Computer Science
- Construction Management
- Economics
- Education: Interdisciplinary
- Educational Leadership
- Educational Psychology
- Engineering Management
- English
- Geography
- Geology
- Health Care Administration
- History
- Interdisciplinary Studies Majors and Special Certificates
- Kinesiology
- Marine Science
- Mathematics
- Multimedia
- Music
- Public Administration
- Recreation and Tourism
- Social Work
- Sociology
- Speech-Language Pathology
- Statistics
- Teacher Education
Anthropology

- Department Information
- M.A. in Anthropology
- Other Degree Requirements
- Graduate Courses

Department Information

Department of Anthropology
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 3097
Phone: (510) 885-3168
Website: [http://class.csueastbay.edu/anthropology/](http://class.csueastbay.edu/anthropology/)

Professor Emeritus
George R. Miller, Ph.D. University of California, Berkeley

Professors
Laurie J. Price, Ph.D. University of North Carolina, Chapel Hill

Associate Professor
Laura C. Nelson (Chair), Ph.D. Stanford University

Assistant Professors
William Henry Gilbert, Ph.D. University of California, Berkeley
Andrew Wong, Ph.D. Stanford University

Graduate Coordinator: Andrew Wong

M.A. in Anthropology

Program Description

The university offers the Master of Arts degree in Anthropology. Anthropology, the study of humans, provides a cross-cultural and time-depth perspective of humanity as the product of both evolutionary and cultural conditions. Students in this field will learn more about the self in relation to biological and cultural forces and in relation to persons of other ethnic backgrounds. In addition, the Department of Anthropology offers regional courses on the major populations of the world, with particular emphasis placed on North and South America and Asia. Although there are no separate options in the program, students are expected to focus their interests in any two sub-fields of the disciplines: sociocultural, archaeological, biological, or linguistic anthropology.

Student Learning Outcomes

Students graduating with an M.A. in Anthropology from Cal State East Bay will: 1) become familiar with and understand the history of anthropology, the body of anthropological theory, how the four fields of anthropology intersect, and current debates in the discipline; 2) understand how anthropology has been and can be used in practice beyond the scope of academic research; 3) develop professional-level, in-depth knowledge of two or more subdisciplines within anthropology (including applied anthropology); 4) develop expertise in either ethnographic research methods or in archeological field methods; 5) develop the ability to conduct research and compose high-quality reports or papers on their own.

Career Opportunities

- Community College Teacher
- Anthropologist
- Archaeologist
- Artifacts Conservator
- Curator
- Ethnologist
- Foreign Service Officer
- Immigration Service Officer
- International Business
- Multicultural Education Instructor
- Museum Curator
- Park Ranger
- Park Service Official
- Professor/Teacher
- Researcher
- Social Science Teacher
- Travel Consultant
- Urban Planner

Research Facilities

The Clarence E. Smith Museum of Anthropology houses a sizable collection of archaeological artifacts recovered in Alameda and Contra Costa Counties, as well as collections of culture groups throughout the world. The public museum is administered by the department and is also used as an instructional facility. Students have an opportunity for "hands-on" experience in museum work and gallery exhibits, and through related courses in museology and cross-cultural art. The museum, housed in Meiklejohn Hall, is open to the public. For information, call (510) 885-3168 or (510) 885-3104.
Research Support and Teaching Opportunities

There are a number of teaching and teaching-related opportunities, in both classroom and online instruction, available within the department for qualified students, including positions as Teaching Assistants, Readers, and Graduate Writing Instructors. Cal State East Bay offers opportunities for practical training and paid internships through its Cooperative Education Program. In the past, anthropology graduate students have obtained internships at places as nearby as local community colleges and as far away as the Smithsonian Institution.

Admission to the Program

To be admitted to the program with "Conditionally Classified Graduate" status, the student must: (1) meet all Cal State East Bay requirements for admission to the university as a post-baccalaureate student; (2) have a grade point average of at least 2.50 in his or her last 90 quarter (60 semester) units; (3) file a written application with the department (in addition to the official application filed with the Admissions Office); and (4) submit two letters of recommendation for admission to the program from former professors.

Classification in the Program

"Classified Graduate" status implies that the student has demonstrated adequate preparation to pursue graduate work leading to the M.A. degree in Anthropology. Credit can be granted for necessary courses taken with graduate standing at other institutions; deficiencies, if any, can be corrected while registered as a "Conditionally Classified Graduate" student in the program. It should be noted that not more than 15 units of course work (6000 series) in Anthropology taken as a "Conditionally Classified Graduate" student will be applicable. Failure by a student to return to "Classified Graduate" status following completion of 16 additional quarter units shall result in his or her dismissal from the program.

Advancement to Candidacy

Advancement to Candidacy implies that the student has demonstrated the capacity to complete satisfactorily the program leading to an M.A. degree in Anthropology. To be Advanced to Candidacy, a student must file with the department (normally upon completion of 23 course units) an approved program of study to include relevant courses satisfactorily completed, those in progress, and those yet to be taken; and then be recommended for Advancement to Candidacy by the department.

Maintenance of "Classified Graduate" Standing

To maintain "Classified Graduate" standing a grade point average of 3.0 or higher must be achieved in all courses taken in the approved program of study, whether at Cal State East Bay or at any other college or university. If a "Classified Graduate" student's GPA falls below 3.0, s/he shall be dropped from candidacy, if previously attained, and placed in "Conditionally Classified Graduate" status until all deficiencies have been remedied and the student is recommended by the department for reinstatement to "Classified Graduate" status (and candidacy when applicable). Failure by a student to return to "Classified Graduate" status following completion of 16 additional quarter units shall result in his or her dismissal from the program.

Requirements for the M.A. in Anthropology (45 units)

I. Requirements for Advancement to Candidacy

A. Acquire a research skill by successfully completing one year of coursework or equivalency (or demonstrating competence) in one of the following: (1) a foreign language relevant to your area of study, (2) computer and/or multimedia skills, (3) statistics. Students should seek departmental approval of the specific research skill.

B. Complete a minimum of 23 units of anthropological coursework applicable to M. A. requirements, including at least 15 units of graduate-level (6000 series) coursework.

II. Course Requirements

A. Complete 45-46 quarter units of graduate work including the 23 units needed for Advancement to Candidacy.

1. All must be earned within the five years just preceding the completion of the requirements for the degree.
2. Not fewer than 32 must be completed in residence.
3. Not fewer than 26 must be in anthropology courses in the 6000 series.
4. Not more than 13 may be taken in "Unclassified Post-baccalaureate" status and/or for extension and/or transfer course credit, as approved by the department.

B. Required Courses (25-28 units)

1. All students are required to take either:
   - ANTH 6350 Advanced Ethnographic Methods (5) or 6251 Advanced Archaeological Field Methods (5), or ANTH 6260 Graduate Osteology (1) and ANTH 4280 Forensics Osteology (4).
2. Students following the Comprehensive Exam or Thesis Tracks must complete ANTH 6700 Applied Anthropology (4) and any four of the following:
   - ANTH 6100 Seminar in Biological Anthropology (4), 6200 Seminar in Archaeology/Prehistory (4), 6400 Seminar in Socio-Cultural Anthropology (4), 6800 Seminar in Linguistic Anthropology (4), or 6999 Special Topics in Anthropology
3. Students following the Applied Anthropology Track must complete ANTH 6700 Applied Anthropology (4), 6760 Internship Experience (4), 6770 Internship Planning and Analysis (4), and any two of the following:
   - ANTH 6100 Seminar in Biological Anthropology (4), 6200 Seminar in Archaeology/Prehistory (4), 6400 Seminar in Socio-Cultural Anthropology (4), or 6800 Seminar in Linguistic Anthropology (4), or 6999 Issues in Anthropology

C. Elective courses (graduate or upper division) in Anthropology (or outside of Anthropology in one or more closely related fields) taken as a graduate student. Choice of appropriate coursework will be made with consent of Graduate Advisor. Students in the Comprehensive Exam Track must have completed at least two upper division courses (or their equivalent) in each of the fields in which they take their exams. All units used to fulfill comps requirements must be included as elective units. Students in the Applied Anthropology Track are strongly advised to complete at least one course in statistics. (16 units)

D. Capstone Experience (1-5 units)

Complete one of the following:

1. Comprehensive Exam Track: ANTH 6905 (5) and pass a comprehensive examination in two sub-fields of anthropology. Before enrolling in ANTH 6905 students must (a) declare the two sub-fields from socio-cultural, biological, archaeological, and linguistic anthropology in which they intend to take their examination, (b) have taken at least 8 units of upper division coursework within each of the chosen fields, and (c) have the approval of the Department Graduate Coordinator. The examination may be taken only after Advancement to Candidacy and the completion of the appropriate core seminars (ANTH 6100, 6200, 6400, and 6800).
3. Thesis Track: ANTH 6910 University Thesis (1-5)
In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These include the 32-credit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

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Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These include the 32-credit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

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Graduate Courses

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<tr>
<td><strong>5100</strong></td>
<td>Seminar in Biological Anthropology (4) Critical examination of theoretical developments in paleoanthropology and primatology, with emphasis on evolutionary mechanisms. Prerequisites: graduate standing and permission of instructor.</td>
</tr>
<tr>
<td><strong>6200</strong></td>
<td>Seminar in Archaeology/Prehistory (4) Advanced study of methods and theories used in archaeological research, combining discussion of current archaeological literature and individual analysis of available archaeological data. Prerequisites: graduate standing and permission of instructor.</td>
</tr>
<tr>
<td><strong>6251</strong></td>
<td>Advanced Archaeological Field Methods (5) Advanced techniques in surface survey and archaeological excavation, laboratory artifact analysis, and principles of data recording and management. Aspects emphasized will depend on opportunities available. May be repeated once for credit, for a maximum of 10 units. Two hrs. lect., 6 hrs. act.</td>
</tr>
<tr>
<td><strong>6260</strong></td>
<td>Graduate Osteology (1) Identification and interpretation of human skeletal remains. Provides basic study outline and practical examinations for graduate students. Complements ANTH 4280 and ANTH 4260. Recommended Co-requisite: ANTH 4260. Prerequisite: ANTH 1100, BIOL 2010, 2011, 2020 or consent of instructor. A-F grading only. Two hrs. act.</td>
</tr>
<tr>
<td><strong>6350</strong></td>
<td>Advanced Ethnographic Methods (5) Ethnographic research design; wide range of observation and interview methods, introduction to quantitative description, field notes, research ethics, methods of analysis and representation, relevant software programs, oral and written presentation of original field research. May be repeated once for credit, for a maximum of 10 units. Two hrs. lect., 6 hrs. act.</td>
</tr>
<tr>
<td><strong>6400</strong></td>
<td>Seminar in Socio-Cultural Anthropology (4) A critical examination of traditional and contemporary theories and methods in socio-cultural anthropology, including trends in the various subfields of the discipline. Emphasis on student participation in criticism and synthesis of significant theoretical positions. Prerequisites: graduate standing and permission of instructor.</td>
</tr>
<tr>
<td><strong>6700</strong></td>
<td>Applied Anthropology (4) Anthropological principles and methods applied to problems of sociocultural change and cross-cultural communication; community based participatory methods and planning; policy analysis; organizational culture, needs assessment, program evaluation, proposal development.</td>
</tr>
<tr>
<td><strong>6760</strong></td>
<td>Internship Planning and Analysis (4) Training in developing, presenting, and evaluating position papers, proposals, work plans; literature searches; ethics and professional development for work outside academia; active involvement in securing appropriate internship and analyzing the internship experience and data. May be repeated once for credit, for a maximum of 8 units.</td>
</tr>
<tr>
<td><strong>6770</strong></td>
<td>Internship Experience (4) Applied M.A. track internship in an agency or nongovernmental organization, including personal activity log, mid-internship report, internship completion statement, and oral presentation on internship. Prerequisites: ANTH 6350 or 6251. May be repeated once for credit, for a maximum of 6 units. Six hrs. act.</td>
</tr>
<tr>
<td><strong>6800</strong></td>
<td>Seminar in Linguistic Anthropology (4) Seminal work within the subdisciplines of anthropological linguistics, including examples of its application. Prerequisites: graduate standing and permission of instructor.</td>
</tr>
<tr>
<td><strong>6898</strong></td>
<td>Cooperative Education (1-4) Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 3.0 GPA; departmental approval of activity. Only up to 4 units may be applied to the M.A. in Anthropology. May be repeated for credit, for a maximum of 8 units. CR/NC grading only.</td>
</tr>
<tr>
<td><strong>6900</strong></td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>
Independent study in anthropology with concentration on a specific problem under guidance by a faculty sponsor. \textit{Prerequisites: Completion of seminar relevant to the specified problem and consent of instructor.}

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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</table>
| 6905       | Directed Readings in Anthropology (5)  
Selected readings in consultation with two or more appropriate faculty members in preparation for the Master's Comprehensive Written Examination in two sub-fields of anthropology. The reading list and the exams must be consistent with the student's areas of concentration and approved by the Graduate Advisor. |
| 6909       | Departmental Thesis (1-4)  
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. \textit{Prerequisite: "Classified Graduate" standing. Maximum of 4 units per student.} |
| 6910       | University Thesis (1-5)  
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least two of whom must be members of the Department. Oral defense normally required. \textit{(See "University Thesis Writing Guide," [website](www.csueastbay.edu/thesiswritingguide). \textit{Prerequisite: "Advancement to Candidacy." Maximum of 5 units per student.}} |
| 6999       | Issues in Anthropology (4)  
Readings, discussion, and research on contemporary and/or significant issues in anthropology. \textit{May be repeated for credit when content varies, for a maximum of 8 units.} |
Biological Science

M.S. and M.A. in Biological Science

M.S. Degree Requirements

M.A. Degree Requirements

Other Degree Requirements

Certificate in Biotechnology

Graduate Courses

Footnote

Department Information

Department of Biological Sciences
College of Science
Office: North Science 429
Phone: (510) 885-3471
Website: http://www.sci.csueastbay.edu/biology

Professors Emeriti
Bevery A. Dixon, Ph.D. University of Georgia

Professors
Christoph W. Baysdorfer, Ph.D. University of California, Berkeley
Donald A. Gailey, Ph.D. University of California, Los Angeles
Michael S. Hedrick (Chair), Ph.D. University of British Columbia
Christopher L. Kitting, Ph.D. Stanford University
Carol R. Lauzon, Ph.D. University of Vermont
Maria C. Nieto, Ph.D. University of California, Berkeley
Susan B. Opp, Ph.D. University of Massachusetts

Associate Professors
Caron Y. Inouye, Ph.D. University of California, Los Angeles
Claudia Uhde-Stone, Ph.D. University of Bielefeld (Germany)
Erica L. Wildy, Ph.D. Oregon State University

Assistant Professors
Kenneth Curr, Ph.D. Albert Einstein College of Medicine, New York
Maria E. Gallegos, Ph.D. University of Wisconsin, Madison
Stephanie Molloy, Ph.D. University of Auckland, New Zealand
James Murray, Ph.D. University of Washington

Graduate Coordinator: Maria C. Nieto

M.S. and M.A. in Biological Science

The Master of Science and Master of Arts degrees in Biological Science offers students the opportunity to obtain advanced academic and research experience in specialized areas of biological science. The program prepares students for careers or further education in the biological sciences.

Biological science is a fast-changing, exciting field offering students numerous options for rewarding careers and scientific advancement. The M.S. in Biological Science is a research-based thesis program that provides students with opportunities to develop and complete research projects and experiences to enhance advancement and career opportunities in biology. The M.A. in Biological Science is a coursework (non-thesis) program with a comprehensive examination as the culminating experience. Both the M.S. and the M.A. programs require 45 quarter units of coursework.

Student Learning Outcomes

Students graduating with an M.S. or M.A. in Biological Science from Cal State East Bay will be able to: (1) use the scientific method to examine questions about the natural world; specifically, they will be able to formulate testable biological hypotheses, analyze empirical data, and synthesize the results of the analysis; (2) present the design and results of an observational or experimental analysis in a well-organized manner using the scientific paper format; (3) orally communicate the design and results of an observational or experimental study in an effective manner; (4) evaluate primary scientific literature and judge the value of the information presented in relation to particular biological questions.

Career Opportunities

Students interested in careers that involve research or interested in pursuing a Ph.D. should consider the M.S. degree in Biological Science. Examples of M.S. study areas in the department are environmental biology, ecology, population biology, marine biology, physiology, neurobiology, cell and molecular biology, microbiology, genetics, and virology. Students interested in career advancement in fields that do not involve research, such as teaching, management, or health professions (including dental, medical, pharmacy, or veterinary practice) should consider the M.A. degree in Biological Science.

Faculty

The Biological Science faculty is comprised of 14 full-time professors at Cal State East Bay. The faculty are committed to excellence in teaching and research, and many of the faculty have federal, state, and private research grant support.

Related Programs

The Biotechnology Certificate Program within the department is a post-baccalaureate program emphasizing molecular and cellular techniques.
For more information about the Biototechnology Certificate Program refer to the Certificate in Biotechnology section of this chapter.

The M.S. degree in Marine Science is offered at Moss Landing Marine Laboratories (MLML), located on Monterey Bay, for students from Cal State East Bay and seven other California State University consortium schools. Graduate students from Cal State East Bay majoring in other areas of study may also take such courses at Moss Landing as are appropriate for their degree objectives. Contact the Biological Sciences Department for application forms and deadlines for this program. For more information on the M.S. in Marine Sciences refer to the Marine Science chapter in the graduate section of this catalog.

Research Facilities

Department facilities for student research and study include invertebrate, vertebrate, and entomology museums; herbarium; greenhouse; insectary; radiation hot lab; microbiology facilities; cell culture facilities; animal rooms; molecular biology labs; microscope facilities including phase, differential interference contrast and fluorescence microscopy; and DNA sequencing and cell storage facilities. Local field opportunities may be found at a wetlands field station at the San Francisco Bay National Wildlife Refuge, the brackish and salt water marshes of the Hayward Regional Shoreline of San Francisco Bay, and a 35-acre oak-grassland preserve located immediately adjacent to the Hayward Hills campus and contiguous with Garin Regional Park (one of the East Bay Regional Parks).

Research and Financial Support

Research space is available to all "Classified Graduate" students in the M.S. in Biological Science program, usually in the major advisor's research lab. Limited funds for graduate research supplies are available each year from the department budget. Graduate research grants are available annually on a competitive basis through Academic Programs and Graduate Studies and can be used to purchase supplies or pay travel expenses for graduate research. In addition, research assistantships are available for some students through faculty research grants. Teaching assistantships may become available for a given quarter. As financial aid within the department is limited, you may want to contact the Financial Aid Office regarding other assistance from the University Work-Study Program, loans, scholarships, etc.

Admission Requirements

1. The M.S. and M.A. degree programs in the Department of Biological Sciences is open to graduates of accredited institutions who have a four-year baccalaureate degree in any field of the biological sciences and who have achieved a GPA of at least 2.75 in all undergraduate work and an average of 3.00 in all biological science courses taken as an upper division student. Normally, all applicants should have completed undergraduate courses equivalent to those required of all biological science majors at Cal State East Bay. Applicants must have taken basic courses in biological and physical sciences and mathematics/statistics; areas omitted, if any, will be treated as course deficiencies and must be completed by the time of classification (see below).

2. In addition to filing the university application and fee, students must apply to the Department of Biological Sciences for admission to graduate standing in the M.S. or M.A. degree program. Application forms are available through the department office or by accessing the Biology Department website. In addition to the GPA requirements for admission mentioned in #1, the department requires that the following be sent directly to the Department of Biological Sciences:
   - departmental application
   - GRE General Test Scores (target scores are in the upper 30th percentile; significant deviation from target scores may be grounds for denial of admission)
   - three letters of reference
   - statement of purpose

   Applicant files will not be reviewed or processed until the application file is complete; this is the applicant's responsibility. During the admission process, students interested in the M.S. program are encouraged to obtain information about research interests of the faculty and to contact faculty members who could potentially serve as thesis advisors.

3. All students admitted to the program will be admitted as "Conditionally Classified Graduate" students.

4. Those students applying for admission to the program with the intent of obtaining an M.S. degree in Marine Sciences from work done at Moss Landing Marine Laboratories must gain admission into "Conditionally Classified Graduate" status as stated above. However, the classification procedures as stated below WILL NOT apply for these students; instead, once admitted to the program as "Conditionally Classified Graduate" students, they will follow MLML’s classification procedures (see the Marine Science chapter in the graduate section of this catalog).

5. Any student not admitted to the program because of incomplete application, deficiency, or failure to meet deadlines is urged to enroll in the university as an "Unclassified Post-baccalaureate" student pending completion and/or reconsideration of the application for classification.

6. No more than 13 quarter units of courses applicable toward the master's degree completed before admission to the program may be counted toward the degree.

Note: Although not an admission requirement, satisfaction of the University Writing Skills Requirement (UWSR) must begin during the first quarter of admission to the program and must be completed before a student can become a fully "Classified Graduate" student.

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M.S. Degree Requirements

A "Conditionally Classified Graduate" student must become a fully "Classified Graduate" student in the program as set forth in 1, 2, 3, and 4 below, if applicable, within four quarters of acceptance into the Master's program or the "Conditional Classification" will expire and the student will be placed in "Unclassified Post-baccalaureate" status. It is the responsibility of the student to make sure these requirements are met within the specified time limits.

1. Establish a three-person graduate advisory committee. At least two faculty members from the Department of Biological Sciences will serve as members of the graduate advisory committee. One faculty member from the department will normally be the major advisor in guiding the student in graduate training. Other members of the committee will be chosen in consultation with the major advisor. The committee will advise on and approve the student's final program including any work and research units counted toward the degree. This advisory committee will also administer the oral examination at the completion of the thesis.

2. Complete basic course deficiencies. If the student lacks basic courses in biological or physical sciences, or mathematics/statistics, these courses must be completed by the end of the fourth quarter following admission to the program. In addition, the student's advisory committee may also determine that there are other course deficiencies that need to be satisfied.

3. Research proposal. The student must submit a formal research proposal to the departmental Graduate Committee. The department office or Graduate Coordinator has examples of these proposals and their format. The proposal must be approved by the student's advisory committee (item 1 above) and submitted to the Graduate Coordinator by the first day of the quarter in which the student wants to begin taking thesis units. If the work is to be done in an off-campus location, a letter of agreement must be included that indicates a mutual understanding and responsibility between the off-campus supervisor, Cal State East Bay, and the student.

4. University Writing Skills Requirement. The University Writing Skills Requirement must be satisfied. (See Graduate Degree Information chapter in this catalog.)
Advanced to Candidacy

The student must have:

1. attained "Classified Graduate" standing
2. completed at least 12 quarter units of satisfactory work beyond the baccalaureate degree suitable for inclusion in an M.S. program in Biological Science as approved by the student's graduate advisory committee. At least 3 quarter units of graduate level coursework in residence at Cal State East Bay must be included. (You must maintain a 3.00 GPA in your degree coursework to remain in good standing.)
3. received approval from his or her advisory committee for an individual research program.

Curricular Requirements (45 units)

A total of 45 quarter units is required beyond the baccalaureate with a GPA of 3.0 or above and no grade lower than "C" in courses included in the program, and with specific requirements as follows:

1. BIOL 6910 University Thesis (9 units)
   Complete copies of the University Thesis must be submitted, in accordance with the rules set forth by the Thesis Editor in the Office of the Associate Vice President, Academic Programs and Graduate Studies, to the chair of the candidate's advisory committee by the sixth week of the quarter at the end of which the degree is desired.
2. Graduate courses in Biology (14-36 units) in area of specialization or in areas related to it as approved by the student's advisory committee, included must be at least one, but not more than two, graduate seminars in the area of special concentration. (May include a maximum of 4 units of Independent Study (BIOL 6900); in certain circumstances exceptions may be granted by the departmental Graduate Committee.)
3. Upper division undergraduate Biology Majors courses (0-22 units) taken as a graduate student and approved by the advisory committee as appropriate to the student's objective. No courses that are required for B.A. or B.S. Biological Sciences students, or those that are designated for non-majors, may be counted toward the M.S. degree.
4. An oral examination administered by the advisory committee covering the candidate's area of specialization and thesis research. This examination will be publicized and open to all faculty.

Granting the Degree

Upon successful completion of the above requirements, the department will recommend that the candidate be granted the M.S. degree.

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M.A. Degree Requirements

A "Conditionally Classified Graduate" student must become a fully "Classified Graduate" student in the program as set forth in 1, 2, and 3 below, if applicable, within four quarters of acceptance into the Master's program or the "Conditional Classification" will expire and the student will be placed in "Unclassified Post-baccalaureate" status. It is the responsibility of the student to make sure these requirements are met within the specified time limits.

1. Specify the area of proposed course and comprehensive exam specialization in writing to the Department of Biological Sciences. Examples of areas of specialization are available from the department or Graduate Coordinator.
2. Complete basic course deficiencies. If the student lacks basic courses in biological or physical sciences, or mathematics/statistics, these courses must be completed by the end of the fourth quarter following admission to the program.
3. University Writing Skills Requirement. The University Writing Skills Requirement must be satisfied. (See Graduate Degree Information chapter in this catalog.)

Advanced to Candidacy

The student must have:

1. attained "Classified Graduate" standing
2. completed at least 12 quarter units of satisfactory work beyond the baccalaureate degree suitable for inclusion in the M.A. program in Biological Science as approved by the graduate advisory committee. At least 3 quarter units of graduate level coursework in residence at Cal State East Bay must be included. (You must maintain a 3.00 GPA in the degree coursework to remain in good standing.)
3. met with a faculty advisor in the student's area of course and comprehensive examination specialization to plan for the comprehensive examination.
4. registered for 2 units of BIOL 6901 Comprehensive Examination Preparation in the spring quarter of the year in which the comprehensive examination is to be completed.

Curricular Requirements (45 units)

A total of 45 quarter units is required beyond the baccalaureate with a GPA of 3.0 or above and no grade lower than "C" in courses included in the program, and with specific requirements as follows:

1. Graduate courses in Biology (21-43 units) in area of specialization as approved by the student's graduate advisor; included must be at least one, but not more than two, graduate seminars in the area of special concentration. (May not include units of Cooperative Education (BIOL 6898), Independent Study (BIOL 6900), or University Thesis (BIOL 6910).)
2. Upper division undergraduate Biology majors courses, (0-22 units) taken as a graduate student and approved by the advisory committee as appropriate to the student's objective.
3. BIOL 6901 Comprehensive Examination Preparation (2 units); taken in spring quarter in the final year of the program.
4. Successful completion of comprehensive written examination in area of specialization in Biological Sciences.

Granting the Degree

Upon successful completion of the above requirements, the department will recommend that the candidate be granted the M.A. degree.

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Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills Requirement (UWSR). For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or
Certificate in Biotechnology

This certificate program consists of 34 units and is designed to give recognition to students who complete a curriculum emphasizing cellular and molecular techniques. This is an appropriate capstone for biology or chemistry students and is preparatory for careers in industrial and academic biological research, development, and production. The Biotechnology Certificate Program requires 34 units of advanced work. The laboratory courses, important to this program, emphasize a "hands-on" approach with close faculty supervision. In addition to experimental techniques, safety standards and quality control are also stressed. Courses are scheduled in a non-conflicting pattern so that a full-time student entering this program can complete the requirements in one academic year. There are over 300 biotechnology companies in the Bay Area with a growing demand for employees skilled in the technical subjects herein outlined. Seven faculty members from the Departments of Biological Sciences and Chemistry share the responsibility for this program and play an active role in arranging employment interviews for students who successfully complete this certificate program.

Admission to the Program

The Certificate Program in Biotechnology is open to undergraduates and graduates of accredited institutions who have a degree major in any field of biological sciences or chemistry and who have achieved a GPA of at least 2.75 in the major and at least 3.0 in the prerequisite courses. Applicants failing to meet these criteria may petition the Biotechnology Committee for a waiver of these requirements.

Prerequisites

Applicants must have majored in biology or chemistry, and have completed the courses listed below or their equivalents. Participants in this program will be selected by the Biotechnology Committee of the Department of Biological Sciences.

- BIOL 3121 Principles of Genetics (taken within last 3 years)
- BIOL 3405 Microbiology
- BIOL 4455 Molecular Cell Biology (taken within last 3 years)
- CHEM 4411 General Biochemistry

Continued Participation in the Program

Students must achieve a minimum grade of "B" in each required course for continued participation and pass a comprehensive written examination upon completion of the program. Students who have a baccalaureate degree and wish to combine the Biotechnology Certificate with an M.S. in Biological Science should be aware that only 13 units earned prior to admission to the Master's Program may be applied to a graduate degree. Students wishing to pursue the M.S. degree in Biological Science must also complete the application process to be considered for the M.S. degree.

Curricular Requirements

Required Courses (34 units)

- BIOL 4450 Cell Culture Techniques (4)
- BIOL 4485 PCR, DNA Sequencing and Fragment Analysis (4)
- BIOL 4490 Bioinformatics (4)
- BIOL 6141 Advanced Molecular Techniques (4)
- BIOL 6147 Functional Genomics (4)
- BIOL 6151 Cell and Molecular Biology I (5)
- BIOL 6152 Cell and Molecular Biology II (5)
- CHEM/BIOL 6430 Protein Chemistry Techniques (4)

Graduate Courses

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<thead>
<tr>
<th>Course Number</th>
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<tbody>
<tr>
<td>6120</td>
<td>Environmental Experimental Analysis (4)</td>
</tr>
<tr>
<td>6141</td>
<td>Advanced Molecular Techniques (4)</td>
</tr>
<tr>
<td>6142</td>
<td>Microbial Symbioses (4)</td>
</tr>
<tr>
<td>6143</td>
<td>Molecular Microbiology (4)</td>
</tr>
<tr>
<td>6147</td>
<td>Functional Genomics (4)</td>
</tr>
<tr>
<td>6151, 6152</td>
<td>Cell and Molecular Biology I, II (5, 5)</td>
</tr>
</tbody>
</table>
control of gene expression, and protein synthesis, cell division and differentiation. Prerequisites: BIOL 4455 or equivalent, and at least one quarter of biochemistry.

6160 Community and Ecosystem Ecology (4)
Structure, dynamics and distributional aspects of ecological communities and energy flow relations in whole ecosystems. Lectures and intensive field work in selected communities, with emphasis on those of central California. Recommended: advanced taxonomic courses in zoology. Prerequisite: BIOL 3110 or equivalent. Two hrs. lect., 6 hrs. field (or lab).

6175 Population Biology (4)
Study of the sizes and distributions of plant and animal populations. Processes affecting reproduction, age structure, density and population fluctuations. Recommended for students interested in ecology, conservation, or environmental biology. Required project, designed, implemented and analyzed by student. Prerequisites: BIOL 3110 or equivalent and statistics or consent of instructor. Not open to students with credit for BIOL 4175. Three hrs. lect., 3 hrs. lab.

6300 Environmental Microbiology (4)
Examination of regulatory mechanisms of animal organ systems using controlled laboratory experiments, with an emphasis on physiological diversity and adaptation. Required project, designed, implemented and analyzed by student. Prerequisite: BIOL 3405 or consent of instructor. A-F grading only.

6310 Environmental Toxicology (4)
Principles and theories of conservation biology, including biodiversity, extinction, habitat fragmentation, captive-breeding programs, restoration ecology, and the role of humans in western U.S. Prerequisites: BIOL 1401, 1402, 1403, 3110 or equivalent. Required project, designed, implemented and analyzed by student. Prerequisite: BIOL 3405 or consent of instructor. A-F grading only.

6340 Water Quality and Human Health (4)
An examination of the physiological adaptations that animals use to cope with their environments, emphasizing the physiological regulation. Prerequisite: BIOL 3405 or consent of instructor. A-F grading only.

6350 Environmental Microbiology (4)
Prerequisite: BIOL 3405 or consent of instructor. A-F grading only.

6405 Microbial Physiology and Biochemistry (4)
Emphasis on the study of microbial function and biology required to fully understand microbial growth relevant to medical and economic importance, including the exploitation of microbial processes for biotechnological advancement. Graduate project required. Prerequisites: BIOL 3405 and CHEM 3400, or equivalent. Not open to those with credit for BIOL 4405.

6435 Water Quality and Human Health (4)
Exploration of the connections between water quality and human health. Topics include the influence of waterborne pathogens on human health, detection of microbes in the environment, transmission and fate of health-related microbes, and water quality regulation. Prerequisite: BIOL 4350 or consent of instructor. A-F grading only.

6500 Quantitative Methods in Physiology (2)
Quantitative treatment and analysis of physiological data using modern methods including applied statistics, spread sheets, graphical methods and data presentation. Prerequisites: BIOL 3151, STAT 3031, or consent of instructor. Not open to students with credit for BIOL 4500.

6504 Comparative Physiology (4)
Physiology of metabolic, respiratory, circulatory, excretory, muscle, and nervous systems of vertebrate and invertebrate animals with an emphasis on physiological diversity and adaptation. Required project, designed, implemented and analyzed by student. Prerequisite: BIOL 3151 or consent of instructor. Not open to students with credit for BIOL 4504.

6506 Animal Physiology Laboratory (3)
Examination of regulatory mechanisms of animal organ systems using controlled laboratory experiments, with an emphasis on experimental design and data analysis. An independent research project and oral presentation of these results will be required. May be taken concurrently or following BIOL 6504 or BIOL 6516. Prerequisite: BIOL 3151 or equivalent, or consent of instructor. Not open to students with credit for BIOL 4506. One hr. lect., 6 hrs. lab.

6513 Animal Senses (4)
Advanced study of how animals use remarkable sensory abilities to communicate, navigate, and detect prey, predators and mates. We will focus on extreme and unusual sensory systems such as echolocation, electroreception, and magnetoreception, as well as vision, smell, touch, and hearing. Prerequisite: BIOL 3151 or permission of instructor.

6515 Neurobiology (4)
The structure and function of the vertebrate and invertebrate nervous system with emphasis on the principles of communication, control, and sensorimotor responses. Survey of concepts of neurochemistry, feedback, learning, and high brain processes. Students are required to make oral and written presentations of a current topic in neurobiology. Prerequisites: BIOL 3151 or equivalent, or consent of instructor. Not open to students with credit for BIOL 4510.

6516 Environmental Animal Physiology (4)
An examination of the physiological adaptations that animals use to cope with their environments, emphasizing the physiological responses of species to extreme environments. Students to present (in oral and written format) and lead discussion on recent research on certain topics in environmental physiology. Prerequisite: BIOL 3151 or equivalent, or consent of instructor. Not open to students with credit for BIOL 4510.

6517 Environmental Toxicology (4)
Exploration of the physiological effects of exposure to environmental toxicants in animals, from the subcellular to organizational levels. Concepts covered include routes of exposure, modes of action, and metabolism, as well as how toxicants are monitored and regulated. Oral presentation and terminal assignment required. Prerequisite: BIOL 3151, CHEM 4411, or equivalents, or consent of instructor. A-F grading only.

6520 Mammalian Physiology Laboratory (3)
Advanced treatment of regulatory mechanisms in mammalian organ systems. Laboratory techniques of anesthesia, surgery, instrumentation and data analysis. Emphasis on cardiovascular, respiratory, renal and gastrointestinal physiology. Terminal project required. Prerequisites: BIOL 3151 or equivalent. Not open to students with credit for BIOL 4520. One hr. lect., 6 hrs. lab.

6525 Neural Development (4)
Survey of various aspects of vertebrate and invertebrate neural development including neurogenesis, neuron polarity, axon/dendrite guidance, target selection and synapse formation. Prerequisite: BIOL 3121 or consent of instructor. A-F grading only.

6530 Ecological Methods (4)
Methods of design and analysis of ecological studies, including sampling techniques, field and laboratory measurements, and computer-aided data analysis including introductory modeling. Recommended ecological field project, designed, implemented and analyzed by student. Recommended: statistics course. Prerequisites: BIOL 1401, 1402, 1403 or equivalents; BIOL 3110, and graduate standing. Three hrs. lect., 3 hrs. lab/field.

6801 Graduate Seminar-Ecology (3)
A seminar in ecology, with a different theme or subject area to be chosen each year. Course based on papers presented by
6811 Graduate Seminar-Physiology (3)
A seminar course dependent upon papers presented by students enrolled. The specific subject area of physiology will be chosen each year. Prerequisite: graduate standing in biology or consent of instructor. May be repeated once for credit, for a maximum of 6 units.

6821 Graduate Seminar in Cell and Molecular Biology (3)
A seminar course involving presentation and discussion of current research literature in cell and molecular biology. The specific subject matter will be at the discretion of the instructor. Prerequisite: graduate standing in biology or consent of instructor. May be repeated once for credit, for a maximum of 6 units.

6822 Biotechnology Colloquium (4)
Biotechnology as science and business. Therapeutics research/design, diagnostics, and marketing analyzed via student presentations/industry guest speakers. Note: Enrollment restricted to M.S. Biological Science students with prior permission of graduate advisory committee, or instructor. Not for undergraduate credit.

6831 Graduate Seminar in Microbiology (3)
A seminar course based on papers presented by students enrolled. A different subject area in microbiology will be chosen each quarter of offering. Prerequisite: graduate standing or consent of instructor. May be repeated once for credit, for a maximum of 6 units.

6841 Graduate Seminar in Neuroscience (3)
Presentation and discussion of current research in neuroscience. The specific subject area of neuroscience will be chosen each quarter. Prerequisites: BIOL 4510; graduate standing in Biology, or consent of instructor. May be repeated once for credit, for a maximum of 6 units.

6898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 3.0 GPA; departmental approval of activity. Only 4 units applicable to biology graduate degree. May be repeated for credit for a maximum of 8 units.

6900 Independent Study (1-4)

6901 Comprehensive Examination Preparation (2)
Preparation for graduate comprehensive examination. Directed readings and review of sample questions. Classified graduate student in Biological Sciences. Declared Plan C. May not be repeated for credit. CR/NC grading only.

6910 University Thesis (1-9)
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See "University Thesis Writing Guide," available online at www.csueastbay.edu/thesiswritingguide.) Prerequisite: graduate standing. May be repeated for credit, for a maximum of 9 units. CR/NC grading only.

6999 Issues in Biological Science (2-4)
Readings, discussion, and research on contemporary and/or significant issues in biological science. May be repeated for credit when content varies, for a maximum of 8 units.

See the Marine Science chapter for descriptions of the following courses. (The course prefix for the following courses is MSC.)

Offered at the Moss Landing Marine Laboratories.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>6202</td>
<td>Oceanographic Instrumentation (6)</td>
</tr>
<tr>
<td>6204</td>
<td>Sampling and Experimental Design (6)</td>
</tr>
<tr>
<td>6206</td>
<td>Molecular Biological Techniques (6)</td>
</tr>
<tr>
<td>6208</td>
<td>Scientific Methods (6)</td>
</tr>
<tr>
<td>6211</td>
<td>Ecology of Marine Birds and Mammals (6)</td>
</tr>
<tr>
<td>6212</td>
<td>Advanced Topics in Marine Vertebrates (6)</td>
</tr>
<tr>
<td>6221</td>
<td>Advanced Topics in Marine Invertebrates (6)</td>
</tr>
<tr>
<td>6231</td>
<td>Biology of Seaweeds (6)</td>
</tr>
<tr>
<td>6233</td>
<td>Advanced Topics in Marine Ecology (1.5-6)</td>
</tr>
<tr>
<td>6234</td>
<td>Advanced Biological Oceanography (6)</td>
</tr>
<tr>
<td>6271</td>
<td>Population Biology (4.5)</td>
</tr>
<tr>
<td>6272</td>
<td>Subtidal Ecology (6)</td>
</tr>
<tr>
<td>6273</td>
<td>Marine Environmental Studies of the Gulf of California (6)</td>
</tr>
<tr>
<td>6274</td>
<td>Advanced Topics in Oceanography (1.5-6)</td>
</tr>
<tr>
<td>6280</td>
<td>Scientific Writing (3)</td>
</tr>
<tr>
<td>6285</td>
<td>Graduate Seminar in Marine Science (3)</td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1.5-6)</td>
</tr>
</tbody>
</table>
Footnote

1. Courses listed under Marine Science at Moss Landing Marine Laboratories are offered on a semester basis in the fall and spring. Semester units have been converted to quarter units.
Biostatistics

- Department Information
- Program Description
- M.S. in Biostatistics
- Other Degree Requirements
- Graduate Courses
- Footnotes

Department Information

Department of Statistics and Biostatistics
College of Science
Office: North Science 229
Phone: (510) 885-3435

Professors Emeriti
Julia A. Norton Ph.D. Harvard University
Bruce E. Trumbo, Ph.D. University of Chicago

Professor
Eric A. Suess (Chair), Ph.D. University of California, Davis

Associate Professor
Mitchell R. Watnik, Ph.D. University of California, Davis

Assistant Professors
Lynn Eudey, Ph.D. University of California, Berkeley
Shenghua (Kelly) Fan, Ph.D. University of Minnesota
Joshua D. Kerr, Ph.D. University of California, Davis
YanYan Zhou, Ph.D. University of Maryland

Graduate Coordinators: Lynn Eudey

Program Description

The Department of Statistics and Biostatistics offers graduate study leading to the degree Master of Science in Biostatistics. The program is designed to serve the needs of students with varying backgrounds in Statistics, Biological Sciences, Public Health, Computer Science, Mathematics and other sciences. The program includes curriculum designed to prepare students to work in the pharmaceutical and biotech industries. All students are expected to master a wide variety of applied statistical and probabilistic techniques and the theoretical foundations on which these techniques rest. They are expected to be familiar with recent developments and to be able to use the statistical literature to learn new techniques and theories throughout their professional careers. In addition to the general requirements stated elsewhere in this catalog, a student must satisfy the departmental requirements stated in the following paragraphs.

Student Learning Outcomes

Students graduating with an M.S. in Biostatistics from Cal State East Bay will have achieved the following:

1. theoretical, interpretive and basic computational skill in (a) descriptive statistics, probability, and graphical displays, (b) distributions, hypothesis testing and confidence intervals, and (c) uncertainty, likelihood, modeling and error analysis;
2. ability to derive basic theory and communicate to others involving (a) descriptive statistics, probability, and graphical displays, (b) distributions, hypothesis testing and confidence intervals, (c) uncertainty, likelihood, modeling and error analysis;
3. ability to formulate problem solutions, produce appropriate computer code and to decipher standard computer results covering (a) descriptive statistics, probability, and graphical displays, (b) distributions, hypothesis testing and confidence intervals, (c) uncertainty, likelihood, modeling and error analysis.

Admission Requirements

1. A baccalaureate degree or equivalent.
2. Differential and Integral Calculus, including multiple integration and infinite series.
3. Departmental approval.
4. For "Classified Graduate" status, fulfillment of the University Writing Skills Requirement.

In addition to the above minimal requirements for admission, if students have some of the following background they will be at an advantage both as to selection for the program and optimal progress toward the degree if admitted:

- basic statistics and probability at the level of STAT 3401, 3502 (or beyond)
- additional mathematics at the level of MATH 2101 and 3100 or 3300 (or beyond)
- knowledge of a computer programming language
- coursework in biology and/or health sciences
- experience in a setting where studies or experiments are conducted for the collection of data

Advancement to Candidacy Requirements

1. Completion of at least 15 quarter units of approved work beyond the baccalaureate, with an average of "B" (3.0) or higher.
2. Departmental approval. (May be contingent upon a written or oral qualifying examination.)
Degree Requirements

Successful completion of the following unit, grade, and course requirements.

A. Unit and Grade Requirements

The M.S. in Biostatistics program consists of at least 48 quarter units of approved upper division and graduate work. At least 44 of these units must be approved graduate (6000 level) courses. All work applied toward the 48 quarter units must be at an average grade of "B" (3.0) or higher. No graduate-level course may be at a grade below "B-.”

B. Course Requirements (48 units)

Additional courses referred to in section # 3 below must be approved in writing in advance by an advisor.

1. Required First Year Courses (24 units)
   - STAT 6204 Probability Theory (4)
   - STAT 6205 Statistical Theory (4)
   - STAT 6250 SAS Programming (4)
   - STAT 6304 Advanced Statistical Inference (4)
   - STAT 6305 Analysis of Variance Models (4)
   - STAT 6509 Theory and Application of Regression (4)

   Students entering the program with acceptable credit for any of these courses (or equivalents) will select additional courses from approved graduate-level coursework, section # 3 below, or courses from other departments designated as acceptable by a graduate advisor.

2. Required Second Year Courses (24 units)
   - BSTA 6651 Analysis of Categorical Data in Biostatistics (4)
   - BSTA 6652 Survival Analysis in Biostatistics (4)
   - BSTA 6653 Clinical Trials in Pharmaceutical and Biomedical Industries (4)
   - STAT 6501 Mathematical Statistics I (4)
   - STAT 6502 Mathematical Statistics II (4)
   - Select one course from the following:
     - BSTA 6690 1 Statistical Bioinformatics (4)
     - STAT 6401 Advanced Probability I (4)

3. Additional Courses

Students with department approval can select courses in Biostatistics, Biological Sciences, Computer Science, Mathematics, or Statistics. A partial list of courses is given below:

   - BSTA 6690 Statistical Bioinformatics (4)
   - BSTA 6843-6849 Selected Topics in Biostatistics (4)
   - STAT 6310 Advanced Stochastic Processes and Simulation (4)
   - STAT 6401 Advanced Probability I (4)
   - STAT 6402 Advanced Probability II (4)
   - STAT 6515 Advanced Multivariate Analysis (4)
   - STAT 6550 Bayesian Statistics (4)
   - STAT 6555 Statistical Time Series Analysis (4)
   - STAT 6601 Advanced Statistical Computing (4)
   - STAT 6860-6864 Selected Topics in Graduate Probability and Statistics (4)
   - STAT 6898 Co-operative Education (1-4)
   - STAT 6900 Independent Study (1-4)
   - MATH 3100 Linear Algebra (4)
   - MATH 3300 Analysis I (4)

Comprehensive Examination

Successful completion of a departmental examination is required. This written examination will cover the contents of the courses in the candidate's approved program. Other material may be included, the general nature of which will be specified in advance. The examination will generally be given only in the Fall and Spring quarters, and will cover both applied and theoretical topics.

In each quarter of offering, the department Chair will appoint three or more members of the graduate faculty to administer the examination. Each student will generally take the comprehensive examination in the quarter s/he intends to graduate or in the preceding quarter, after consulting with the graduate advisor. The examination committee is the final departmental authority in deciding eligibility to take the examination.

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Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement (UWSR). For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

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Graduate Courses

Biostatistics (Course Prefix: BSTA)
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>6651</td>
<td><strong>Analysis of Categorical Data in Biostatistics (4)</strong>&lt;br&gt;Applied methods for discrete data in Biostatistics. Topics may include: proportions and counts, contingency tables, loglinear models, logistic regression, Poisson regression, generalized linear models. Data integrity. Computing techniques and analysis of discrete data. Use of SAS. Report writing. <strong>Prerequisites:</strong> STAT 6205, 6250, 6305, 6509. <strong>Cross-listed with STAT 6651.</strong></td>
</tr>
<tr>
<td>6652</td>
<td><strong>Survival Analysis in Biostatistics (4)</strong>&lt;br&gt;Applied methods for survival analysis in Biostatistics. Incomplete data, censored and truncated data, life tables, nonparametric methods, parametric methods, accelerated failure time models, proportional hazards models, partial likelihood, advanced topics. Data integrity. Computing techniques and analysis of clinical data. Use of SAS. Report writing. <strong>Prerequisite:</strong> BSTA 6651.</td>
</tr>
<tr>
<td>6653</td>
<td><strong>Clinical Trials in the Pharmaceutical and Biomedical Industries (4)</strong>&lt;br&gt;Statistical principles, design, and management of clinical trials. Recruitment, treatment allocation, randomization, blocking, and blinding. Practical applications of advanced statistical procedures for clinical trial data. Ethics of clinical trials design, data collection, data analysis and reporting. Data integrity. Data monitoring. Domestic/International regulatory guidelines emphasized. Use of SAS. Professional protocols are studied. Formal report writing and oral presentation. <strong>Prerequisite:</strong> BSTA 6652.</td>
</tr>
<tr>
<td>6690</td>
<td><strong>Statistical Bioinformatics (4)</strong>&lt;br&gt;Statistical analysis of genomic data. Includes probability and statistics application to DNA sequence analysis, phylogenetic inference, statistical population genetics and genetic mapping, statistical molecular evolution, and macromolecular structure prediction. Emphasis on large datasets. <strong>Prerequisite:</strong> STAT 6310. A-F grading only.</td>
</tr>
<tr>
<td>6843-6849</td>
<td><strong>Selected Topics in Biostatistics (4)</strong>&lt;br&gt;Topics in biostatistics. Variable content to be specified at time of offering. <strong>Prerequisites:</strong> STAT 6305 and graduate standing. May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units. <strong>Cross-listed with STAT 6843-6849.</strong></td>
</tr>
<tr>
<td>6999</td>
<td><strong>Issues in Biostatistics (4)</strong>&lt;br&gt;Readings, discussion, research, and applications on contemporary and/or significant issues in Biostatistics. <strong>May be repeated for credit when content varies, for a maximum of 8 units.</strong></td>
</tr>
</tbody>
</table>

**Footnotes**

1. **Prerequisite:** STAT 6310 Advanced Stochastic Processes and Simulation<br>2. Students considering additional graduate education in Statistics or Biostatistics are strongly advised to take advanced mathematics coursework.

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Business Administration

- Department Information
- Description of Programs
- M.B.A.
- M.S.B.A.: Information Technology Management Option
- M.S. in Taxation
- Other Degree Requirements
- Transfer of Courses
- Taxation Certificate
- Graduate Courses
- Footnotes
- Errata (Note: Please see Errata page for corrections to this content.)

Department Information

College of Business and Economics
Graduate Programs Office (VBT 430, 510-885-2419)
Email: cbe_grad@csueastbay.edu
Website: www20.csueastbay.edu/cbe/grad-advising.html

Dean: Terri Swartz
Deans Office: Valley Business and Technology Bldg., Rm 447
Phone: (510) 885-3291

Department of Accounting and Finance

Location: VBT 442
Phone Number: 510-885-3397

Professor Emeritus
Doris G. Duncan, Ph.D. Golden Gate University
Franklin Lowenthal, Ph.D. Stanford University

Professors
Micah Frankel (Chair), Ph.D. University of Arizona
Ching-Lih Jan, Ph.D. University of California, Berkeley
Christopher W. K. Lubwama, Ph.D. Simon Fraser University (Canada)
Nancy R. Mangold, Ph.D. University of California, Berkeley
Gary R. McBride, LL.M. Georgetown University Law Center
Diane Salin, Ph.D. University of California, Berkeley

Associate Professors
Siu-Kuen Scott Fung, D.B.A. Boston University
Y. Robert Lin, Ph.D. University of California, Los Angeles
Fung-Shine Pan, Ph.D. University of California, Berkeley
Tammie X. Simmons-Mosley, Ph.D. University of Wisconsin-Madison

Assistant Professors
Eric Fricke, Ph.D. Pennsylvania State University
M. Sinan Goktan, Ph.D. The University of Texas at Dallas
Szu-Yin (Kathy) Hung, Ph.D. The George Washington University
Wenju (Jerry) Liu, Ph.D. University of Wisconsin
Kim Shima, Ph.D. University of Hawai‘i at Manoa
John K. Tan, Ph.D. University of South Florida
Jing-wen Yang, Ph.D. University of Maryland

Department of Economics

Location: VBT 442
Phone Number: 510-885-3265

See the graduate Economics chapter for a listing of Economics faculty and a description of the Economics major.

Department of Management

Location: VBT 440
Phone Number: 510-885-3307

Professor Emeritus
Stephen H. Miller, Ph.D. Purdue University

Professors
Xinjian Lu (Chair), Ph.D. University of Waterloo, Canada
Bijan Mashaw, Ph.D. Clemson University
Kenneth Pefkaros, Ph.D. University of Delaware
Zinovy Radovitsky, Ph.D. Scientific Research Institute of Labor (Moscow)
Asha Rao, Ph.D. Temple University
Harry Waters, Jr., Ph.D. University of Oregon

Associate Professors
Jed DeVano, Ph.D. Stanford University
The mission of the College of Business and Economics is to prepare students to make ethical choices and succeed in a dynamic business environment shaped by the challenges of a competitive global economy, emerging technologies, and diverse stakeholders. All CBE programs are accredited by AACSB International - The Association to Advance Collegiate Schools of Business. The College of Business and Economics offers the following master's degrees:

1. **Master of Business Administration (M.B.A.)** with the following options:
   a. Entrepreneurship
   b. Finance
   c. Human Resources and Organizational Behavior
   d. Information Technology Management
   e. Marketing Management
   f. Operations and Supply Chain Management
   g. Strategy and International Business

2. **Master of Science in Business Administration (M.S.B.A.), Information Technology Management Option**

   **Important Notice:**
   The Department is not currently accepting applications for the M.S.B.A. Please consult the Department or the online catalog for any changes.

   Please see material below, following the M.B.A.

3. **Master of Science (M.S.) in Taxation**

   Please see material below, following the M.S.B.A.

4. **Master of Arts (M.A.) in Economics**
Please see the Economics chapter in the graduate section of this catalog for a description of the M.A. in Economics.

M.B.A.

The Master of Business Administration program strives to provide its graduates with positive career outcomes. The program objectives include:

1. The M.B.A. will provide students with the knowledge and skills managers need to succeed.
2. The M.B.A. will provide students with the opportunity to select an area of specialization.

Student Learning Outcomes

Students graduating with an M.B.A. from Cal State East Bay will be able to:

1. Make legal and ethical decisions in organizations and society.
2. Develop business strategies that respond to emerging opportunities and challenges in the global environment.
3. Apply leadership, teamwork, and communication skills in diverse managerial environments.
4. Analyze and integrate information from different functional areas of business in managerial decisions.
5. Apply quantitative, analytical, and technological tools for data driven decision making.

Graduate Faculty Advisors for M.B.A. Options

- M.B.A./Entrepreneurship: Brian McKenzie
- M.B.A./Finance: Fung-Shine Pan
- M.B.A./Human Resources and Organizational Behavior: Jed Devaro
- M.B.A./Information Technology Management: Hongwei Du
- M.B.A./Marketing Management: Joanna Lee
- M.B.A./Operations and Supply Chain Management: Zinovy Radovilsky
- M.B.A. Strategy and International Business: Gregory Theyel, Yi Jiang

Admission

The M.B.A. is open to students who hold a baccalaureate degree from an accredited college or university. Each applicant is evaluated on the basis of:

- past academic performance as reflected in undergraduate grade point average and subsequent coursework; and
- results of the Graduate Management Admissions Test (GMAT) in verbal, quantitative, and the “Index Score” that involves the total GMAT score, Index Score = (Upper Division GPA x 200) + Total GMAT. Admission to the program is selective. The average GPA and GMAT score of applicants admitted to the program varies from year to year. For last year’s admitted students profile, please visit the CBE Graduate Programs Office.

Proficiencies

All Conditionally Classified M.B.A. students must fulfill the University Writing Skills Requirement (UWSR) and M.B.A. program proficiencies. The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST) or through coursework. Information about the Writing Skills Test and the courses can be found on the Testing Office website. The Website contains information on test dates, registration procedures and fees. Further information can be obtained from the Testing Office, Library, Room LI 3165A, phone 510-885-3661. If students have not satisfied the UWSR before they begin their graduate work, they must either take the WST or enroll in a first tier course by the end of their first quarter in the program.

Students are also expected to have completed M.B.A. proficiency requirements in introductory mathematics and statistics with a grade of "C" or better and within 7 years of starting in program. To satisfy the mathematics proficiency, students must complete the equivalent coursework in intermediate algebra, MATH 1130 or an equivalent course. The statistics requirement may be met by a course in statistics that is equivalent to STAT 2010 or STAT 100.

Requirements for Graduation

To be eligible for the M.B.A. a student must have been Advanced to Candidacy (see Graduate Degree Information chapter of the catalog) and have completed 52-64 quarter units meeting the following criteria:

- All have a course grade of "C" or better.
- Have a combined 3.0 grade point average (minimum) in all units taken to satisfy the requirements of the student's degree program.
- Have no more than 13 units for extension and/or transfer credit (any extension and/or transfer credit must be approved by the Program Director) and/or coursework taken in "Unclassified Postbaccalaureate" status.
- All units earned within the five years immediately preceding the completion of the requirements for the degree.
- Have completed a satisfactory program of study, defined below.

1. Fundamental Coursework (0-12 units)

   Fundamental coursework must be completed before enrolling in any M.B.A. core course, except MKTG 6120 Managerial Communication and MGMT 6120 Globalization, Innovation and Sustainability. Fundamental coursework can be waived by passing an exam on a course by course basis. Exams are offered once per quarter. There is a fee of $25 for each exam. Please see the M.B.A. website http://www.mba.csueastbay.edu or contact the CBE Graduate Programs Office (VBT 430, phone 510-885-2419) for dates and registration information.
   a. ACCT 6015 Financial Accounting (4)
   b. ITM 6015 Information Systems Development and Management (4)
   c. MGMT 6015 Data Analysis and Decision Modeling for Managers (4)

2. Core Coursework (36 units)

   MGMT 6120 and MKTG 6120 should be taken before other core courses. These two courses only require proficiencies as prerequisites. All remaining core courses require both proficiencies and fundamental coursework.
   a. MGMT 6120 Globalization, Innovation and Sustainability (4)
b. MKTG 6120 Managerial Communication (4)
c. ACCT 6215 Managerial Accounting (4)
d. ECON 6215 Economics for Managers in a Global Economy (4)
e. FIN 6215 Corporate Financial Management (4)
f. MGMT 6215 Business, Government and Society (4)
g. MGMT 6220 Operations and Supply Chain Management (4)
h. MGMT 6225 Executive Leadership (4)
i. MKTG 6215 Marketing Management (4)

3. Capstone (4 units)
   - ENTR 6800 Entrepreneurship Practicum (4)
   - or MGMT 6800 Seminar in Strategic Management (4)

4. Electives or Option (12 units)
   Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.
   or
   Students select one of the following options:
   **Entrepreneurship Option (12 units)**
   **Required Courses (12 units)**
   - ENTR 6480 Introduction to Entrepreneurship
   - ENTR 6485 New Venture Development
   - MGMT 6520 Negotiation for Managers and Entrepreneurs
   **Finance Option (12 units)**
   Select three courses from the following:
   - FIN 6305 New Venture Financing
   - FIN 6310 Seminar in Security Analysis and Portfolio Management
   - FIN 6315 Seminar in Options and Futures
   - FIN 6320 Studies in Financial Markets
   - FIN 6325 Financial Management of Banking Institutions
   - FIN 6360 Management of Risk and Insurance
   - FIN 6375 International Financial Management
   **Human Resources and Organizational Behavior Option (12 units)**
   a. **Required course (4 units)**
      - MGMT 6612 Strategic Human Resources: Frameworks for General Managers
   b. **Electives (8 units). Select two courses from the following (we highly recommend that 3 courses be taken):**
      - MGMT 6520 Negotiation for Managers and Entrepreneurs
      - MGMT 6550 Research Methods for the Successful Manager
      - MGMT 6560 High Performance Management
      - MGMT 6613 Topics in Human Resource Management
      - MGMT 6615 Strategic Compensation, Incentives, and Productivity (Note: Please see Errata page for corrections to this content.)
      - MGMT 6618 Selecting, Maintaining and Retaining Employees
      - MGMT 6675 International Human Resource Management
   **Information Technology Management Option (12 units)**
   a. **Required Courses (8 units)**
      - ITM 6271 Database Management and Applications
      - ITM 6273 Business Intelligence and Knowledge Management
   b. **Electives within Information Technology Management (4 units). Select one course from the following:**
      - ITM 6130 Enterprise Management Systems
      - MGMT 6155 Applied Project Management (4)
      - ITM 6278 E-Business Systems Development
   **Marketing Management Option (12 units)**
   Select three courses from the following:
   - MKTG 6401 Marketing Research
   - MKTG 6410 Buyer Behavior
   - MKTG 6411 Product Management
   - MKTG 6412 Pricing Management
   - MKTG 6413 Integrated Marketing Communication
   - MKTG 6414 Distribution Management
   - MKTG 6420 Seminar in Marketing Strategy
   - MKTG 6450 Seminar in Selected Marketing Topics
   - MKTG 6470 International Marketing
   **Operations and Supply Chain Management Option (12 units)**
   Select three courses from the following:
   - MGMT 6115 E-Commerce Enterprise Management
M.S.B.A.: Information Technology Management Option

**Important Notice:**
The Department is not currently accepting applications for the M.S.B.A. Please consult the Department or the online catalog for any changes.

**Graduate Coordinator:** Hongwei Du

The Master of Science in Business Administration, Information Technology Management (ITM) Option provides students with a balanced set of knowledge and skills by combining a comprehensive understanding of business operations with a solid grasp of contemporary information systems. This degree offers students a focused specialty in how Information Technology (IT) is applied in business organizations. The program objectives include:

1. The M.S.B.A., ITM Option will provide hands-on experience and in-depth study of important IT topics including types of data, hardware components, operating systems, computers in e-Business, database and knowledge management systems, and other application software.
2. The M.S.B.A., ITM Option will offer students an opportunity to learn IT infrastructure, and information systems security and control, and to apply IT to business fields.

**Student Learning Outcomes**

Students graduating with an M.S.B.A., Information Technology Management Option from Cal State East Bay will have achieved the following:

1. **Information Systems and Development.** Graduate students will be able to demonstrate an advanced understanding of contemporary IT.
2. **Database Management and Applications.** Graduate students will be able to design, implement, and manage databases.
3. **Business Intelligence.** Graduate students will be able to acquire, validate, and represent data and information for building knowledge-based intelligent systems.
4. **IT in Business Organizations.** Graduate students will be able to apply database systems, knowledge-based systems, and information systems development skills in business operations and decision making.

**Admission**

The M.S.B.A. is open to students who hold a baccalaureate degree from an accredited college or university. Each applicant is evaluated on the basis of:

- Past academic records as reflected in undergraduate grade point average and subsequent coursework; and
- Results of the Graduate Management Admissions Test (GMAT). Applicants must meet the following two criteria:
  - A minimum 1050 "Index Score" and
  - Minimum 20th percentile GMAT verbal and quantitative scores. [Index Score = (Upper Division GPA x 200) + Total GMAT]. Exceptions to these criteria will be rare and limited to extraordinary cases.

**Proficiencies**

All Conditionally Classified M.S.B.A. students must fulfill the University Writing Skills Requirement (UWSR) and M.S.B.A. program proficiencies. The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST) or through coursework. Information about the Writing Skills Test and the courses can be found on the [Testing Office website](#). On the Website you will find information on test dates, registration procedures and fees. Further information can be obtained from the Testing Office, Warren Hall Room 245, phone 510-885-3661. If students have not satisfied the UWSR before they begin their graduate work, they must either take the WST or enroll in a first tier course by the end of their first quarter in the program.

Students are also expected to have completed M.S.B.A. proficiency requirements in introductory mathematics and statistics with a grade of "C" or better and within 7 years of starting in the program. To satisfy the mathematics proficiency, you must have completed equivalent coursework in intermediate algebra. If you have not completed such coursework, you can take MATH 1130 or an equivalent course. The statistics requirement may be met by a course in statistics that is equivalent to STAT 2010 or STAT 1000.

**Requirements for Graduation**

To be eligible for the M.S.B.A. you must have been Advanced to Candidacy (see [Graduate Degree Information chapter](#) of the catalog) and have completed 45-49 quarter units meeting the following criteria:

- All have a course grade of "C" or better.
- Have a combined 3.0 grade point average (minimum) in all units taken to satisfy the requirements of the student's degree program.
- Have no more than 13 units for extension and/or transfer credit (any extension and/or transfer credit must be approved by the Program Director) and/or coursework taken in "Unclassified Postbaccalaureate" status.
- All units earned within the five years immediately preceding the completion of the requirements for the degree.
- Have completed a satisfactory program of study, defined below.

1. **Fundamental Coursework (0-4 units)**
Fundamental coursework must be completed before enrolling in any MSBA required course. Fundamental coursework can be waived by passing an exam. Exams are offered once per quarter. There is a fee of $25 for each exam. Please see the M.B.A. website www.mba.csueastbay.edu or contact the CBE Graduate Programs Office (VBT 430, phone 510-885-2419) for dates and registration information.

- ITM 6015 Information Systems Development and Management (4)

2. Required Courses (8 units)

- ITM 6271 Database Management and Applications (4)
- ITM 6273 Business Intelligence and Knowledge Management (4)

3. Elective Courses (32 units)

Select eight courses from the following:

- ENTR 6485 New Venture Development (4)
- FIN 6305 New Venture Finance (4)
- ITM 6130 Enterprise Management Systems (4)
- ITM 6270 E-Business Systems Development (4)
- MGMT 6115 E-Commerce Enterprise Management (4)
- MGMT 6141 Service Operations Management (4)
- MGMT 6150 Global Supply Chain Management (4)
- MGMT 6155 Applied Project Management (4)
- MGMT 6470 Management of Technology and Innovations (4)
- MGMT 6520 Negotiation for Managers and Entrepreneurs (4)

4. Capstone Experience (5 units)

- ENTR 6800 Entrepreneurship Practicum (4) and ITM 6899 Project (1)
- MGMT 6800 Seminar in Strategic Management (4) and ITM 6899 Project (1)

M.S. in Taxation

Graduate Coordinator: Gary McBride

Features

The California State University, East Bay Master of Science in Taxation is designed for professionals who seek a high quality educational experience learning taxation, with the extraordinary flexibility unique to online education. Lectures by experienced tax professionals are easily viewed with free media player software. Robust student/faculty interaction is an integral component of each class. The program is accredited by both the Western Association of Schools and Colleges (WASC) and the Association to Advance Collegiate Schools of Business (AACSB). The 100% online format makes the program convenient and accessible for anyone in the world, not merely those who live or work in the San Francisco East Bay Area.

Admission

To be considered for admission to the Master of Science in Taxation program, students must hold a baccalaureate degree from an accredited college or university and have a grade point average of 2.75 or better over the last 90 quarter units or 60 semester units of their undergraduate program. A student who does not meet the grade point requirements may be considered at the discretion of the department pending receipt of other evidence of the student's academic achievement.

Applicants must also satisfy one of the following two requirements:

- have passed either the U.S. C.P.A. Examination or the Enrolled Agents Examination;
- have taken the Graduate Management Admissions Test (GMAT) and met the following two criteria:
  - a minimum 1050 "Index Score" \[\text{Index Score} = (\text{Upper Division GPA} \times 200) + \text{Total GMAT}\]
  - minimum 20th percentile GMAT verbal and quantitative score.

Foundation Coursework (0-12 units)

In order to be considered for "Classified Graduate" standing in the Master of Science in Taxation program, you must satisfy the following undergraduate courses or equivalent:

- ACCT 2251 Introduction to Financial Accounting (4)
- ACCT 2253 Introduction to Managerial Accounting (4)
- ACCT 3220 Tax Accounting: Fundamentals and Individuals (4)

Proficiency Evaluation

Proficiency Evaluation to be satisfied: University Writing Skills Requirement (UWSR).

Requirements for Graduation

To be eligible for the M.S. in Taxation, you must:

1. have been a "Classified Graduate" student and Advanced to Candidacy (see the Classification Status section, above).
2. have completed 45 quarter units of which
   a. all are beyond the prerequisite coursework;
   b. all have a course grade of "C" or better and a 3.00 GPA;
   c. all are applicable to the degree;
   d. at least 32 are in residence as a "Classified and/or Conditionally Classified Graduate" student;
   e. not more than 13 are for extension and/or transfer credit (any extension and/or transfer credit must be approved by the Program Director) and/or coursework taken in "Unclassified Postbaccalaureate" status;
   f. all are earned within the five years immediately preceding the completion of the requirements for the degree;
3. not more than 5 units are for thesis, independent study and/or a project.
4. have a 3.0 grade point average for all units taken to satisfy the requirements of the student's degree program.
5. have completed a satisfactory program of study as determined by the College of Business and Economics and the university.

Curricular Requirements (45 units)

A. Required Courses (24 units)
- ACCT 4220 Tax Accounting: Corporate Tax (4)  
  or ACCT 6202 Corporate Tax (4)
- ACCT 6222 Income Taxation of Partners and Partnerships (4)
- ACCT 6223 Federal Tax Research, Procedures, and Penalties (4)
- ACCT 6224 Advanced Corporate Taxation (4)  
  or ACCT 6227 S Corporations and Other Flow-Through Entities (4)
- ACCT 6258 Tax Planning for Individuals (4)
- ACCT 6410 Tax Accounting Periods and Methods (4)

We recommend that ACCT 6223 be taken as one of the first three classes in the program.

B. Elective Courses (16 units)
Select 16 units from the following:
- ACCT 6224 Advanced Corporate Taxation  
  or 6227 S Corporations and Other Flow-Through Entities (4)
- ACCT 6226 State and Local Taxation (4)
- ACCT 6229 Estate/Gift Tax and Income Taxation of Estates and Trusts (4)
- ACCT 6470 International Tax: Inbound (if not used to fulfill the International Requirement) (4)
- ACCT 6472 International Tax: Outbound (if not used to fulfill the International Requirement) (4)
- ECON 6370 Seminar: Public Sector Economics (4)

C. International Requirement (4 units)
- ACCT 6470 International Tax: Inbound (if not used to fulfill an Elective Requirement) (4)
- ACCT 6472 International Tax: Outbound (if not used to fulfill an Elective Requirement) (4)
- ECON 6700 Seminar: International Trade (4)
- ECON 6710 Seminar: International Economic Development (4)
- FIN 6375 International Financial Management (4)
- MGMT 6440 Global Strategic Management and Strategic Alliances (4)
- MGMT 6675 Seminar in International Human Resources Management (4)
- MKTG 6470 International Marketing (4)

D. Capstone Experience (1 unit)
- ACCT 6899 Project (1) completed in conjunction with one of the last three classes in the program.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661.

Transfer of Courses

Upper division prerequisite and foundation and graduate courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Taxation Certificate

The graduate Taxation certificate program is designed to meet the needs of those who wish to focus on taxation courses. This program is offered in a 100% online format.

Admission

The program is open to students who hold a baccalaureate degree from an accredited college or university. Admission into the graduate Taxation certificate program requires that at least two of the following standards be met:
1. Satisfactory performance on the Graduate Management Admissions Test (GMAT) or passage of the U.S. Uniform Certified Public Accountants exam or the Federal Enrolled Agents exam.
2. Acceptable grade point average on all course work prior to admission into the certificate program;
3. A record of appropriate employment.

Prerequisite Courses (12 units)

(These prerequisite courses may be satisfied through equivalencies.)
- ACCT 2251 Introduction to Financial Accounting (4)
- Eight additional units of ACCT 2000 or 3000 level coursework covering financial reporting/analysis, tax accounting fundamentals, and individual taxation, with consent of advisor (8)
**Curricular Requirements**

**A. Required Courses (20 units)**
- ACCT 4220 Tax Accounting: Corporate Tax (4) or ACCT 6202 Corporate Tax (4)
- ACCT 6222 Income Taxation of Partners and Partnerships (4)
- ACCT 6223 Federal Tax Research, Procedures, and Penalties (4)
- ACCT 6258 Tax Planning for Individuals (4)
- ACCT 6410 Tax Accounting Periods and Methods (4)

**B. Elective Courses (8 units)**
- Two of the following, one of which must be ACCT 6224 or ACCT 6227
  - ACCT 6224 Advanced Corporate Taxation (4)
  - ACCT 6226 Issues in State Taxation: California Income and Sales Taxes (4)
  - ACCT 6227 S Corporations and Other Flow-Through Entities (4)
  - ACCT 6229 Estate/Gift Tax and Income Taxation of Estates and Trusts (4)
  - ACCT 6470 International Taxation (4)

Participants in the program will be required to have a minimum 3.0 grade point average in order to receive the certificate. No grade below a “B” in graduate courses and no grade below a “C” in undergraduate courses can be used in the program. All of the coursework must be completed within five years.

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**Graduate Courses**

Restricted to "Classified" and "Conditionally Classified" Graduate Students.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6015</strong> Financial Accounting (4)</td>
<td>Focus on financial reporting, analysis, interpretation, and decision-making for managers. Topics include constructing, analyzing and interpreting financial statements; analyzing transactions, reporting and analyzing operating income, operating assets, debt financing, owner financing, and off-balance-sheet financing. Prerequisites: All CBE and University proficiencies, including the UWSR. A-F grading only.</td>
</tr>
<tr>
<td><strong>6202</strong> Corporate Tax (4)</td>
<td>Corporate taxation from inception to dissolution. Also includes consolidated returns, multinational issues, multistate issues, S Corporations, and tax exempt corporations. Skills developed include tax research, analysis and technical writing in the context of the course subject matter. Undergraduate, upper division course plus a graduate tutorial module. Students in the M.S. in Taxation or MBA (Taxation Option) have registration priority. Not open to those with credit for ACCT 4220.</td>
</tr>
<tr>
<td><strong>6215</strong> Managerial Accounting (4)</td>
<td>Focus on analyzing accounting information critical for managerial decision-making. Topics include cost estimation, cost-volume-profit analysis, product costing, activity-based costing and management, operational budgeting, capital budgeting decisions, pricing and target costing, performance evaluation, segment reporting, and balanced scorecard. Prerequisites: All CBE and University proficiencies, including the UWSR, and all MBA fundamental courses. A-F grading only.</td>
</tr>
<tr>
<td><strong>6222</strong> Income Taxation of Partners and Partnerships (4)</td>
<td>Concepts and principles governing the taxation of partners and partnerships; including the tax effect of formation, partnership agreements, distributions, and dissolutions. Prerequisite: ACCT 3220 or 6420.</td>
</tr>
<tr>
<td><strong>6223</strong> Federal Tax Research, Procedures, and Penalties (4)</td>
<td>Methods of researching federal tax issues using LEXIS and other research materials with a focus on case studies. Emphasis on administrative procedures, introduction to the judicial process, and taxpayer and preparer penalties. Prerequisite: ACCT 3220 or 6420.</td>
</tr>
<tr>
<td><strong>6224</strong> Advanced Corporate Taxation (4)</td>
<td>Corporate liquidations, redemptions, reorganizations, carryovers of tax attributes, personal holding companies, accumulated earnings tax, collapsible corporations, consolidated returns, and employee compensation plans. Prerequisite: ACCT 4220 or 6202.</td>
</tr>
<tr>
<td><strong>6226</strong> State and Local Taxation (4)</td>
<td>A study of principles and concepts of state and local taxation. Includes income tax, property tax and sales/use tax. Selected State of California tax issues are discussed as well as multistate tax issues. Considers individuals, partnerships, corporations, and other entities. Prerequisite: ACCT 3220 or 6420 or consent of instructor. May be repeated once for credit, for a maximum of 8 units.</td>
</tr>
<tr>
<td><strong>6227</strong> S Corporations and Other Flow-Through Entities (4)</td>
<td>Concepts and principles governing the taxation of S corporations and S shareholders; including the tax effect of formation, operations, distributions, and liquidations. Selected advanced partnership issues.</td>
</tr>
<tr>
<td><strong>6229</strong> Estate/Gift Tax and Income Taxation of Estates and Trusts (4)</td>
<td>Taxation of beneficiary, estate, gift, and related tax treatment of fiduciary entity. Focus on estate tax planning. Prerequisite: ACCT 3220 or 6420.</td>
</tr>
<tr>
<td><strong>6258</strong> Tax Planning for Individuals (4)</td>
<td>Individual tax planning, minimizing taxes. Comprehensive personal financial planning: retirement income planning, estate planning, short-term investment planning. Tax consequences of property transactions and different arrangements, such as family trusts, wills, private annuities. Prerequisite: ACCT 3220 or 6420.</td>
</tr>
<tr>
<td><strong>6410</strong> Tax Accounting Periods and Methods (4)</td>
<td>Cash and accrual methods, startup and organization costs, installment sales, accounting periods and the appropriate tax year-end, inventory methods including the uniform capitalization rules, original issue discount, bad debt reserves, and FASB 109. Prerequisite: ACCT 3220 or 6420.</td>
</tr>
</tbody>
</table>
6420 Fundamentals of Federal Income Taxation (4)

6470 International Tax: Inbound (4)
Primarily involves the study of taxation of Inbound International Business. Examines jurisdiction to tax citizens, residency issues, sources of income and deductions, U.S. taxation of foreign persons, and methods of transfer pricing. Prerequisites: ACCT 6420, or ACCT 3220 and 4220 or 6202.

6472 International Tax: Outbound (4)
Primarily involves a study of taxation of outbound international business. Examines the U.S. tax effects of foreign branches and foreign entities, foreign tax credit limitations, international sales of goods, and transfer of rights and intangibles. Prerequisites: ACCT 6420, or ACCT 3220 and 4220 or 6202. Restricted to "Classified" and "Conditionally Classified" Graduate Students.

6510 Accounting Theory (4)
Critical study of alternative accounting theories and their implications for accounting standard setting. Topics include information and decision theory, role of accounting in capital markets, information content of earnings, clean surplus theory, positive accounting theory, executive compensation, and earnings management. Prerequisite: ACCT 3212. A-F grading only.

6520 Strategic Cost and Performance Management (4)
Design of cost and performance management systems for strategic managerial decision-making and for implementing strategy. Topics include activity-based costing systems, activity-based management, profit planning, evaluating profit performance, transfer pricing, balanced scorecard, and incentive and compensation systems. Prerequisite: ACCT 6550. A-F grading only.

6530 Consolidations, Partnerships and Government Accounting (4)
Accounting for business combinations, consolidations, intercompany transactions, reorganization and foreign currency translation of subsidiaries; partnership formation, operation, ownership changes and liquidation; governmental and nonprofit budgeting and fund accounting, and financial statement presentation. Prerequisite: ACCT 6512. A-F grading only.

6540 Financial Reporting for Special Industries (4)
In-depth study of financial reporting standards and accounting issues for banking and financial institutions and other topics for special industries including real estate, environmental and oil and gas accounting, accounting for high-tech firms and wine industries. Prerequisite: ACCT 3212. A-F grading only.

6541 Healthcare Accounting (4)
In-depth study of financial reporting standards and accounting and cost management issues for healthcare organizations such as hospitals, medical centers, nursing homes, and health insurance companies. Prerequisite: ACCT 3212. A-F grading only.

6550 Advanced Accounting Information Systems (4)
SOX and PCAOB requirements on internal controls, design of internal controls and audit trails in accounting information systems, implications of ERP on continuous financial reporting and attestation, knowledge and use of global financial reporting language XBRL and current topics. Prerequisite: ACCT 3170. A-F grading only.

6560 Financial Statement Analysis and Business Valuation (4)
Analysis and forecast of financial statements for business valuation and financial strategies. Topics include financial statement analysis and forecast, business valuation using accounting and cash flow based models, valuation analysis for equity security, credit decisions, and mergers and acquisitions. Prerequisites: ACCT 3212 or consent of instructor. A-F grading only.

Design and implementation of financial reporting systems using Oracle Financial Applications. Topics include system design and implementation for a company from financial reporting analysis, chart of accounts design, transaction processing to reports generation using Oracle General Ledger and Receivables systems. Prerequisites: All foundation courses.

Design and implementation of financial reporting systems using Oracle Financial Applications. Topics include system design for a company from payable and asset system setup, payables and assets transaction processing to reports generation using Oracle Payables and Fixed Assets systems. Prerequisite: ACCT 2251 or 6015. A-F grading only.

6580 International Financial Reporting and Standards (4)
Focus on international financial reporting standards and their applications, and the discussion of environmental dimensions influencing accounting development, comparative financial statement analysis across countries, and other accounting issues associated with multinational corporations. Prerequisite: ACCT 3212. A-F grading only.

6590 Attestation and Information Systems Audit (4)
Topics include: current announcements of the PCAOB and the latest SAS, functions of internal audit under the Sarbanes-Oxley Act, application of the Enterprise Risk Management-Integrated Framework, information-technology audit using ACL and IDEA, and concepts of XBRL audits. Prerequisite: ACCT 4250. A-F grading only.

6600 Mergers and Acquisitions (4)
Topics include: M&A process, legal and regulatory framework, accounting for M&As, taxation and acquisitions, strategic processes, theories of merger, empirical tests of M&A performance, valuation, alliances and joint ventures, international takeovers and restructuring, and strategies for creating value. Prerequisite: ACCT 2251 or 6015. A-F grading only.

6707 Cross-Border Transfer Pricing (4)
Transfer pricing methods used for transfers of tangible and intangible property, services and financial products between U.S. corporations and their international affiliates. Advanced Pricing agreements between the U.S. and foreign tax authorities.

6898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. Prerequisites: at least 3.0 GPA, departmental approval of activity. May be repeated for credit, for a maximum of 4 units. No units may be counted toward any CBE graduate degree. CR/NC grading only.

6899 Project (1)
If used for the M.S. Taxation: development and writing of a research paper relevant to taxation. Supervision by a tax faculty required. Prerequisite: " Classified Graduate" standing. A-F grading only.

6900 Independent Study (1-4)

6909 Departmental Thesis (1-4)
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>6215</td>
<td>Corporate Financial Management (4)</td>
</tr>
<tr>
<td>6215</td>
<td>Theory and practice of financial decision making. Topics include corporate governance, corporate performance analysis, capital investment decisions, valuation and cost of capital, long-term financial policy, short-term financial policy, dividend policy decisions, mergers and acquisitions. Prerequisites: All CBE and University proficiencies, including the UWSR, all MBA fundamental courses, minimum of 36 units of core and/or option courses, and application for graduation on file. A-F grading only.</td>
</tr>
<tr>
<td>6305</td>
<td>New Venture Financing (4)</td>
</tr>
<tr>
<td>6305</td>
<td>Concepts and practices of financing and financial management of a new venture or expansion of an existing growth business. Valuation, financial planning, corporate structuring, exit strategies, private placement, initial public offerings venture capital, and other current issues. Prerequisites: All fundamental courses and FIN 6215.</td>
</tr>
<tr>
<td>6310</td>
<td>Seminar in Security Analysis and Portfolio Management (4)</td>
</tr>
<tr>
<td>6310</td>
<td>Theory and practice of security investment. Investment environment and instruments, capital asset pricing theory, technical and fundamental analysis of common stock portfolio analysis, bond analysis and management, mutual funds and investment companies, and financial derivatives. Prerequisites: All fundamental courses and FIN 6215.</td>
</tr>
<tr>
<td>6315</td>
<td>Seminar in Options and Futures (4)</td>
</tr>
<tr>
<td>6315</td>
<td>Financial derivative markets. Option markets, valuation, and strategies; futures markets and strategies; risk management and hedging; swaps and financial engineering. Prerequisites: All fundamental courses and FIN 6215.</td>
</tr>
<tr>
<td>6320</td>
<td>Studies in Financial Markets (4)</td>
</tr>
<tr>
<td>6320</td>
<td>Evolution and structure of financial markets, instruments, and institutions. The process of intermediation including the development of risk reduction devices and the growth of securitization. Focus is on debt instruments and the role of global regulation. Prerequisites: All fundamental courses and FIN 6215.</td>
</tr>
<tr>
<td>6325</td>
<td>Financial Management of Banking Institutions (4)</td>
</tr>
<tr>
<td>6325</td>
<td>Comprehensive treatment of commercial bank management in today's financial services industry. Modern approach to understanding and managing the risks faced by banks. Methods of optimizing shareholder value, risk-return tradeoffs, regulatory and strategic issues. Prerequisites: All fundamental courses and FIN 6215.</td>
</tr>
<tr>
<td>6360</td>
<td>Management of Risk and Insurance (4)</td>
</tr>
<tr>
<td>6360</td>
<td>Identification, measurement, analysis, treatment, and administration of risk in the business firm. Insurance for commercial, professional, family and personal risk exposures and contract provisions for property, liability, health, and life insurance. Regulation and operation of insurance companies and related public policy issues. Prerequisites: All fundamental courses and FIN 6215.</td>
</tr>
<tr>
<td>6375</td>
<td>International Financial Management (4)</td>
</tr>
<tr>
<td>6375</td>
<td>Financial decision-making for multinational corporations, management of foreign exchange risk, foreign direct investment, multinational project evaluation, international diversification and risk-return analysis, international capital markets and capital structure. Prerequisites: All fundamental courses and FIN 6215.</td>
</tr>
<tr>
<td>6898</td>
<td>Cooperative Education (1-4)</td>
</tr>
</tbody>
</table>

Economics

See graduate Economics chapter for list of Economics courses.

Entrepreneurship (Prefix: ENTR)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>6480</td>
<td>Introduction to Entrepreneurship (4)</td>
</tr>
<tr>
<td>6480</td>
<td>Provides a survey of entrepreneurship and business ownership—including foundation concepts, the new venture creation process, financial estimation, and entrepreneurial decision-making. A highly participatory, integrative class, with lectures, case studies, extensive discussions, and student presentations. Prerequisites: All fundamental courses.</td>
</tr>
<tr>
<td>6485</td>
<td>New Venture Development (4)</td>
</tr>
<tr>
<td>6485</td>
<td>Students select, research, design, structure, document, and persuasively present a business plan for a new or growing entrepreneurial venture. Students learn and apply systematic approaches to business planning. A highly participatory, learner-oriented, term project class. Prerequisites: All fundamental courses and ENTR 6480.</td>
</tr>
<tr>
<td>6800</td>
<td>Entrepreneurship Practicum (4)</td>
</tr>
<tr>
<td>6800</td>
<td>An integrative capstone experience in which students learn to develop business strategies and write a strategic business plan. This course is formatted as an experiential, hands-on consulting project working with small to mid-sized enterprises. Prerequisites: All CBE and university proficiencies, including the UWSR, all MBA fundamental courses, minimum of 36 units of core and/or option courses, and application for graduation on file. A-F grading only.</td>
</tr>
<tr>
<td>6909</td>
<td>Departmental Thesis (1-4)</td>
</tr>
<tr>
<td>6909</td>
<td>Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee at least one of whom must be a Cal State East Bay faculty member. Prerequisite: graduate standing.</td>
</tr>
</tbody>
</table>

Finance (Prefix: FIN)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>6909</td>
<td>Issues in Accounting (4)</td>
</tr>
<tr>
<td>6909</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in accounting. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
</tbody>
</table>
### Number Course Information

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 6999          | Issues in Finance (4)  
Readings, discussion, and research on contemporary and/or significant issues in finance. Prerequisite: consent of instructor. May be repeated for credit when content varies, for a maximum of 8 units. |
| 6909          | Departmental Thesis (1-4)  
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee, at least one of whom must be a Cal State East Bay faculty member. Prerequisite: graduate standing. |
| 6910          | University Thesis (1-5)  
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.) Prerequisite: classified graduate standing and advisor approval. Maximum of 5 units per student. |

### Information Technology Management (Prefix: ITM)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</table>
| 6015          | Information Systems Development and Management (4)  
Development of business information technology strategies and solutions for enterprise and global information management systems. Topics include the structure, analysis, design, and implementation of information technology systems. Prerequisites: All CBE and University proficiencies, including the UWSR. A-F grading only. |
| 6130          | Enterprise Management Systems (4)  
Design, selection and implementation of enterprise resource management (ERM) and enterprise resource planning (ERP) systems. Emphasis on integration and automation of business functions. Development of practical skills and utilization of enterprise resource planning software. Prerequisite: All fundamental courses. |
| 6271          | Database Management and Applications (4)  
Data modeling, database design and implementation, database administration, and database applications. Topics include: database design, incorporating business rules into entity-relationship (ER) models, transformation of an ER model into a relational database design, normalization of database tables, SQL data definition language and data manipulation language, views, triggers, data dictionary, and the Internet database environment. Prerequisite: All fundamental courses. |
| 6273          | Business Intelligence and Knowledge Management (4)  
This course covers computerized support for decision making, business intelligence, and knowledge management. Topics include: major tools and techniques of managerial decision support, the essentials of business intelligence, data warehousing definitions and architectures, data integration, data visualization, data mining concepts and applications, and approaches to knowledge management. Prerequisite: All fundamental courses. |
| 6278          | E-Business Systems Development (4)  
The environment in which electronic business/electronic commerce operates. Fundamentals of the enabling technologies which include the Internet, World Wide Web, databases, programming languages, web authoring tools. Security standards. Prerequisite: All fundamental courses. |
| 6898          | Cooperative Education (1-4)  
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. Prerequisites: at least 3.0 GPA, departmental approval of activity. May be repeated for credit, for a maximum of 4 units. No units may be counted toward any CBE graduate degree. |
| 6899          | Project (1)  
Development and writing of an information technology project. Supervision by an ITM faculty member required. Prerequisites: All fundamental and required coursework and proficiencies for the MSBA, Information Technology Option, including the UWSR. A-F grading only. |
| 6900          | Independent Study (1-4) |
| 6909          | Departmental Thesis (1-4)  
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee, at least one of whom must be a Cal State East Bay faculty member. Prerequisite: graduate standing. |
| 6999          | Issues in Information Technology Management (4)  
Readings, discussion, and research on contemporary and/or significant issues in information technology management. May be repeated for credit when content varies, for a maximum of 8 units. |

### Management (Prefix: MGMT)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</table>
| 6015          | Data Analysis and Decision Modeling for Managers (4)  
Quantitative modeling and data analysis as they are applied for making managerial decisions in organizations. Topics include regression, correlation, forecasting models, optimization, decision analysis, project management, and simulation. Emphasis on usage of spreadsheet modeling and appropriate software technology. Prerequisites: All CBE and University proficiencies, including the UWSR. A-F grading only. |
<p>| 6115          | E-Commerce Enterprise Management (4) |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6120</td>
<td>Globalization, Innovation and Sustainability (4)</td>
<td>An integrative overview of personal, organizational, inter-organizational and societal processes of innovation, centered on the central challenges and expanding range of business opportunities relating to environmental and social sustainability found in the context of a globalizing economy. (Recommended as one of the first core MBA courses.) Prerequisites: All CBE and University proficiencies, including the UWSR. A-F grading only.</td>
</tr>
<tr>
<td>6125</td>
<td>Purchasing Management and Strategic Sourcing (4)</td>
<td>Modern techniques in sourcing and negotiation, contract management, supply chain management, and computer-based purchasing systems. Seminar format with case studies and projects. Prerequisites: All fundamental courses and MGMT 6220.</td>
</tr>
<tr>
<td>6130</td>
<td>Enterprise Planning and Control (4)</td>
<td>Modern methods of planning and managing resources in an organization including aggregate planning, enterprise resource planning and control, short-term scheduling, and maintenance. Emphasis on developing practical skills and utilizing modern computer applications in enterprise resource planning and control. Prerequisites: All fundamental courses and MGMT 6220.</td>
</tr>
<tr>
<td>6140</td>
<td>Service Operations Management (4)</td>
<td>Contemporary methods and applications of service operations management, including those in service processes, planning, and scheduling. Seminar format with case studies, problem solving, and use of computer software. Prerequisites: All fundamental courses and MGMT 6220.</td>
</tr>
<tr>
<td>6145</td>
<td>Logistics Management (4)</td>
<td>The physical distribution of goods. Methods of logistics analysis, planning, and scheduling. Use of information technology in logistics and logistics information systems. Logistical support to e-business operations. Emphasis on problem solving and use of computer software. Prerequisites: All fundamental courses and MGMT 6220.</td>
</tr>
<tr>
<td>6150</td>
<td>Global Supply Chain Management (4)</td>
<td>Topics in global supply chain management, including synthesis of global logistics, operations, purchasing, and distribution into a cohesive strategy. Use of information technology, global strategic supply management planning, relationships, and quality. Prerequisites: All fundamental courses and MGMT 6220.</td>
</tr>
<tr>
<td>6155</td>
<td>Applied Project Management (4)</td>
<td>Analysis of modern methods and tools of project management. Topics include project definition, time and resource scheduling, budgeting, risk management, and performance measurement. Emphasis on developing practical skills in managing projects through case studies and utilization of project management software. Prerequisites: All fundamental courses and MGMT 6220. A-F grading only.</td>
</tr>
<tr>
<td>6215</td>
<td>Business, Government and Society (4)</td>
<td>Strengthens students’ ability to anticipate, critically analyze and appropriately respond to the legal and ethical dilemmas that confront managers in a global economy. This course focuses on the challenges of responsible decision-making in complex, socially diverse business environments. Prerequisites: All CBE and University proficiencies, including the UWSR, and all MBA fundamental courses. A-F grading only.</td>
</tr>
<tr>
<td>6220</td>
<td>Operations and Supply Chain Management (4)</td>
<td>Integrative overview of management and control of the processes that create and deliver the goods and/or services of a firm. Topics covered include operations strategy, product/process design, quality management, supply chain management, inventory management, and lean management. Prerequisites: All CBE and University proficiencies, including the UWSR, and all MBA fundamental courses.</td>
</tr>
<tr>
<td>6225</td>
<td>Executive Leadership (4)</td>
<td>Managers leverage people to meet and exceed performance expectations. Leadership is a critical means to this end. Practice of visioning, motivating, decision making, communicating effectively, managing group dynamics and using power and influence will establish your path to leadership. Prerequisites: All CBE and University proficiencies, including the UWSR, and all MBA fundamental courses. A-F grading only.</td>
</tr>
<tr>
<td>6400</td>
<td>Global Strategy (4)</td>
<td>Integrative treatment of global strategic management and strategic alliances. Emphasis is on the firm in the global competitive context, decisions to enter markets, how to compete in global markets, and how to develop and implement a global strategy. Prerequisites: All fundamental courses.</td>
</tr>
<tr>
<td>6460</td>
<td>Strategic Management for a Sustainable Society (4)</td>
<td>Examines the strategic management of environmental issues and the functional and strategic responses of firms to deal with environmental issues. The domain of strategy and industry is expanded to incorporate environmental issues. Prerequisites: All fundamental courses.</td>
</tr>
<tr>
<td>6470</td>
<td>Management of Technology and Innovation (4)</td>
<td>Examines the management of technology and innovation, the strategic problems of firms in high technology industries, with special attention to market structure, standards issues, and strategic responses by firms in highly turbulent environments. Prerequisites: All fundamental courses.</td>
</tr>
<tr>
<td>6520</td>
<td>Negotiation for Managers and Entrepreneurs (4)</td>
<td>Managerial and entrepreneurial success requires agreement and collaboration with people both within and between firms. This course will examine a broad spectrum of negotiation settings to help you develop the skills needed to best negotiate deals and resolve problems. These skills build on core communication skills to focus on conflict mapping, distributive and integrative bargaining, alternate dispute resolution methods, and cultural patterns, to develop effective tactics in negotiations. Prerequisites: All fundamental courses.</td>
</tr>
<tr>
<td>6550</td>
<td>Research Methods for the Successful Manager (4)</td>
<td>A hands-on methods course in conducting research at work and assessing business research. Students design projects to understand organizational problems and execute research using innovative tools (online surveys, analysis software and traditional tools) in data collection and reporting. Prerequisites: All fundamental courses.</td>
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<td>Course Number</td>
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<tr>
<td>6560</td>
<td>High Performance Management (4) Development of skills essential for high performing managers. Interactive course using combination of self-assessment instruments, experiential exercises, and cases to help you develop critical skills in building and managing high performing teams, communications, goal-setting, empowering people, persuasion, and dispute resolution. Prerequisites: All fundamental courses.</td>
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<tr>
<td>6570</td>
<td>Management of the Multinational Firm (4) A study of the operation of multinational firms in terms of marketing, finance, accounting, production, and personnel policies using case studies and current readings. Prerequisites: All foundation courses.</td>
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</tr>
<tr>
<td>6612</td>
<td>Strategic Human Resources: Frameworks for General Managers (4) Application of theories from economics and organizational behavior to analyze core topics in strategic human resources management, including recruitment and screening, training, performance evaluation, compensation and benefits, job design, promotions, downsizing, outsourcing, unions, labor law, internal labor markets, and high-commitment HRM. Prerequisite: All fundamental courses. May be repeated for credit with consent of department, for a maximum of 8 units.</td>
<td></td>
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<tr>
<td>6615</td>
<td>Strategic Compensation, Incentives, and Productivity (4) Examines design of compensation and benefits systems to attract, retain, and motivate top talent in a dynamic organizational environment shaped by market, political, legal, and union constraints. Incentive pay, deferred compensation, pensions, layoffs, buyouts, corporate raiding, promotions, performance evaluation, etc. Prerequisite: ACCT 6015, ITM 6015, MGMT 6015 (Note: Please see Errata page for corrections to this content.)</td>
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<tr>
<td>6618</td>
<td>Selecting, Maintaining and Retaining Employees (4) Students will understand regulations regarding hiring, execute successful job analyses for job descriptions, pre-employment selection tools (e.g. behavioral interviews) with psychometric tools, develop training and employee development programs to retain employees, use motivation theory and successfully implement a performance system. Prerequisites: All fundamental courses. Not open to students with credit for MGMT 4618.</td>
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</tr>
<tr>
<td>6622</td>
<td>Human Resources Information Systems (4) Administration of human resources information systems. Topics include the uses and content of HRIS, effective organization and implementation of information systems, legal and ethical considerations of HRIS, effective reporting for management and employee users, and review of widely utilized systems. Prerequisites: All fundamental courses.</td>
<td></td>
</tr>
<tr>
<td>6675</td>
<td>International Human Resource Management (4) Learn to execute global best practice HR functions such as recruitment, selection, compensation and management development of employees the world over in order to stay globally competitive. Understand the impact of national and corporate culture on organizations. Prerequisites: All fundamental courses.</td>
<td></td>
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<tr>
<td>6800</td>
<td>Seminar in Strategic Management (4) An integrative capstone experience in which students learn to conduct a strategic situational analysis, identify strategic alternatives and write an implementation plan for a strategic initiative. Real world organizational opportunities relating to globalization, innovation and sustainability will be emphasized. Prerequisites: All CBE and university proficiencies, including the UWSR, all MBA fundamental courses, minimum of 36 units of core and/or option courses, and application for graduation on file. A-F grading only.</td>
<td></td>
</tr>
<tr>
<td>6888</td>
<td>Cooperative Education (1-4) Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. Prerequisites: at least 3.0 GPA, departmental approval of activity. May be repeated for credit, for a maximum of 8 units. No units may be counted toward any CBE graduate degree. CR/NC grading only.</td>
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<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
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<tr>
<td>6909</td>
<td>Departmental Thesis (1-4) Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee at least one of whom must be a Cal State East Bay faculty member. Prerequisite: graduate standing.</td>
<td></td>
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<tr>
<td>6910</td>
<td>University Thesis (1-5) Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See &quot;University Thesis Writing Guide,&quot; <a href="http://www.csueastbay.edu/thesiswritingguide">www.csueastbay.edu/thesiswritingguide</a>.) Prerequisites: &quot;Classified Graduate&quot; standing and advisor approval. Maximum of 5 units per student.</td>
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</tr>
<tr>
<td>6999</td>
<td>Issues in Management Sciences (4) Readings, discussion, and research on contemporary and/or significant issues in management sciences. May be repeated for credit when content varies, for a maximum of 8 units.</td>
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</tbody>
</table>

**Marketing (Prefix: MKTG)**

<table>
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<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>6120</td>
<td>Managerial Communication (4) Managerial communication concepts, tools, and skills. Emphasis on building effective oral and written communication skills. Apply communication tools and knowledge: self-assessment, theory of human communication, interpersonal communication, organizational communication; and intercultural communication. (Recommended as one of the first core MBA courses.) Prerequisites: All CBE and University proficiencies, including the UWSR. A-F grading only.</td>
</tr>
<tr>
<td>6215</td>
<td>Marketing Management (4) Core marketing management issues in a changing business environment, conceptual knowledge, analytical tools, and problem solving skills applicable to marketing. Topics include environmental scanning, target marketing process; customer relationship management; managing product, price, distribution, and promotion; and marketing control. Prerequisites: All CBE and University proficiencies, including the UWSR, and all MBA fundamental courses. A-F grading only.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>6401</td>
<td>Marketing Research (4)</td>
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<td>6410</td>
<td>Buyer Behavior (4)</td>
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<td>6411</td>
<td>Product Management (4)</td>
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<td>6412</td>
<td>Pricing Management (4)</td>
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<td>6413</td>
<td>Integrated Marketing Communications (4)</td>
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<td>6414</td>
<td>Distribution Management (4)</td>
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<tr>
<td>6420</td>
<td>Seminar in Marketing Strategy (4)</td>
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<tr>
<td>6450</td>
<td>Seminar in Selected Marketing Topics (4)</td>
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<tr>
<td>6470</td>
<td>International Marketing (4)</td>
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<tr>
<td>6898</td>
<td>Cooperative Education (1-4)</td>
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<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
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<tr>
<td>6909</td>
<td>Departmental Thesis (1-4)</td>
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<tr>
<td>6910</td>
<td>University Thesis (1-5)</td>
</tr>
<tr>
<td>6999</td>
<td>Issues in Marketing (4)</td>
</tr>
</tbody>
</table>

Footnotes
1. If ACCT 6224 is selected, then ACCT 6227 may be chosen as a taxation elective, and vice versa.
2. ACCT 6226 may be repeated for credit with consent of the department.

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Chemistry

- **Department Information**
- **M.S. in Chemistry**
- **Other Degree Requirements**
- **Graduate Courses**

**Department Information**

Department of Chemistry and Biochemistry  
College of Science  
Office: North Science 431  
Phone: (510) 885-3452  
Website: [www.sci.csueastbay.edu/chemistry/](http://www.sci.csueastbay.edu/chemistry/)

**Professors**  
Michael K. K. Leung, Ph.D. University of Southern California

**Associate Professors**  
Michael Groziak, Ph.D. Northwestern University  
Chul-Hyun Kim, Ph.D. University of California, Berkeley  
Anne T. Kotchevar, Ph.D. University of Minnesota, Minneapolis  
Ann A. McPartland (Chair), Ph.D. Purdue University

**Assistant Professors**  
Danika LeDuc, Ph.D. University of California, Berkeley  
Anthony Masiello, Ph.D. Oregon State University  
Monika Sommerhalter, Ph.D. Technische Universität Berlin

**Graduate Coordinator:** Chul-Hyun Kim

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**M.S. in Chemistry**

**Program Description**

The Master of Science degree in Chemistry mainly serves students in four categories: those seeking opportunities in the chemical industry requiring training beyond the baccalaureate level, fully employed chemists who wish to enhance their career potential, future teachers of high school or community college chemistry, and individuals contemplating more advanced graduate study.

Students accepted into the program may focus on any area of chemistry, or select an option in biochemistry.

**Mission Statement**

It is imperative that CSUEB chemistry students possess sufficient theoretical and practical training in chemistry or biochemistry so that they will be able to assume the significant technical responsibilities required by the chemical and biotechnology industries that will employ them. It is important that our students are not only trained in chemistry or biochemistry, but will become respected scientists and research technicians. In addition, it is important that students planning for entrance into Ph.D. programs or professional programs are more than adequately prepared for these programs.

**Student Learning Outcomes**

Students graduating with an M.S. in Chemistry from Cal State East Bay should:

1. have a solid background in advanced chemistry and a mastery of advanced chemical information;
2. have significant experience in laboratory research methods and be able to present complex chemical information via oral and written reports;
3. have successfully completed a capstone project.

**Program Options**

Within the Chemistry degree, candidates will choose one of four courses of study:

- M.S. Chemistry, Plan A
- M.S. Chemistry, Plan B
- M.S. Chemistry, Option in Biochemistry, Plan A
- M.S. Chemistry, Option in Biochemistry, Plan B

Both Plan A programs require a University Thesis, whereas both Plan B programs require completion of a literature review paper and passing terminal written and oral exams.

**Faculty**

The Department of Chemistry and Biochemistry has seven full-time faculty members; each has a Ph.D. degree. Most came to Cal State East Bay with postdoctoral experience either in academia or industry, or both. Added breadth of experience is provided by occasional visiting lecturers in graduate lecture courses.

**Facilities**

The laboratories are modern and well-equipped. Major instrumentation includes a 500 MHz nuclear magnetic resonance spectrometer (NMR), capillary gas chromatographs with both flame-ionization and mass-spectral detection (GC/MS), a fourier-transform infrared spectrophotometer (FTIR), an atomic absorption spectrophotometer (AA) with graphite furnace and cold vapor attachments, high performance liquid chromatograph (HPLC), ion chromatograph (IC), x-ray fluorescence spectrometer, and a diode-array visible-ultraviolet spectrophotometer that can be adapted for stopped-flow kinetics studies. A molecular modeling facility is available for instruction and research.

The department is served by an office staff of a department secretary and a part-time clerical assistant, and by a staff of four full-time...
In order to be eligible for the degree, the student must satisfy the following departmental requirements:

**M.S. Chemistry, Plan B**

Program, Plan A (University Thesis) or Plan B (Comprehensive Exam) must be selected.

**Curricular Requirements**

Advancement to Candidacy requires that the student complete 12 units in 6000-level courses applicable towards the degree with an average grade of 3.0 or better and select a research advisor for the thesis or a supervisor for the Plan B literature search and comprehensive examination.

**Advancement to Candidacy**

In order to progress in the program, a student must pass or obtain a waiver for the placement exams. A waiver is usually obtained by enrolling in an undergraduate course covering appropriate material. The exams must be completed within one year of entry into the Department of Chemistry and Biochemistry. Additionally, students must satisfy the University Writing Skills Requirement and qualify for "Classified Graduate" status within two years of admission.

Advance to Candidacy requires that the student complete 12 units in 6000-level courses applicable towards the degree with an average grade of 3.0 or better and select a research advisor for the thesis or a supervisor for the Plan B literature search and comprehensive examination.

**Plan A, Thesis**

A university thesis is required both for the M.S. Chemistry, Plan A and the M.S. Chemistry, Option in Biochemistry, Plan A degrees. A thesis topic is decided by mutual agreement between a graduate student and an appropriate faculty member.

**Plan B, Comprehensive Examination**

Plan B entails the completion of additional specified coursework in lieu of a thesis and completion of a significant literature search and report on a selected topic. Applicants must pass a comprehensive examination which consists of an oral portion covering the report of the literature search and a written portion covering all other coursework applied to the degree.

**Additional Information**

The masters' degree program is under the nominal direction of the graduate coordinator, with the participation of the department's Graduate Studies Committee. All inquiries should be directed to the graduate coordinator or to the department chair.

**Admission Requirements**

The basic requirements for entry into the program are possession of a baccalaureate degree in Chemistry or Biochemistry, including a year of physical chemistry, and a GPA of at least 2.6 in upper division chemistry and biochemistry courses. Applicants not meeting the GPA requirement may still be accepted subject to receipt of acceptable letters of recommendation. The G.R.E. is not required. Applicants not having an undergraduate major in chemistry or biochemistry may be accepted into the program depending on the amount of undergraduate coursework required to remove deficiencies.

Qualified applicants are accepted in "Conditionally Classified Graduate" status. To become fully "Classified Graduate," students must pass placement tests in organic, physical, and one of analytical, inorganic, or biochemistry; remove any deficiencies in the undergraduate major, complete 12 units applicable to the degree, and satisfy the University Writing Skills Requirement (UWSR).

**Plan A, Thesis**

A university thesis is required both for the M.S. Chemistry, Plan A and the M.S. Chemistry, Option in Biochemistry, Plan A degrees. A thesis topic is decided by mutual agreement between a graduate student and an appropriate faculty member.

**Off-Campus Research**

Candidates whose employers permit the use of appropriate facilities and approve the release of the applicable findings may arrange to conduct research on their employers' premises in support of their M.S. theses, subject to prior approval by the department.

**Curricular Requirements**

The M.S. programs in Chemistry provide for the degree to be obtained under Chemistry or Chemistry, Option in Biochemistry. Under either program, Plan A (University Thesis) or Plan B (Comprehensive Exam) must be selected.

**M.S. Chemistry, Plan A**

In order to be eligible for the degree, the student must satisfy the following departmental requirements:

1. Complete a total of 22 units in required courses in Chemistry comprising the following:
   - CHEM 4521 Elements of Chemical Thermodynamics (4)
   - CHEM 6251 The Chemical Bond (3)
   - CHEM 6820 Seminar (1,1,1)
   - CHEM 6830 Research (6)
   - CHEM 6850 Methods of Graduate Research (3)
   - CHEM 6910 University Thesis (3)

2. Complete a minimum of nine units from the Advanced Topics courses CHEM 6310 and 6510.
3. Complete additional units to total the minimum 45 units required--to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry or biochemistry, or from the list of upper division courses in chemistry acceptable for the M.S. Chemistry, Plan A degree. No more than four units of 6900 and three units of 6830 may be included. A maximum of six units from applicable courses in related fields may be included (e.g., in physics, geological sciences, or mathematics), and additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate.

**Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Plan A Degree:**

- CHEM 4161, 4162 Advanced Inorganic Chemistry (3 each), 4180 Inorganic Chemistry Laboratory (2), 4240 Instrumental Methods of Analysis (4), 4311 Advanced Organic Chemistry (4), 4411, 4412, 4413 General Biochemistry (4 each), 4430 General Biochemistry Laboratory (4), 4431 Advanced Biochemistry Laboratory (2), 4440 Protein Structure (3), 4450 Nucleic Acid Chemistry (3), 4460 Major Organ Biochemistry (3), 4601, 4602 Environmental Chemistry I, II (4 each), 4700 Survey of Chemical Literature (2), 6430 Protein Chemistry Techniques (4)

4. Submit to the department an acceptable master's degree thesis (University Thesis, CHEM 6910).

**M.S. Chemistry, Plan B**

In order to be eligible for the degree, the student must satisfy the following departmental requirements:

1. Complete a total of 21 units in required courses in Chemistry comprising the following:
   - CHEM 4240 Instrumental Methods of Analysis (4)
   - CHEM 4521 Elements of Chemical Thermodynamics (4)
   - CHEM 4700 Survey of Chemical Literature (2)
   - CHEM 6251 The Chemical Bond (3)
   - CHEM 6820 Seminar (1, 1, 1)
2. Complete a minimum of 12 units from the Advanced Topics courses CHEM 6310, 6410 and 6510.
3. Complete additional units to total the minimum 45 units required -- to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry or biochemistry or from the list of upper division chemistry courses acceptable for the M.S. Chemistry, Plan B degree. No more than two units of 6900 and none of 6830 or 6910 may be included. A maximum of 12 units from applicable courses in related fields may be included, and additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate.

**Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Plan B Degree:**
- CHEM 3531, 3532 Physical Chemistry Laboratory (2 each), 4161, 4162 Advanced Inorganic Chemistry (3 each), 4180 Inorganic Chemistry Laboratory (2), 4311 Advanced Organic Chemistry (4), 4411, 4412, 4413 General Biochemistry (4 each), 4430 General Biochemistry Laboratory (4), 4431 Advanced Biochemistry Laboratory (2), 4440 Protein Structure (3), 4450 Nucleic Acid Chemistry (3), 4460 Major Organ Biochemistry (3), 4601, 4602 Environmental Chemistry I, II (4 each), 4630 Protein Chemistry Techniques (4)

4. Complete a literature review paper and pass a comprehensive examination consisting of an oral portion covering the review paper and a written portion covering coursework applied to the degree [CHEM 6901 Comprehensive Review (2)].

**M.S. Chemistry, Option in Biochemistry, Plan A**

To be eligible for the Option in Biochemistry, M.S. in Chemistry, the student must satisfy the following departmental requirements:

1. Complete a total of 22 units in required courses in Chemistry comprising the following:
   - CHEM 6410 Advanced Topics in Biochemistry (3)
   - CHEM 6430 Protein Chemistry Techniques (4)
   - CHEM 6820 Seminar (1, 1, 1)
   - CHEM 6830 Research (Biochemistry Specialization) (6)
   - CHEM 6850 Methods of Graduate Research (3)
   - CHEM 6910 Thesis (Biochemistry Specialization) (3)

2. Complete a minimum of six units from the following courses:
   - CHEM 4521, 6310, 6410, 6510, 6521, including at least one of CHEM 4521 and 6521.

3. Complete additional units to total the minimum 45 units required -- to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry and biochemistry or from the list of upper division chemistry courses acceptable for the M.S. Chemistry, Biochemistry Option, Plan A degree. No more than four units of 6900 and three units of 6830 may be included. A maximum of ten units from applicable courses in Biological Sciences may be selected from the following:
   - BIOL 4450 Cell Culture Techniques (4)
   - BIOL 4490 Bioinformatics (4)
   - BIOL 6141 Advanced Molecular Techniques (4)
   - BIOL 6151, 6152 Cell and Molecular Biology I, II (5, 5)

Additional units must be selected to replace any courses in (1) and (2) above taken as an undergraduate.

**Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Biochemistry Option, Plan A Degree:**
- CHEM 3531, 3532 Physical Chemistry Laboratory (2 each), 4161, 4162 Advanced Inorganic Chemistry (3 each), 4180 Inorganic Chemistry Laboratory (2), 4240 Instrumental Methods of Analysis (4), 4311 Advanced Organic Chemistry (4), 4440 Protein Structure (3), 4450 Nucleic Acid Chemistry (3), 4460 Major Organ Biochemistry (3), 4601, 4602 Environmental Chemistry I, II (4 each), 4700 Survey of Chemical Literature (2)

4. Submit to the department an acceptable master's degree thesis (University Thesis, CHEM 6910).

**M.S. Chemistry, Option in Biochemistry, Plan B**

1. Prerequisite: One year of undergraduate biochemistry.

2. Complete a total of 21 units in the following required chemistry courses:
   - CHEM 4240 Instrumental Methods of Analysis (4)
   - CHEM 6430 Protein Chemistry Techniques (4)
   - CHEM 4700 Survey of Chemical Literature (2)
   - CHEM 6521 The Chemical Bond (3)
   - OR CHEM 4521 Elements of Chemical Thermodynamics (4)
   - CHEM 6820 Seminar (1, 1, 1)
   - CHEM 6850 Methods of Graduate Research (3)
   - CHEM 6901 Comprehensive Review (2)

3. Complete a minimum of 12 units from the Advanced Topics courses CHEM 6310, 6410, and 6510.

4. Complete additional units to total the minimum 45 units required--to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry and biochemistry or from the list of upper division chemistry courses acceptable for the M.S. Chemistry, Biochemistry Option, Plan B degree. No more than two units of 6900 and none of 6830 or 6910 may be included. A maximum of ten units from applicable courses in Biological Sciences may be selected from the following:
   - BIOL 4450 Cell Culture Techniques (4)
   - BIOL 4490 Bioinformatics (4)
   - BIOL 6141 Advanced Molecular Techniques (4)
   - BIOL 6151, 6152 Cell and Molecular Biology I, II (5, 5)

Additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate.

**Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Biochemistry Option, Plan B Degree:**
- CHEM 3531, 3532 Physical Chemistry Laboratory (2 each), 4161, 4162 Advanced Inorganic Chemistry (3 each), 4180 Inorganic Chemistry Laboratory (2), 4311 Advanced Organic Chemistry (4), 4440 Protein Structure (3), 4450 Nucleic Acid Chemistry (3), 4460 Major Organ Biochemistry (3), 4601, 4602 Environmental Chemistry I, II (4 each), 4700 Survey of Chemical Literature (2)
Major Organ Biochemistry (3), 4601, 4602 Environmental Chemistry I, II (4 each)

5. Complete a literature review paper and pass a comprehensive examination consisting of an oral portion covering the review paper and a written portion covering coursework applied to the degree [CHEM 6901 Comprehensive Review (2)].

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Graduate Courses

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<th>Course Number</th>
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<tr>
<td>6310</td>
<td>Advanced Topics in Organic Chemistry (3) Selected topics in special advanced fields of organic chemistry. Topics vary each quarter. Prerequisite: one year of organic chemistry. <strong>May be repeated two times for credit when content varies, for a maximum of 9 units.</strong></td>
</tr>
<tr>
<td>6410</td>
<td>Advanced Topics in Biochemistry (3) Selected topics in biochemistry, e.g., advanced discussion of proteins, enzyme kinetics, physical biochemical techniques, nucleic acid chemistry. Prerequisite: CHEM 4413 or consent of instructor. <strong>May be repeated once for credit when content varies, for a maximum of 6 units.</strong></td>
</tr>
<tr>
<td>6430</td>
<td>Protein Chemistry Techniques (4) Techniques in protein chemistry. Methods for protein quantitation, separation, identification, purification and sequence analysis. Emphasis on modern procedures employing techniques such as chromatography, electrophoresis, isoelectric focusing, gene splicing and immunological probing. Prerequisites: CHEM 4412 and 4431 or BIOL 4465 or BIOL 4456 (or equivalents) and permission of instructor. Two hrs. lect., 6 hrs. lab.</td>
</tr>
<tr>
<td>6510</td>
<td>Advanced Topics in Physical Chemistry (3) Selected topics in physical chemistry, e.g., molecular structure, spectroscopy, quantum mechanics, and crystallography. Prerequisite: 1 year physical chemistry. <strong>May be repeated for credit, for a maximum of 9 units.</strong></td>
</tr>
<tr>
<td>6521</td>
<td>The Chemical Bond (3) The quantum mechanical description of the structure and spectroscopic properties of atoms and molecules, of the chemical bonding in molecules, and of bonding in solids and liquids. Prerequisite: CHEM 3513.</td>
</tr>
<tr>
<td>6530</td>
<td>Research (1-5) Original research in chemistry, under the supervision of a member of the graduate faculty. Prerequisites: Advancement to Candidacy and departmental approval. <strong>May be repeated for credit, for a maximum of 9 units.</strong></td>
</tr>
<tr>
<td>6540</td>
<td>Methods of Graduate Research (3) An introduction to advanced research methods including bibliographical, instrumental, and laboratory applications. Prerequisites: &quot;Classified Graduate&quot; standing in chemistry and departmental approval.</td>
</tr>
<tr>
<td>6820</td>
<td>Seminar (1) Written and oral review of topics in the current chemical literature; reports of research in progress. Prerequisite: upper division or graduate standing in chemistry. <strong>May be repeated two times for credit, for a maximum of 3 units. CR/NC grading only.</strong></td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-3) A maximum of four units may be applied toward the degree.</td>
</tr>
<tr>
<td>6901</td>
<td>Comprehensive Review (2) Preparation for Comprehensive Examination including review of relevant areas and preparation of a substantial written report on a selected topic under the direction of a faculty advisor. The final examination covers the selected topic and is the oral portion of the Comprehensive Examination. Prerequisite: completion of or concurrent enrollment in all courses required in categories (1), (2) and (3) of M.S. program excluding one unit of CHEM 6820. CR/NC only.</td>
</tr>
<tr>
<td>6910</td>
<td>University Thesis (1-3) Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense is normally required. (See also, &quot;University Thesis Writing Guide,&quot; <a href="http://www.csueastbay.edu/thesiswritingguide">www.csueastbay.edu/thesiswritingguide</a>.) Prerequisites: Advancement to Candidacy and departmental approval. Maximum of 3 units per student.</td>
</tr>
<tr>
<td>6999</td>
<td>Issues in Chemistry (4) Readings, discussion, and research on contemporary and/or significant issues in chemistry. <strong>May be repeated for credit when content varies, for a maximum of 8 units.</strong></td>
</tr>
</tbody>
</table>
Communication

Department Information

Department of Communication
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 3011
Phone: (510) 885-3292 FAX: (510) 885-4099
Website: http://class.csueastbay.edu/communication/

Professors Emeriti
Thomas S. McCoy, Ph.D. Ohio University
Robert L. Terrell, Ph.D. University of California, Berkeley
Gale Young (Interim Chair), Ph.D. University of California, Los Angeles

Professors
Sally K. Murphy, Ph.D. University of Minnesota, Minneapolis

Assistant Professors
Lonny J. Brooks, Ph.D. University of California, San Diego
Grant Kien, Ph.D. University of Illinois at Urbana-Champaign
Terry L. West, Ph.D. Southern Illinois University

Graduate Coordinator: Grant Kien

M.A. in Communication

The Department of Communication offers graduate study leading to the Master of Arts degree in Communication. The candidate must observe the general requirements for the Master of Arts degree stated in the Graduate Degree Information chapter in this catalog as well as specific departmental requirements stated here and more fully in the Graduate Handbook issued by the department (copies available upon request).

University requirements include the 32-unit residence requirement, the 5-year rule in currency of subject matter, the minimum number of units of 6000-level courses, a 3.00 GPA, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

The candidate is also responsible for:

1. consulting an advisor and planning a tentative program with that advisor.
2. completing the prerequisites to the program and all program requirements.

Program Description

Students who complete the Master of Arts degree in Communication will gain understanding and expertise in media studies, organizational and interpersonal communication. By enabling them to critically analyze and improve spoken and written messages, the program prepares students to play valuable roles in business, industry, government, and education; to pursue doctoral study; and to communicate effectively in day-to-day life.

The study of Communication includes theories and critical methods of rhetoric and communication, as well as critical analysis of messages as they occur within and across public, interpersonal, and organizational contexts, and across disciplines. The department focuses upon relating theory to practice in ways that recognize and explore the profound influences of ethics and cultural experience on how we communicate. Cal State East Bay's Communication program is widely and highly regarded for its excellence in preparing business, government, teaching professionals, and Ph.D. students.

Student Learning Outcomes

Students graduating with an M.A. in Communication from Cal State East Bay can:

1. think critically, demonstrated in oral and written work;
2. conduct advanced research; and
3. write a research proposal, report, and scholarly essays.

Career Opportunities

Students with an M.A. in Communication are educated to speak, think, and write clearly and effectively. Because these are highly-sought-after skills, graduates are valuable employees in many jobs, including but not limited to teaching, consulting, human resources, personnel, communication training in organizations, management, banking, sales, government, and politics. The degree is also excellent preparation for Ph.D. and law degrees.

Faculty: Areas of Specialization

The graduate faculty is comprised of eight professors committed to teaching excellence and research. The faculty are well respected and are involved in professional organizations, in campus activities, and in community service.

Lonny Brooks, Ph.D. 2004, University of California, San Diego; M.L.I.S. 1995, University of California, Los Angeles: organizational communication, information technologies, critical ethnography, communication theory and research

Grant Kien, Ph.D., 2006, University of Illinois at Champaign-Urbana, M.A., 2002, York University: technography, technology and organizational/social change, digital media and culture, qualitative research, globalization.
Scholarships and Awards

The Communication Connection elects officers and meets regularly to socialize and to discuss research, concerns, and problems.

Communication Connection: Communication, or by other work-related internships.

Communication Lab, by mentoring in COMM 1000 or 1004, by internship through Co-op Education, by internship in Organizational Administration.

All courses are four units unless otherwise specified. In cases of transferred credit, a minimum of 32 units must be completed at CSU East Bay.

Students are encouraged to volunteer in the Lab to gain valuable teaching experience and to serve other students. Graduate students may also serve as paid lab assistants.

Communication Laboratory: In addition to classroom study of interpersonal, intercultural, organizational, and public communication, we sponsor a Communication Laboratory open to the campus community that provides communication-related support services. Upper division Communication majors and graduate students serve as tutors who help students research, organize, outline, and deliver oral presentations. Students are encouraged to volunteer in the Lab to gain valuable teaching experience and to serve other students. Graduate students may also serve as paid lab assistants.

Work Study: If you are interested in the work study program, consult with the Financial Aid Office, 3rd Floor, Student Services and Administration.

Internships: With the permission of your committee chair, students may earn up to four units of internship credit by working in the Communication Lab, by mentoring in COMM 1000 or 1004, by internship through Co-op Education, by internship in Organizational Communication, or by other work-related internships.

Communication Connection: Communication Connection is the department's student organization open to all Department of Communication students. The Communication Connection elects officers and meets regularly to socialize and to discuss research, concerns, and problems.

Scholarships and Awards

- The Karl Robinson Scholarship is awarded to outstanding Communication students and M.A. candidates who show potential for excellence in scholarly achievement.
- The Outstanding Graduate Student Award is given to students who demonstrate outstanding scholarship, leadership, and contribution to the program.
- The Outstanding Teaching Associate Award is given to students who demonstrate outstanding performance in teaching.

Admission

Application for admission includes two parts:

1. submit the university application form, with fee, to the Admissions Office, Student Services and Administration Building, Cal State East Bay, Hayward, CA 94542;
2. submit the department application form, a statement of purpose, three letters of recommendation, and a sample of scholarly writing to the Graduate Coordinator, Department of Communication, Cal State East Bay, Hayward, CA 94542. Both university and department application forms are available on the Department of Communication website. You may be admitted under one of the following:

"Classified Graduate" Standing

For admission with "Classified Graduate" standing to the M.A. program in Communication, students must:

1. submit an application to pursue a specific program of graduate study and be accepted by the department and the university
2. have completed a baccalaureate major in Communication from an accredited institution, or appropriate preparatory coursework approved by the faculty
3. have maintained an overall grade point average of at least 3.00, and
4. satisfied the University Writing Skills Requirement.

"Conditionally Classified Graduate" Standing

If a student's communication major did not include prerequisite courses, if a student's degree is in another field, or if the University Writing Skills Requirement has not been satisfied, it may be possible to be admitted with "Conditionally Classified Graduate" standing. In this case, students are admitted graduate students but have conditions to meet. Student status will remain conditional until the work is completed with a minimum of "B" or better grades and the Writing Skills Test has been passed. (See the following section, "Degree Requirements," for prerequisite courses.)

Degree Requirements

The M.A. in Communication requires completion of 45 units in an approved program of study, with a "B" (3.0) or better. Up to 12 units at the 4000 level may count toward graduation.

Up to 12 units of Independent Study may be taken (by advisor approval) which may also count towards your degree. No more than two Independent Study units may be taken as mentee or intern credit.

Up to 12 units of graduate seminars outside the Communication Department may be taken (by advisor approval) at or above the 4000 level. All courses are four units unless otherwise specified. In cases of transferred credit, a minimum of 32 units must be completed at CSU East Bay.

Areas of Emphasis

Students in the department take regularly-offered seminars and upper division courses in organizational communication, interpersonal communication, media studies, and intercultural communication. In addition, students may choose among special-topics seminars, upper division courses, and independent study. Advisors work with students to create programs of study that meet their goals.

Features

Teaching Associates: Qualified students may be granted opportunities to teach, to assist in forensics, or to assist a professor on a project. To be eligible for consideration in teaching COMM 1000 and/or 1004, students must show satisfactory achievement in COMM 6250 (Teaching Public Speaking and Interpersonal Communication), successful completion of specified coursework, and must have mentored with a faculty member in the course(s) they wish to teach. Interested students should consult with the Graduate Coordinator or the department Chair.

Communication Laboratory: In addition to classroom study of interpersonal, intercultural, organizational, and public communication, we sponsor a Communication Laboratory open to the campus community that provides communication-related support services. Upper division Communication majors and graduate students serve as tutors who help students research, organize, outline, and deliver oral presentations. Students are encouraged to volunteer in the Lab to gain valuable teaching experience and to serve other students. Graduate students may also serve as paid lab assistants.

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1. submit the university application form, with fee, to the Admissions Office, Student Services and Administration Building, Cal State East Bay, Hayward, CA 94542;
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"Classified Graduate" Standing

For admission with "Classified Graduate" standing to the M.A. program in Communication, students must:

1. submit an application to pursue a specific program of graduate study and be accepted by the department and the university
2. have completed a baccalaureate major in Communication from an accredited institution, or appropriate preparatory coursework approved by the faculty
3. have maintained an overall grade point average of at least 3.00, and
4. satisfied the University Writing Skills Requirement.

"Conditionally Classified Graduate" Standing

If a student's communication major did not include prerequisite courses, if a student's degree is in another field, or if the University Writing Skills Requirement has not been satisfied, it may be possible to be admitted with "Conditionally Classified Graduate" standing. In this case, students are admitted graduate students but have conditions to meet. Student status will remain conditional until the work is completed with a minimum of "B" or better grades and the Writing Skills Test has been passed. (See the following section, "Degree Requirements," for prerequisite courses.)

Degree Requirements

The M.A. in Communication requires completion of 45 units in an approved program of study, with a "B" (3.0) or better. Up to 12 units at the 4000 level may count toward graduation.

Up to 12 units of Independent Study may be taken (by advisor approval) which may also count towards your degree. No more than two Independent Study units may be taken as mentee or intern credit.

Up to 12 units of graduate seminars outside the Communication Department may be taken (by advisor approval) at or above the 4000 level. All courses are four units unless otherwise specified. In cases of transferred credit, a minimum of 32 units must be completed at CSU East Bay.
Writing Skills Requirement

All students must meet the University Writing Skills Requirement (UWSR) to become fully "Classified Graduate" students. Graduate students must begin satisfaction of this requirement in their first quarter of their residency.

Attainment of "Classified Graduate" Standing

To attain "Classified Graduate" standing, a student must have completed all prerequisites with grades of "B" or better and satisfied the University Writing Skills Requirement. Notify the graduate advisor immediately upon completion, and request that s/he complete the necessary paperwork.

Advancement to Candidacy

To be Advanced to Candidacy for the M.A. degree in Communication, the student must:

1. be a "Classified Graduate" student in good standing;
2. complete 12 quarter units beyond the prerequisites with at least "B" grades;
3. choose a program advisor;
4. submit a study plan for completion of the degree program to the program advisor;
5. have the thesis proposal or project proposal approved by their graduate adviser, if applicable;
6. show evidence of progress and ability to complete the program.

Capstone Experiences

1. Project (5 units): Upon approval of his/her graduate committee, a student may elect the Project option (5 units); enrollment commits the student to a production of a piece of work which is to follow prescribed forms; a permanent record is to be filed in the departmental office.
2. University Thesis (9 units): Upon approval of his/her graduate committee, a student may elect the University Thesis; s/he will carry out research on a specific topic in the field and will report, review, and file the results; s/he will be examined on the thesis (see 3, below under "Examinations" heading); the University Thesis carries 9 units of credit.
3. Comprehensive Examination: A student may elect a program made up entirely of a minimum of 45 units of approved coursework, including COMM 6901 Comprehensive Examination Preparation. A comprehensive examination must be passed.

Examinations

1. Students electing the Project option (5 units) will sit for a two-hour oral defense of their project at its completion.
2. Students electing the University Thesis option will sit for a two-hour oral defense of the thesis at its completion.
3. Satisfactory achievement on comprehensive written and oral examinations will be required of students electing the coursework and project options. For the comprehensive examinations, the student will be tested on all coursework taken during their graduate study, including all required courses and any coursework in progress during the quarter of examination.

Curricular Requirements

I. Required Courses (12 units)
   A. Take both of the following in the first year of study (8 units)
      • COMM 6000 Introduction to Graduate Study (4)
      • COMM 6010 Seminar in Theories in Communication (4)
   B. Select at least one course from the following (4 units):
      • COMM 6040 Advanced Qualitative Research Methods (4)
      • COMM 6050 Advanced Quantitative Research Methods (4)

II. Cluster Courses (12 units)
Select at least three courses in the cluster of your choice (12 units; more may be taken).

- Cluster 1: Communication Studies (12 units)
  Any combination of 12 units taken from all clusters with advisor's approval.
- Cluster 2: Media Studies (12 units)
  Required: COMM 6300 Seminar in Media Studies (4)
  Select at least two courses from the following:
  • COMM 6020 Communication, Media and Society (4)
  • COMM 6450 Seminar in Globalization and Media (4)
  • COMM 6550 Seminar in Critical Cultural Studies (4)
  • COMM 6551 Critical Ethnic Media Studies (4)
- Cluster 3: Organizational and Interpersonal Communication (12 units)
  Required: COMM 6400 Seminar in Rhetorical Studies (Public Discourse) (4)
  Select at least two courses from the following:
  • COMM 6600 Seminar in Organizational Communication (4)
  • COMM 6800 Seminar in Interpersonal Communication (4)
  • COMM 6810 Seminar in Intercultural Communication (4)
  • COMM 6850 Professional Communication (covering facilitation, corporate communication and communications consulting) (4)
  • COMM 6100 Topics in Communication (4) (may be repeated)
  • COMM 6900 Independent Study (4)

III. Electives (12-20 units)
The number of elective units you take is determined by the Capstone Experience you choose in IV, below (e.g. 16 units of electives with a 5-unit Special Project). Total units for III. Electives and IV. Capstone Experience must be 21. Total units for degree is 45.

Qualifying 4000 and 6000 level departmental and non-departmental courses to be approved in advance of every quarter, as per the University course calendar.

IV. Capstone Experience (1-9 units)
The M.A. degree may be completed in one of the following ways, with approval of the advisor: Project, University Thesis, or Comprehensive Examination.
A. **Special Project (5 units)**
   COMM 6899 Project (1-5) (may be taken over two quarters, but must total 5 units to finish)
   Prerequisites: COMM 6000, COMM 6010, COMM 6020 or 6040.

B. **University Thesis (9 units)**
   COMM 6910 University Thesis (1-9) (may be taken over two or more quarters, but must total 9 units to finish)
   Prerequisites: COMM 6000, COMM 6010, COMM 6020 or 6040.

C. **Comprehensive Examination (1 unit)**
   COMM 6901 Comprehensive Examination Preparation (1)
   Prerequisites: Advancement to Candidacy (completion of all required and elective courses.)

---

**Courses**

At times the subject matter in a course changes significantly and may be taken more than once for credit, with permission of the instructor and the student's advisor. This is indicated in the description of the course.

**Post-Baccalaureate (Prefix: COMM)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
</table>
| 5900          | Independent Study (1-4)  
May be applied to the M.A. degree with approval. May be repeated for credit, for a maximum of 8 units. |

The following graduate seminars, except COMM 6000, are offered on a rotating basis. Therefore, some 6000-level courses may not appear in a given academic year.

**Graduate Courses (Prefix: COMM)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
</table>
| 6000          | Introduction to Graduate Study (4)  
Develop attitude and skills of scholarly writing; engage questions about approaching and justifying research, conduct literature reviews, practice scholarly writing of research proposals, conduct advanced library research, and consider the place of ethics in research. Prerequisites: graduate standing and consent of instructor. |
| 6010          | Seminar in Theories in Communication (4)  
Theories of communication across the discipline of communication, interactions among theories, development of theories of communication, and the relationship of theory to criticism and practice. Prerequisite: COMM 6000. |
| 6020          | Seminar in Communication, Media, and Society (4)  
An overview of media studies in a field of inquiry, including an evolutionary historical perspective culminating in the present state of the field. Emphasis is given to the levels of the inquiry and content, medium and social interactions around the medium. Context range from personal/local through international/global. |
| 6030          | Capstone Seminar: Rhetoric, Communication, and Media (4)  
Integrate study of media and modes of communication within public and professional spheres of communication, engaging tensions among theory, criticism, research, practice, service, and ethics; across research in rhetoric, communication, and media. Prerequisite: COMM 6000. |
| 6040          | Advanced Qualitative Research Methods  
Qualitative approaches to communication research, emphasizing applied research skills. Cover major traditions and concepts in qualitative research and recent advances in quantitative inquiry into contemporary electronic media and/or communications issues. Prerequisite or Co-requisite: COMM 6000. |
| 6050          | Advanced Quantitative Research Methods  
Quantitative approach to communication research, emphasizing applied research skills. Cover major traditions and concepts in quantitative research and recent advances in quantitative inquiry into contemporary electronic media and/or communications issues. Prerequisite or Co-requisite: COMM 6000. |
| 6100          | Topics in Speech Communication (4)  
Presentation of selected topics in speech communication beyond regular course offerings. Subjects will vary and will be specified at time of offering. Prerequisite: consent of instructor. May be repeated for credit when content varies for a maximum of 8 units. |
| 6200          | Internship in Speech Communication (1-4)  
Supervised experience in a variety of communication activities inside and outside the University. Prerequisite: department approval. May be repeated for credit, for a maximum of 4 units in the M.A.; for a maximum of 6 units (combined with units from Co-Op Ed.) in the B.A. CR/NC grading only. |
| 6250          | Teaching Communication (4)  
The theories of learning and motivations to learn. Development of strategies to communicate course content to encourage learning for the diversity of students in the communication classroom. |
| 6300          | Seminar in Media Studies (4)  
Examines the historical, philosophical, technological, economic, political, and sociological dimensions of media studies as a field of inquiry, emphasizing current concerns in effects and critical research. Prerequisites or Co-requisites: COMM 6000, COMM 6020, may be taken concurrently. |
| 6450          | Seminar in Globalization and Media (4)  
Perspectives examining globalization of media and the special role media plays in globalization. Draws from political economy (authors such as David Held and Manuel Castells) and critical media studies. |
| 6550          | Seminar in Critical Cultural Studies (4)  
Overview of cultural studies as a field of inquiry from a critical perspective. Major works studied may include the Frankfurt School,
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>6551</td>
<td>Critical Ethnic Media Studies (4)</td>
<td>Overview of the ethnic media infrastructure and discourse as it relates to the changing face of contemporary media in America. Emphasizes study of community, diaspora, marginality, border-crossings, gender, transgression, queer ethnicity, and critical examinations of oppressions and resistance.</td>
</tr>
<tr>
<td>6600</td>
<td>Seminar in Organizational Communication (4)</td>
<td>Oral communication in organizational settings including the design, implementation and management of communication systems. Research and theories of organizational communication. Prerequisite: consent of instructor. May be repeated once for credit, for a maximum of 8 units.</td>
</tr>
<tr>
<td>6800</td>
<td>Seminar in Interpersonal Communication (4)</td>
<td>Critical examination of research, theory, and methods in interpersonal communication; analysis of verbal and nonverbal message forms affecting the nature of human interaction. Prerequisites: COMM 1004 and 4820; or consent of instructor. May be repeated once for credit, for a maximum of 8 units.</td>
</tr>
<tr>
<td>6850</td>
<td>Professional Communication (4)</td>
<td>Overview of professional communication principles and practices, covering skills, strategies, techniques, use of media, ethics, and professional communication across and between differing cultural and ethnic contexts.</td>
</tr>
<tr>
<td>6898</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: minimum 3.0 GPA, departmental approval of activity. May be repeated for credit, for a maximum of 8 units. Only a maximum of 4 units may be applied to the M.A. in Communication. CR/NR grading only.</td>
</tr>
<tr>
<td>6899</td>
<td>Project (5)</td>
<td>Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required. Maximum of 5 units per student. Prerequisite: graduate standing.</td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
<td></td>
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<tr>
<td>6901</td>
<td>Comprehensive Examination Preparation</td>
<td>Preparation for graduate comprehensive examination. Directed readings and review of sample questions. Prerequisite: Advancement to Candidacy (completion of all required and elective courses.) May not be repeated for credit. CR/NC grading only.</td>
</tr>
<tr>
<td>6910</td>
<td>University Thesis (1-9)</td>
<td>Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also &quot;University Thesis Writing Guide,&quot; <a href="http://www.csueastbay.edu/thesiswritingguide">www.csueastbay.edu/thesiswritingguide</a> ) Maximum of 9 units per student. Prerequisite: graduate standing.</td>
</tr>
<tr>
<td>6999</td>
<td>Issues in Speech Communication (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in speech communication. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
</tbody>
</table>
Computer Networks

Department Information

Department of Mathematics and Computer Science
College of Science
Office: North Science 335
Phone: (510) 885-3414
E-mail: mathcs@csueastbay.edu
http://www.sci.csueastbay.edu/mathcs/
Student Service Center: North Science 337
Phone: (510) 885-4011

Professors
Kevin A. Brown, Ph.D. University of South Carolina
Leann Christianson, Ph.D. University of South Carolina
William Thibault, Ph.D. Georgia Institute of Technology
Ytha Y. Yu, Ph.D. University of California, Berkeley

Associate Professors
Levent Ertaul, Ph.D. University of Sussex (United Kingdom)
Farzan Roohparvar, Ph.D. Iowa State University

Graduate Coordinator: Leann Christianson

M.S. in Computer Networks

Program Description

The Department of Mathematics and Computer Science offers graduate study leading to the degree of Master of Science in Computer Networks. The program provides opportunities for students to gain a deeper understanding of the basis for computer networking technology and its application to communication infrastructures. It is designed to offer both a theoretical background and practical experience beyond that covered in typical undergraduate degree programs. A theoretical background to support hands-on learning is imperative as the computer network industry and its technologies are transitory and rapidly evolving. Students can expect to have a number of different job classifications during their working lives.

The area of computer networks requires a variety of skills including knowledge and experience with computer network protocols, routing algorithms, network congestion control, error handling, network management, data compression and encryption, switching algorithms, operating systems principles and practices, computer architecture, and software development. Computer network theory rests upon engineering principles and concepts that draw upon mathematics and physics.

Our program features small classes that allow for close contact between students and faculty. Most graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Computer Networks should speak with the Computer Networks Graduate Coordinator.

Student Learning Outcomes

Students graduating with an M.S. in Computer Networks from Cal State East Bay will have acquired the knowledge and skills listed below.

1. Technical competence to:
   a. design and implement computer network programs running on multiple machines,
   b. manage network devices,
   c. use protocol and service design principles,
   d. design a solution to a consumer request using current technologies;

2. A fundamental understanding of Computer Networks theory including:
   a. mathematical basis for network traffic analysis,
   b. design and analysis of a wide variety of network algorithms,
   c. understanding of network architectures and protocols,
   d. network security concepts and applications;

3. Able to work effectively as a team member;
4. An understanding of their professional and ethical responsibilities and appreciation of the impact of computer network solutions in the societal context;
5. Able to communicate effectively, both in written and oral form.

Career Opportunities

- Network Engineer
- Software Engineer
- Network Administrator
- Network Applications Programmer
Faculty
The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas. They have a strong commitment to high quality teaching, and have interests in fields such as wireless and mobile networking, network security, data compression, computer graphics, numerical analysis, compiler design, computer simulation, parallel programming, computer architecture, automata, multimedia, cryptography, computational complexity, language design and implementation, graph theory, microcomputer architecture, and database systems.

Features
There are multiple PC labs around campus as well as wireless network access. The department runs a grid computing laboratory and has classrooms equipped for computerized demonstration.

Scholarships
Each year the department awards several scholarships for the subsequent year. Scholarship applications may be obtained from the department office during the Winter quarter.

Admission
To apply for admission to the Master of Science program in Computer Networks, a student must submit the proper forms, fees and transcripts to the university's Office of Planning and Enrollment Management, which reviews each application initially. The department then reviews the application, making the decision whether to accept or reject the applicant. Each applicant must have the score on the general portion of Graduate Record Examination (GRE) submitted directly to the department. Submission of scores on the Computer Science portion is optional.

A student wishing to enter this program must normally have an undergraduate degree in Computer Science or in a related field, with courses in Computer Science as indicated below, and must have a grade point average of 2.75 in all undergraduate work and a 3.00 grade point average in the Computer Science Core and Mathematics courses listed below.

- **Computer Networks Admission Requirements**
  - CS 2430 Computer Organization and Assembly Language Programming
  - CS 3240 Data Structures and Algorithms
  - CS 3430 Computer Architecture
  - CS 3590 Data Communications and Networking
  - CS 4560 Operating Systems or CS 3560 Introduction to Systems Programming
  - CS 4590 Computer Networks

  Successful completion of equivalents to all the following mathematics requirements is also required.

- **Mathematics Requirements for Admission**
  - MATH 2150 Discrete Structures
  - An upper division course in probability or statistics (STAT/ENGR 3601, STAT 3401, or STAT 3502)

A student who has not met all of the above requirements may be admitted to the program at the discretion of the department as a "Conditionally Classified Graduate" student, provided the student's record clearly demonstrates the capability of meeting all these requirements.

No more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree. Note that courses used to make up deficiencies for admission may not be applied toward the master's degree. A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or better average in at least 12 quarter units of post-baccalaureate study, and has satisfied the University Writing Skills Requirement should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status. A maximum of 13 units taken as an "Unclassified Post-baccalaureate" student may be applied to a master's degree.

Advancement to Candidacy
Advancement to Candidacy is a university requirement for graduation for a master's degree program. A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units towards the master's degree with a "B" average, including at least two 6000 level Computer Science courses with a "B" or better average.

Before being Advanced to Candidacy, a student's complete course of study must be approved by the Computer Networks Graduate Committee.

Degree Requirements
The following departmental requirements are in addition to the university requirements.

A. **Required Courses (12 units)**
   - CS 6560 Operating System Design (4)
   - CS 6580 Distributed Systems (4)
   - CS 6591 Communications Network Analysis and Design (4)

B. **Breadth Requirement (16 units)**
Four courses selected from the following:
   - CS 4594 Broadband Networks and Communications (4)
   - CS 6320 Software Engineering of Web-Based Systems (4)
   - CS 6522 Advanced WWW Software Development (4)
   - CS 6525 Network Security (4)
   - CS 6526 Security in Mobile, Wireless, Grid and Pervasive Computing (4)
   - CS 6592 Network Management (4)
• CS 6596 Wireless and Mobile Networking Architecture (4)
• CS 6715 Data Compression (4)

Note: Some of the breadth requirement courses contain prerequisites that are not included in the program admission requirements.

C. Capstone Experience (5 units)
CS 6899 Project (5)

The capstone experience consists of a project, normally involving a team of students, and an individual formal document from each student. Projects must be approved by a designated faculty committee and sponsored by a faculty advisor.

D. Electives (12 units)
Any graduate course in Computer Science may be applied to this category. Any Computer Science course numbered 3000 (except 3898) or higher, provided it has not been already applied toward a B.S. degree or toward prerequisites for admission. This restriction includes equivalent courses from other degree programs; exceptions require the approval of the Computer Networks Graduate Committee.

E. Unit and Grade Requirements
At least 45 quarter units of approved upper division and graduate work. Of these, at least 26 units must be approved graduate (6000-level) courses. All work toward the 45 units must be at an average grade of "B" (3.0) or higher. Grades below "C-" will not be counted as prerequisites or toward the degree.

Other Degree Requirements
In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Graduate Courses
See the graduate Computer Science chapter for Computer Science (CS) course descriptions.
M.S. in Computer Science

Program Description

The Mathematics and Computer Science Department offers graduate study leading to the degree of Master of Science in Computer Science. This program is designed to extend the student's knowledge in a broad manner beyond the baccalaureate degree major in Computer Science. It will both (1) deepen general understanding of theoretical principles and (2) provide specific professional background. This approach is especially important in Computer Science, where training in specific languages and systems and on specific machines is transitory, as these languages, systems, and machines evolve. In contrast, many of the principles will last and generally apply to a wide variety of specializations within the field. This breadth is important to individual students because many of them will have a number of different job classifications in their working lives.

Our program features small classes that allow for close contact between students and faculty. Most graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Some courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Computer Science should speak with the Computer Science Graduate Coordinator. The Math and Computer Science Department also offers a Master of Science degree program in Computer Networks.

Student Learning Outcomes

Students graduating with an M.S. in Computer Science from Cal State East Bay will have acquired the knowledge and skills listed below.
1. Technical competence to: (a) design and implement large and complex computer programs, (b) use data structures in program design, (c) know and use modern programming techniques, and (d) use software engineering design principles;

2. A fundamental understanding of Computer Science theory including: (a) mathematical problem solving skills, (b) design and analysis of a wide variety of algorithms, (c) understanding of computer architecture and operating system concepts, (d) analysis of programming languages;

3. Able to work effectively as a team member;

4. An understanding of their professional and ethical responsibilities and appreciation of the impact of computer science solutions in the societal context;

5. Able to communicate effectively, both in written and oral form.

**Career Opportunities**

- Systems Analyst
- Program Analyst or Designer
- Systems Manager or Programmer
- Scientific Applications Programmer
- Computer Operations Manager
- Graphics Specialist
- Software Engineer
- Programming Team Member, possibly specializing in Design, Testing, or Documentation
- Computer Network Support
- Database Applications Programmer or Administrator
- Computer Sales Representative
- Customer Support
- Technical Writer
- Teacher/Professor

**Faculty**

The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas. They have a strong commitment to high quality teaching, and have interests in fields such as computer graphics, networks, numerical analysis, compiler design, computer simulation, parallel programming, computer architecture, automata, multimedia, cryptography, computational complexity, language design and implementation, graph theory, microcomputer architecture, and database systems.

**Features**

Computer Science students at Cal State East Bay have access to some of the most modern and powerful computer equipment available. The campus provides a network backbone, including connection to the Internet, personal computers, and wireless network access. Several computer labs on campus offer terminal access and assistance with problems.

Cal State has an active Computing Club, which hosts industry tours as well as academic and social events and is involved with a number of ongoing projects.

**Scholarships**

Each year the department awards a number of scholarships covering a large portion of the fees for the subsequent year. Scholarship applications may be obtained from the department office during the Winter quarter.

**Admission**

To apply for admission to the Master of Science program in Computer Science, a student must submit the proper forms, fees and transcripts to the university's Office of Admissions, which reviews each application initially. The department then reviews the application, making the decision whether to accept or reject the applicant.

A student wishing to enter this program must normally have an undergraduate degree in Computer Science or in a related field, with courses in Computer Science as indicated below, and must have a grade point average of 2.75 in all undergraduate work and a 3.00 grade point average in the Computer Science Core and Mathematics courses listed below.

**Computer Science Admission Requirements**

Twenty-eight (28) quarter units (7 courses) of upper division Computer Science coursework that covers a broad range of Computer Science and includes the following four courses or their equivalents.

- CS 3120 Programming Language Concepts
- CS 3240 Data Structures and Algorithms
- CS 3430 Computer Architecture
- CS 4560 Operating Systems

Successful completion of equivalents to all the following mathematics requirements is also required.

**Mathematics Requirements for Admission**

- A year of Calculus (MATH 1304, 1305, 2304)
- Linear Algebra (MATH 2101)
- Discrete Structures (MATH 2150)
- An upper division course in Probability or Statistics (STAT 3401, 3502, or 3601)

A student who has not met all of the above requirements may be admitted to the program at the discretion of the department as a "Conditionally Classified Graduate" student, provided the student's record clearly demonstrates the capability of meeting all these requirements.

No more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree. Note that courses used to make up deficiencies for admission may not be applied toward the master's degree. A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or better average in at least 12 quarter units of post-baccalaureate study, and has satisfied the University Writing Skills requirement should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status. A maximum of 13 units taken as an "Unclassified Post-baccalaureate" student may be applied to a master's degree.

**Advancement to Candidacy**
Advancement to Candidacy is a university requirement for graduation from a master's degree program. A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units towards the master's degree with a "B" average, including at least two 6000 level Computer Science courses with a "B" or better average.

Before Advancement to Candidacy, a student's complete course of study must be approved by the Computer Science Graduate Coordinator.

**Degree Requirements**

The following departmental requirements are in addition to the university requirements.

**A. Research Methodologies Requirement (2 units)**
- CS 6000 Research Methodologies (2)

**B. Breadth Requirement (24 units)**
- CS 6260 Computation and Complexity (4)
- CS 6560 Operating Systems Design (4)
- At least two courses from each of the following two categories (16 units):
  - Development/Theory (6)
    - Any two of the following courses:
      - CS 6140 Language Design (4)
      - CS 6170 Automata and Formal Languages (4)
      - CS 6310 Advanced Software Engineering (4)
      - CS 6320 Software Engineering of Web-based Systems (4)
      - CS 6520 Cryptography and Data Security (4)
      - CS 6522 Advanced WWW Software Development (4)
      - CS 6715 Data Compression (4)
      - CS 6810 Topics in Artificial Intelligence (4)
      - CS 6820 Machine Learning (4)
      - CS 6870 Computer Simulation (4)
      - MATH/CS 6750 Topics in Numerical Analysis (4)
  - Systems/Architecture (8)
    - Any two of the following courses:
      - CS 6110 Theory and Design of Compilers (4)
      - CS 6430 Computer System Architecture (4)
      - CS 6432 VLSI Systems Design (4)
      - CS 6525 Network Security (4)
      - CS 6570 Distributed Computation (4)
      - CS 6580 Distributed Systems (4)
      - CS 6860 Database Systems (4)
      - CS 6752 Digital Signal Processing (4)
      - CS 6825 Computer Vision (4)
      - CS 6835 Statistical Pattern Recognition (4)

**C. Capstone Experience (1-5 units).** A student must select and satisfy one of the following capstone requirements:
1. CS 6901 Capstone Experience (4). A student must successfully complete at least 30 units of study including all required courses (Area A), satisfy the WST, and file Advancement to Candidacy before enrolling in Capstone Experience.
2. CS 6909 Departmental Thesis (1-5). Students who write a thesis must have an advisor who agrees to oversee the work, and must have the proposed topic approved by the Computer Science Graduate Studies Committee.

**D. Electives (14-18 units)**
The following courses (or their equivalents) may be counted toward the master's degree:
- Any graduate course in Computer Science (except CS 6899) may be applied to this category.
- Any Computer Science course numbered 3000 (except 3898) or higher, provided it has not been already applied toward a B.S. degree or toward prerequisites for admission. This restriction includes equivalent courses from other degree programs; exceptions require the approval of the Computer Science Graduate Committee.
- MATH 3151 Combinatorics
- MATH 4151 Graph Theory

**E. Courses equivalent to CS 4170/6170 (Automata and Formal Languages) and CS 4245 (Analysis of Algorithms) if not completed before admission to the M.S. program.**

**F. Unit and Grade Requirements**
- At least 45 quarter units of approved upper division and graduate work. Of these, at least 26 units must be approved graduate (6000-level) courses. All work toward the 45 units must be at an average grade of "B" (3.0) or higher. Grades below "C-" will not be counted as prerequisites or toward the degree.

**Other Degree Requirements**

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-credit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at [www.csueastbay.edu/testing](http://www.csueastbay.edu/testing) or call 510.885.3661.

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<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>6000</td>
<td>Research Methodologies (2) Seminar in recent research in Computer Science. Use of periodical and non-periodical literature for research in computer science. Students read, analyze, present, and discuss papers of current interest in Computer Science. Prerequisite: &quot;Classified Graduate&quot; standing in Computer Science M.S. degree program and permission of instructor.</td>
</tr>
<tr>
<td>6005</td>
<td>Teaching Computer Science at the University Level (1) Theory, methodology, and practical experience in the teaching of computer science at the university level. Includes discussion of lecturing techniques, analysis of tests and supporting material, preparation and grading of examinations, and related topics. Required of departmental teaching associates. Prerequisites: graduate standing and permission of department. May be repeated for credit, but only two units can be used toward the M.S. degree.</td>
</tr>
<tr>
<td>6110</td>
<td>Theory and Design of Compilers (4) Grammars and parsing techniques, advanced theory and methods of code generation, code optimization, error recovery, use of compiler-generator tools. Prerequisite: CS 4110.</td>
</tr>
<tr>
<td>6140</td>
<td>Language Design (4) Topics in design and use of programming languages: object-oriented languages, functional and applicative languages. Exception handling, parallel processing and concurrency control. Fourth generation languages. Prerequisites: CS 3120 and 4110.</td>
</tr>
<tr>
<td>6170</td>
<td>Automata and Formal Languages (4) Alphabets, strings and languages; Chomsky hierarchy and language classes; regular languages, finite automata, regular expressions and operators; context-free languages, grammars, pushdown automata; context-sensitive languages; Turing machines and decidability. Prerequisites: MATH 2101, MATH 2150, MATH 2304.</td>
</tr>
<tr>
<td>6260</td>
<td>Computation and Complexity (4) Languages and algorithms; decision problems; Turing machines and Turing-Completeness: decidability; measures and classes of time and space complexity (e.g., P, NP, PSPACE); NP-Completeness. Prerequisites: CS/MATH 4170 (or CS 6170) and CS/MATH 4245; or permission of instructor. Cross-listed with MATH 6260.</td>
</tr>
<tr>
<td>6310</td>
<td>Advanced Software Engineering (4) Advanced concepts of object-oriented and architectural design, along with implementation. Pattern-based design of software using the Unified Modeling Language. Design patterns as re-usable architecture. Prerequisite: CS 3340.</td>
</tr>
<tr>
<td>6320</td>
<td>Software Engineering of Web-Based Systems (4) Current practices and trends in software design, development, and deployment of web-based systems, with particular emphasis on e-commerce. Projects include the latest technologies and techniques used by the Internet community. Prerequisites: CS 3520, CS 3340; or permission of instructor.</td>
</tr>
<tr>
<td>6330</td>
<td>Secure Software Development (4) Security and safety in software design and development. Vulnerability detection and avoidance. Introduction to software analysis tools. Topics include authentication, principle of least privilege, buffer overflows, race conditions, time-of-check vs. time-of-use, trust management, access control, and other security relevant issues. Prerequisite: CS 3240. A-F grading only.</td>
</tr>
<tr>
<td>6432</td>
<td>VLSI Systems Design (4) The use of a highly integrated suite of CAD (Computer Aided Design) tools to design and test a bit-sliced microprocessor that implements concepts from CS 6430. Prerequisites: CS 4432 and 6430 or consent of instructor. Three hrs. lect., 3 hrs. lab.</td>
</tr>
<tr>
<td>6520</td>
<td>Cryptography and Data Security (4) Cryptographic theory with applications to data and file access security. Substitution ciphers, stream and block ciphers, algebraic codes, error correcting codes, Shannon’s theorem. Cryptosystems, including public key. The Data Encryption Standard. Issues of privacy, authenticity, integrity. Implementation issues, including key management and chaining. Prerequisites: CS 4560, CS 4170 or 4245, and a course in probability, or permission of instructor.</td>
</tr>
<tr>
<td>6521</td>
<td>Advanced WWW Software Development (4) Advanced WWW system architecture and software development. Database access, 2- and 3-tier systems, objects and components, XML, Servlets and JSP, Web Services, Enterprise Java Beans, ASP.NET. Programming exercises. Prerequisites: CS 3340 and CS 3520; or permission of instructor.</td>
</tr>
<tr>
<td>6525</td>
<td>Network Security (4) Principles of secure network communications. Techniques of authentication and identification, cryptographic key distribution and management, assurances of data integrity. Access control, Security policy; conformance of implementation to policy. Discussion of particular systems, protocols, and utilities, e.g., Kerberos, firewalls, various commercial standards. Prerequisite: CS 4590.</td>
</tr>
<tr>
<td>6570</td>
<td>Distributed Computation (4) Classical problems which abstract real-world network problems. Process synchronization and communication using message-passing systems. Topics may include mutual exclusion, leader election, global snapshots, Byzantine generals, consensus, shared registers, common knowledge and distributed spanning trees. Prerequisite: CS 4560.</td>
</tr>
<tr>
<td>6580</td>
<td>Distributed Systems (4) Issues in the design and implementation of distributed systems. Network layers, architectures, and topologies. Distributed process management, concurrency control, deadlock, and recovery. Prerequisites: CS 4560 and 4590.</td>
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<td>Course Code</td>
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<tr>
<td>6591</td>
<td>Communication Network Analysis and Design (4)</td>
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<tr>
<td>6594</td>
<td>Broadband and Multimedia Networks (4)</td>
</tr>
<tr>
<td>6596</td>
<td>Wireless and Mobile Network Architecture (4)</td>
</tr>
<tr>
<td>6601</td>
<td>Database Systems (4)</td>
</tr>
<tr>
<td>6605</td>
<td>Database Systems Administration (4)</td>
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<tr>
<td>6751</td>
<td>Digital Signal Processing (4)</td>
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<tr>
<td>6752</td>
<td>Topics in Artificial Intelligence (4)</td>
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<tr>
<td>6755</td>
<td>Machine Learning (4)</td>
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<tr>
<td>6851</td>
<td>Computer Vision (4)</td>
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<tr>
<td>6852</td>
<td>Statistical Pattern Recognition (4)</td>
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<tr>
<td>6855</td>
<td>Topics in Graphical User Interface Programming (4)</td>
</tr>
<tr>
<td>6871</td>
<td>Computer Simulation (4)</td>
</tr>
<tr>
<td>6879</td>
<td>Project (5)</td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
</tr>
<tr>
<td>6901</td>
<td>Graduate Synthesis in Computer Science (4)</td>
</tr>
</tbody>
</table>
Departmental Thesis (1-5)
Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a
departmental committee, at least one of which must be a Cal State East Bay faculty member. Prerequisites: CS 6000,
advancement to candidacy, and approval of thesis proposal by advisor and departmental committee. May be repeated for a
maximum of 5 units.

Footnote
1. Enrollment in these courses is restricted to "Classified" and "Conditionally Classified Graduate" students. Others may enroll with the
permission of the department.

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Department Information

Department of Engineering
College of Science
Office: VBT 346
Phone: (510) 885-2654
Website: www20.csueastbay.edu/csci/departments/engineering/

Professors
Karina Garbesi (Geography and Environmental Studies), Ph.D. University of California, Berkeley
Christopher W. K. Lubwama (Accounting and Finance), Ph.D. Simon Fraser University (Canada)
Saeid Motavalli (Chair), Ph.D. University of Pittsburgh
Helen Zong, Ph.D. University of Houston

Associate Professors
David Bowen, Ph.D. University of California, Berkeley
Farnaz Ganjeizadeh, Ph.D. University of Alabama at Huntsville
Tammie X. Simmons-Mosley (Accounting and Finance), Ph.D. University of Wisconsin-Madison

Assistant Professor
Farzad Shahbodaghli, Ph.D. Purdue University

M.S. in Construction Management

Program Description
The Department of Engineering is offering an interdisciplinary Masters of Science degree in Construction Management. This degree is designed for working professionals who are in leadership/management positions in the construction industry or planning to advance their careers to manage large construction projects.

The goals of the Masters of Science degree in Construction Management are to prepare effective managers for large public and private construction projects, to prepare the workforce required for the expected increase in the state's transportation infrastructure improvements, and to enable current and future engineers and other professionals to assume leadership roles in the construction industry.

This program is different from other construction management programs as it is based on a well-balanced curriculum covering various aspects of the construction management profession. Special attention is given to working professionals with classes offered at times convenient for the students. Students will take required courses in legal and environmental issues in construction, project planning and control, cost estimating, financial and risk management issues. Also issues in construction safety and current trends in construction industry will be discussed. Students will also have a broad choice of electives from courses in construction management, engineering, business, or other graduate courses with department approval.

Mission Statement
The mission of the Masters of Science degree in Construction Management is to prepare effective managers to lead medium and large public and private construction projects, prepare a technically capable management workforce requirement for the expected increase in the state's transportation infrastructure improvement projects, and enable current and future engineers and other professionals to assume leadership roles in the construction industry.

Student Learning Outcomes
Students graduating with an M.S. in Construction Management from Cal State East Bay will

1. have knowledge in the core construction management areas (legal issues in construction, environmental issues, project planning and control, financial decision making, risk analysis, and safety),
2. have knowledge in broad areas of construction management beyond the core areas,
3. have the ability to communicate effectively,
4. have the ability to function in teams,
5. have the knowledge of sustainable building and construction techniques and relevant state regulations,
6. have an awareness of the complex environment (involving professional and ethical responsibilities) in which they will practice their profession,
7. have the ability to educate themselves and be prepared for lifelong learning and professional development, and
8. have experience in solving real life problems.

Career Opportunities
With the expected increase in large construction work, in part stemming from the increase in public spending on California's transportation infrastructure improvement, there is considerable demand for individuals who can technically and scientifically manage large construction projects. The construction industry, as a whole, is one of the largest industries in the nation with a great need for skilled project managers. Sample jobs are construction manager, site manager and others.

Features
The M.S. in Construction Management is designed to accommodate working adults. The class meetings will be conducted at times convenient
for the students. The instructors will be selected from the industry leaders with significant construction management work experience. Students will have the opportunity to take elective courses in construction management, engineering, business, or other graduate courses with department approval, to broaden their skills.

Admission

The M.S. in Construction Management is open to individuals planning a career or advancing their career in the construction industry, and who have

1. a baccalaureate degree from an accredited university with a minimum overall GPA of 2.5 (4.0 basis) in their undergraduate work,
2. relevant work experience, and
3. College Algebra and Trigonometry or equivalent level math courses.

In addition to the University Graduate and Post-baccalaureate Application, all applicants should submit to the department:

1. personal statement explaining their reasons for wanting to pursue the M.S. in Construction Management degree,
2. a resume detailing their professional and academic achievements, and
3. two letters of recommendation.

Admission to the University and admission to the M.S. in Construction Management degree program are separate steps.

Student Standing and Progress Toward the Degree

There are three categories of student status which reflect student progress toward the degree: "Conditionally Classified Graduate" student, "Classified Graduate" student, and "Advancement to Candidacy" student.

1. Students achieve "Conditionally Classified Graduate" status when they have been admitted to the M.S. in Construction Management degree program, but have not yet completed the prerequisites for "Classified Graduate" status in the M.S. in Construction Management.
2. Students achieve "Classified Graduate" status when they have satisfied the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.
3. Students are advanced to Candidacy when they have completed the required courses with a 3.0 or better GPA.

Note: Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two or more consecutive quarters will be academically disqualified from the university.

Degree Requirements

The M.S. degree program in Construction Management requires completion of 48 quarter units distributed among required courses, elective courses, and the Project. Of these units, at least 35 units must be completed in residence (transfer units are limited to 13 quarter units); at least 24 units must be in courses in the 6000 series. No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 48-unit graduate degree program.

No more than 4 units of Independent Study (CMGT 6900) may be counted toward the 48 units required for the degree. Project credit may not exceed 4 units.

A grade point average of 3.0 must be maintained in all 48-quarter units taken to satisfy the degree requirements. All graduate degree requirements must be completed within five (5) years.

Sample Program

A Sample Program for this degree can be found at the department website: www20.csueastbay.edu/csci/departments/engineering/.

Curricular Requirements (48 units)

I. Required Courses (36 units)

- CMGT 6100 Engineering Graphics for Construction Management (4)
- CMGT 6200 Legal Issues in Construction Management (4)
- CMGT 6300 Environmental Issues and Green Building (4)
- CMGT 6400 Construction Cost Estimating (4)
- CMGT 6500 Construction Project Planning and Control, Computer Tools (4)
- CMGT 6600 Financial Decision Making and Reporting in Construction (4)
- CMGT 6700 Construction Risk Management and Commissioning (4)
- CMGT 6800 Construction Safety (4)
- CMGT 6850 Current Issues in Construction Management (4)

II. Elective Courses (8 units)

Eight (8) quarter units of graduate course credit from the following list or other graduate courses with department approval.

- CMGT 6860 Utility Systems Construction (4)
- CMGT 6870 Advanced Integrated Computer Applications (4)
- CMGT 6900 Independent Study (1-4)
- ENGR 5601 Statistics and Probability for Science and Engineering I (4)
- ENGR 6200 Project Management (4), ENGR 6400 Research Methods in Engineering Management (4)
- MGMT 6130 Enterprise Planning and Control (4)
- MGMT 6526, 7810 Quality Management (4)

III. Capstone Experience (4 units)

- CMGT 6899 Project (4); or pass the comprehensive examination and complete an additional 4-unit elective course with departmental approval.

Incompletes

Students accumulating more than 8 units of work graded "I" may not register for courses applicable to the degree until the "I" grades are removed.

Capstone Experience

To complete a research project, students enroll in CMGT 6899 Project (4 units). The Project is a capstone cumulative experience based on the coursework completed for the degree and is accompanied by a written document. A faculty member from the department supervises the
student's work. One bound copy of the written component of the Project is required for the department.

Grades of "RP" (Report in Progress) may be given for a Project that is not completed at the end of the quarter. The "RP" grade must be removed within one year or it will become an "F." (Note: Please see Errata page for corrections to this content.)

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Master of Science degree in Construction Management. Students must file for graduation by the end of the second week of the quarter prior to the quarter in which they expect to graduate.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Graduate Courses

Courses for Construction Management (Prefix: CMGT)

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<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>6100</td>
<td>Engineering Graphics for Construction Management (4) Engineering graphics fundamentals, drawing and reading construction plans with emphasis on the use of Computer Aided Design (CAD) tools in construction.</td>
</tr>
<tr>
<td>6200</td>
<td>Legal Issues in Construction Management (4) Legal issues arising from design and construction services such as claims and dispute resolution, liability, state law pertaining to construction.</td>
</tr>
<tr>
<td>6300</td>
<td>Environmental Issues and Green Building (4) Environmental laws and regulations pertaining to construction. Issues such as construction waste disposal and treatment, and green building concepts, LEED permits, scoring and submittal processes for projects.</td>
</tr>
<tr>
<td>6400</td>
<td>Construction Cost Estimating (4) Issues related to construction project cost from the conceptual phase to full implementation. Use of computer aided tools for construction cost estimating.</td>
</tr>
<tr>
<td>6500</td>
<td>Construction Project Planning and Control, Computer Tools (4) Application of project planning techniques such as CPM and PERT. Project scheduling, forecasting, communications required for project cost and scheduling control. Study of various tools and techniques for construction management information systems. Familiarization with the latest software for construction management.</td>
</tr>
<tr>
<td>6600</td>
<td>Financial Decision Making and Reporting in Construction (4) Introduction to real estate finance. Issues such as mortgage evaluation, cash flow, capital markets, tax laws, and other financial aspects of construction projects are covered.</td>
</tr>
<tr>
<td>6850</td>
<td>Current Issues in Construction Management (4) Topics selected that cover current issues in construction management such as construction methods, equipment, and safety issues. Prerequisite: Departmental Approval. May be repeated once for credit for a maximum of 8 units, when content varies.</td>
</tr>
<tr>
<td>6860</td>
<td>Utility Systems Construction (4) Study of the materials, methods, and techniques associated with the construction of major utility systems such as water, sewer, communications, electrical or natural gas. Includes construction of central utility plants, as well as major distribution and collection systems. Prerequisite: CMGT 6100.</td>
</tr>
<tr>
<td>6870</td>
<td>Advanced Integrated Computer Applications (4) Study of management information systems used in the construction industry. Emphasis on the utilization of current state-of-the-art integration of Computer Aided Design (CAD), scheduling (including advanced concepts such as resource leveling, schedule compression, and cash flow projections), and estimating programs. Prerequisites: CMGT 6400 and CMGT 6500.</td>
</tr>
<tr>
<td>6899</td>
<td>Project (1-4) This is a capstone project where the knowledge gained in the curriculum is applied to a real world construction project. Prerequisite: Completion of 32 credit hours of required courses.</td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-4) Course is based on selected research topics agreed on between the student and the faculty supervising the course. Prerequisite: Completion of 32 credit hours of required courses.</td>
</tr>
</tbody>
</table>
**Economics**

- **Department Information**
- **M.A. in Economics**
- **Certificate**
- **Graduate Courses**

**Department Information**

Department of Economics  
College of Business and Economics  
Office: Valley Business & Technology Center, VBT 442  
Phone: (510) 885-3265

**Professors Emeriti**  
Jane E. Lopus, Ph.D. University of California, Davis  
Stephen Shmanske, Ph.D. University of California, Los Angeles  
David J. St. Clair, Ph.D. University of Utah

**Professors**  
James C. W. Ahiakpor, Ph.D. University of Toronto (Canada)  
Gregory B. Christiansen, Ph.D. University of Wisconsin, Madison  
Leo Kahane (Chair), Ph.D. Columbia University  
Anthony K. Lima, Ph.D. Stanford University  
Lynn C. Paringer, Ph.D. University of Wisconsin, Madison

**Associate Professor**  
Jed DeVaro, Ph.D. Stanford University

**Assistant Professors**  
Nicolae Stoian, Ph.D. University of Arizona

**Graduate Advisor**: Nicolae Stoian

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**M.A. in Economics**

**Admission Requirements**

To be considered for admission, students must hold a baccalaureate degree from an accredited college or university and have a grade point average of 2.75 or better over the last 90 quarter units or 60 semester units of their undergraduate program. A student who does not meet the grade point requirements may be admitted at the discretion of the department pending receipt of other evidence of the student's academic achievement.

International students must show English proficiency by posting an official TOEFL score of 580 or above (237 on the Computer-Based TOEFL), or by posting an official transcript showing graduation with a bachelor's degree from a U.S. college or university, or an international college or university where English is the principal language of instruction, or by an official letter from the college or university certifying that English was the language of instruction.

Students enrolling in the program are expected to have completed the equivalent of MATH 1810 and ECON 4000 (mathematical economics) or a two-course sequence in calculus; STAT 1000 or 2010 or equivalent; and at least one course in intermediate micro-economics and one course in intermediate macro-economics. These course prerequisites must have been completed with a grade of 'C' or better and within 5 years of starting the program. Rare exceptions can be granted with permission from both the Department Chair and Graduate Advisor. Students who have not completed the Economics prerequisites may enroll in the undergraduate courses to fulfill the prerequisites.

**Student Learning Outcomes**

Students graduating with an M.A. in Economics from Cal State East Bay will: (1) demonstrate an advanced understanding of microeconomic and macroeconomic theory; (2) be able to apply economic theory and methods at an advanced level to selected economic topics through independent research; (3) demonstrate the ability to present orally a coherent, logical economic argument grounded in economic theory; (4) demonstrate the ability to present in writing a coherent, logical economic argument grounded in economic theory and methods in writing; (5) use appropriate computer technologies to develop research problems and present written and oral economic arguments.

**Classification in the Program**

There are three levels of advancement for students within the M.A. program: "Conditionally Classified Graduate" standing, "Classified Graduate" standing, and "Advancement to Candidacy." Note: If a student is in post-baccalaureate status but has not been accepted into a graduate degree program(s)he) is an "Unclassified Post-baccalaureate" student. Admission to the university as an "Unclassified Post-baccalaureate" student in no way implies acceptance to a graduate degree program.

A. **Conditionally Classified Graduate Standing**  
A student who has been admitted to a graduate degree program but who has not satisfied all prerequisite coursework or other requirements such as the University Writing Skills Requirement is a "Conditionally Classified Graduate" student. A student may be admitted to a graduate degree program as a "Conditionally Classified" graduate student upon:

1. submission of a written application, with required supporting documents, to the Admissions Office declaring an intent to pursue the M.A. degree in Economics;  
2. acceptance by the department; and  
3. completion of other appropriate requirements as specified in the Admission/Graduate chapter in this catalog.

B. **Classified Graduate Standing**  
A student who has been admitted to the M.A. program by meeting the requirements established in item 1 above; has fulfilled all prerequisite coursework and other requirements such as the University Writing Skills Requirement (UWSR); and has a strong background in economics may begin as a "Classified Graduate" student. Students admitted into the program but lacking such background will be
designated as "Conditionally Classified Graduate" students until deficiencies are made up and they are recommended for "Classified Graduate" standing by the department. The student must have satisfied the University Writing Skills Requirement (UWSR) to become a "Classified Graduate" student. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

C. Advancement to Candidacy
To be Advanced to Candidacy in the M.A. program a student must:
1. be a "Classified Graduate" student in good standing;
2. have filed an approved program of study with the department;
3. have completed at least 12 quarter units in Economics considered applicable by the department toward the M.A. degree requirements, including at least 8 quarter units of graduate level (6100-6999 series) work in residence at Cal State East Bay; and
4. have been recommended for Advancement to Candidacy by the department.

Transfer of Courses
Upper division prerequisite and foundation and graduate courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Requirements for Graduation
To be eligible for the M.A. degree in economics a student must:
A. have been Advanced to Candidacy;
B. have completed 45 quarter units of graduate work as indicated in (C) below, of which:
   1. all must have been earned within the five years just preceding the completion of the requirements for the degree;
   2. not fewer than 32 must have been completed in residence;
   3. not fewer than 28 must have been in Economics courses in the 6100-6999 series;
   4. not more than 5 may have been for a thesis (ECON 6910);
   5. not more than 13 have been taken in "Unclassified Post-baccalaureate" status and/or for extension and/or transfer course credit, as approved by the department;
   6. each course must have a grade of "C" or better and all 45 units must result in at least a 3.00 GPA;
C. have completed a satisfactory program of study (45 units) as approved by the department and the graduate coordinator, to include:
   1. Required Courses (20 units)
      - ECON 6101, 6102 Seminar: Micro-Economic Theory I, II (8)
      - ECON 6105 Seminar: Macro-Economic Theory (4)
      - ECON 6400 Seminar: Econometrics (4)
      - ECON 6511 Advanced Applied Econometrics (4)
   2. Five Seminars from: ECON 6200, 6250, 6315, 6370, 6520, 6680, 6700, 6710 (20 units)
   3. Choice of the following (5 units):
      a. ECON 6896 Research Methods (5)
      b. ECON 6910 University Thesis (5)
   4. Pass a two-part comprehensive exam: one in micro-economic theory and one in macro-economic theory
   5. Satisfy the other university requirements for graduation described in the Graduate and Postbaccalaureate Studies chapter at the beginning of the graduate section in this catalog. These include a 3.00 GPA and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.
Seminar: Micro-Economic Theory II (4)
Second of two-quarter sequence: Selected topics in periodical literature in general equilibrium; welfare theory and economic efficiency; capital theory. Prerequisite: ECON 6101.

Seminar: Macro-Economic Theory (4)
Develops the tools of modern macroeconomics for an understanding of the macroeconomics literature. Topics include growth theory; Keynesian and modern micro-based theories of economic fluctuations; unemployment, monetary policy and fiscal policy. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math proficiency requirements for the M.A. in Economics.

Macroeconomics for Business (4)
Understanding the nature and causes of fluctuations in business cycles, employment and unemployment, the price level and inflation, interest rates, exchange rates, and the effects of fiscal and monetary policies on the business environment. Interpreting and analyzing the government's and Fed's role in the economy. Prerequisite: ECON 2302, with grade no lower than a "C." May not be counted toward the M.A. in Economics degree.

Seminar: Comparative Economic Systems (4)
Selected problems and approaches to resource allocation, income distribution, economic development, and planning in alternative economic systems. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math proficiency requirements for the M.A. in Economics.

Economics for Managers in a Global Economy (4)
Economics for business managers - economic systems; supply, demand, prices and decision making in a global economy; interest rates and the value of currencies; the money supply process, business cycles, and inflation; market structures and production decisions; long-term economic growth determinants. Prerequisites: All CBE and University proficiencies, including the UWSR, and all MBA fundamental courses. Not for credit in the MA Economics degree or certificate. A-F grading only.

Seminar: Project Analysis (4)
Benefit-cost analysis applied to resource allocation and planning. Applications to such areas as education, manpower programs, medical care, transportation, and non-profit enterprises. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math proficiency requirements for the M.A. in Economics.

Seminar: Monetary Theory (4)
Review of periodical literature on static and dynamic issues of the supply and demand for money. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math proficiency requirements for the M.A. in Economics.

Seminar: Public Sector Economics (4)
Economic analysis as applied to the public sector including public finance, welfare economics, public expenditure evaluation, theories of taxation, analysis of the U.S. tax structure, public choice, and policy issues. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math proficiency requirements for the M.A. in Economics.

Seminar: Econometrics (4)
Statistical analysis of economic relationships. Regression analysis and simple time series analysis in economic applications. Prerequisites: ECON 3005; ECON 3000 or 3551; STAT 3010 or 3030.

Advanced Applied Econometrics (4)
Applied Statistical Models, including multiple regression, simultaneous equation models, time series models, and logistic regression/binary choice models. Prerequisite: ECON 6400 or STAT 6509. Cross-listed with STAT 6511. A-F grading only.

Seminar: Industrial Organization and Public Policy (4)
Selected topics in industrial organization and public policy including antitrust policy. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math proficiency requirements for the M.A. in Economics.

Seminar: Labor Economics (4)
Theoretical and empirical analysis of labor market operations with applications to public policy. Topics include investment in human capital, wages and wage determination, labor supply, employment and unemployment. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math proficiency requirements for the M.A. in Economics.

Seminar: International Trade (4)
Selected topics in the modern theory of international trade and investment, multinational enterprise, commercial policy and international trading systems and methods. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math proficiency requirements for the M.A. in Economics.

Seminar: International Economic Development (4)
Selected topics in the theory and practice of international economic development with a focus on the nature and causes of development in specific areas and nations of the world. Prerequisites: ECON 3005; ECON 3000 or 3551; and the math proficiency requirements for the M.A. in Economics.

Research Methods (5)
Research methodologies, data analysis, and report writing. Provides students with analytic and research tools to increase their capacity to pose, answer, and critically evaluate research questions. Culminates in research project that synthesizes research methods, statistical analysis, and reporting of empirical results. Prerequisites: ECON 6101, 6105, 6400, 6511, and at least one graduate seminar in Economics and co-enrollment or completion of ECON 6102. Four hrs. lect., 2 hrs. lab.

Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. Prerequisites: at least 3.0 GPA; departmental approval of activity. No units may be counted toward any CBE graduate degree. May be repeated for credit, for a maximum of 8 units. CR/NC grading only.

Independent Study (1-4)
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by
a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also “University Thesis Writing Guide,” www.csueastbay.edu/thesiswritingguide). Prerequisites: Advancement to Candidacy and an officially appointed thesis director or committee. Maximum of 6 units per student.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Description</th>
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<tr>
<td>6999</td>
<td>Issues in Economics (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in economics. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
</tbody>
</table>

**Footnotes**

1. Enrollment in this course is restricted to "Classified" and "Conditionally Classified Graduate" students. The course is a graduate program prerequisite, and its units cannot be applied to the 45 units required for any CBE graduate degree.
2. Enrollment in these courses is restricted to "Classified" and "Conditionally Classified Graduate" students.
3. Undergraduate, upper division course plus a graduate tutorial module. Not open to students who have completed the parallel-numbered undergraduate course at Cal State East Bay for credit.
Education: Interdisciplinary

Department Information

Interdisciplinary Studies Cluster
College of Education and Allied Studies
Office: Arts and Education Bldg. 305
Phone: (510) 885-4496

Professor Emerita
Nan P. Chico (Coordinator of Online Teaching and Learning Option), Ph.D. University of California, San Francisco

General Information

The Interdisciplinary Studies Cluster (College of Education and Allied Studies) program is built on the recognition that there are some issues that cross disciplines or professional areas within the College of Education and Allied Studies. It develops cross-disciplinary courses and experiences for students at the same time it provides a base for those subjects, programs, and faculty not currently embraced by any one department. It promotes interdisciplinary collaboration among students and faculty in the college, builds partnerships, and broadens program offerings for current and new students. By involving faculty from three or more departments in common endeavors, the Interdisciplinary Studies Cluster actively encourages cross-departmental renewal and innovation. The Cluster offers the M.S. in Education, Option in Online Teaching described below.

M.S. in Education

Option in Online Teaching and Learning

I. Prerequisites
To be admitted to the Online Teaching and Learning Option in the M.S. in Education, students meet normal Cal State East Bay requirements for admission to a graduate program in Education. Students from schools where English is not the primary language of instruction are required to achieve a TOEFL score of at least 213 (550 on the former grading scale) for admission to the program.

II. Curricular Requirements (45 units)
Students work with designated program advisors. Communication with advisors is by e-mail, telephone, and videoconference as necessary. Student orientation to the program is by means of the program website.

Students complete 45 units of approved coursework. All work applied toward the 45 units must be at an average grade of "B" (3.0) or higher, and no graduate-level required course may be at a grade below "B." Students who are qualified for admission to the program will be placed in the "Conditionally Classified Graduate" category. Upon completion of the University Writing Skills Requirement (which is satisfied with a "B" or better in EDUI 6706), they will be placed in the "Classified Graduate" category. If students do not pass EDUI 6706 with a "B" or better, they must take the Writing Skills Test (WST) to satisfy the University Writing Skills Requirement. If students do not pass the WST, they must take a course or courses (depending on the score they received on the WST), to improve their skills and satisfy the University Writing Skills Requirement. Students complete either EDUI 6899 Project (4.5) or EDUI 6910 University Thesis (4.5) as the capstone experience.

A. Required Courses (36 units)
Students must complete EDUI 6701, 6702, 6703, and 6704 before they may take any other courses.

- EDUI 6701 Introduction to Online Teaching and Learning (4.5)
- EDUI 6702 Teaching Models for Online Instruction (4.5)
- EDUI 6703 Technology Tools for Online Instruction (4.5)
- EDUI 6704 Designing Curriculum for Online Instruction (4.5)
- EDUI 6705 Educational Planning and Development for Online Programs (4.5)
- EDUI 6706 Research in Online Teaching and Learning (4.5)
- EDUI 6707 History and Culture of Online Learning Communities (4.5)
- EDUI 6899 Project (4.5) or EDUI 6910 University Thesis (4.5)

B. Electives (9 units)
1. Theoretical: Choose one of the following (4.5 units):
   - EDUI 6772 Content Development for Online Learning (4.5)
   - EDUI 6773 Supervising and Evaluating Online Teaching (4.5)
   - EDUI 6774 Current Issues in Online Learning (4.5)

2. Methodological: Choose one of the following (4.5 units):
   - EDUI 6780 Building the Online Environment (4.5)
   - EDUI 6781 Creating Digital Media for Online Instruction (4.5)
   - EDUI 6782 Designing and Implementing User Interfaces for Online Instruction (4.5)
   - EDUI 6783 Providing Interactivity in the Online Environment (4.5)

Courses

See the Division of Continuing and International Education's course schedule for classes offered each quarter. For additional EDUI courses, see Teacher Education in the graduate section of this catalog.
## Graduate Courses (Course prefix: EDUI)

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<th>Course Number</th>
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<tr>
<td><strong>6002</strong> Animation for the Web (2)</td>
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</tbody>
</table>
- Introduction to Flash, an animation tool for the Web; covers the basic functions that permit the educator to include multimedia features in lessons and student productions. A Flash movie may use text, graphics, sounds, animation, buttons and fields. Prerequisite: graduate standing or consent of instructor. May be repeated for credit when content varies, for a maximum of 10 units. Six hrs. lab.

| **6005** Digital Graphics (4) |
- Introduction to several graphics programs such as Adobe Photoshop and Illustrator used in educational settings. Students learn to use the drawing tools in these applications to edit, create, and manipulate graphics and millions of colors. Prerequisite: graduate standing or consent of instructor. May be repeated for credit when content varies, for a maximum of 20 units. Twelve hrs. lab.

| **6701** Introduction to Online Teaching and Learning (4.5) |
- Design and delivery of online coursework with consideration of principles of teaching and learning, the virtual classroom, synchronous vs. asynchronous teaching and learning, copyright and fair use, accessibility, appropriate learning strategies in onground and online classes, potential for interactivity, and contrast between the principles and practices of onground and online teaching and learning.

| **6702** Teaching Models for Online Instruction (4.5) |
- Teaching models and their relationship to curriculum development, to student learning, to assessment, and to learning psychology. Special attention to the application of models of teaching to online instruction, different learning styles, various teaching and learning situations, needs of learners with accessibility issues, and limitations of current technologies. Prerequisite: EDUI 6701.

| **6703** Technology Tools for Online Instruction (4.5) |
- Design and construction of online environments for teaching and learning. Attention to platform, browser, system differences and limitations as well as to synchronous, asynchronous, and web-based delivery systems. Differences among online delivery providers, emphasis on maximum accessibility. Prerequisites: EDUI 6701, 6702.

| **6704** Designing Curriculum for Online Instruction (4.5) |
- Incorporating onground and online teaching strategies and concepts into the design of an online course, including objectives, assignments, assessment, collaboration, participation, and course materials. Models of teaching and learning outcomes in onground and online courses. Practice in linking appropriate teaching models and designated learning outcomes with attention to differing learning styles. Prerequisites: EDUI 6701, 6702, 6703.

| **6705** Educational Planning and Development for Online Programs (4.5) |
- History of innovation in education and its effect on educational culture and thought. Organizational and managerial issues, problems, decision-making and solutions for successful implementation of online programs. Solutions to educational problems common to onground and online teaching environments as well as consideration of educational problems unique to online education such as intensive faculty development and support. Prerequisites: EDUI 6701, 6702, 6703, and 6704.

| **6706** Research in Online Teaching and Learning (4.5) |
- Research methods in education, both quantitative and qualitative, with attention to sources, collection, and uses of data. Critical analysis of research on online teaching and learning. Preparation of a research project to include references, rationale, and outline. Offered collaboratively with library staff. Satisfies the University Writing Skills. Prerequisites: EDUI 6701, 6702, 6703, and 6704. Requirement only for M.S. Education, Option in Online Teaching and Learning Students if passed with a "B" or better.

| **6707** History and Culture of Online Learning Communities (4.5) |
- The development of the cyberclassroom of today from both traditional distance learning correspondence courses and early networked virtual realities with attention to the history and culture of education. Evolution of onground and online teaching and learning roles, development of institutional responsibilities, and growth of degree, certificate, and enrichment programs. Prerequisites: EDUI 6701, 6702, 6703, and 6704.

| **6722** Content Development for Online Learning (4.5) |
- Creating course materials specific to various learning environments: corporate, academic, military, industrial, enrichment, online and onground. Differences between training and education with emphasis on relevant teaching and learning strategies for each modality. Completion of online teaching components suitable to at least two different environments. Prerequisites: EDUI 6701, 6702, 6703, and 6704.

| **6723** Supervising and Evaluating Online Teaching (4.5) |
- Effective delivery of online materials within the context of educational theories of supervisory functions. Adaptation of techniques, including clinical supervision, for promoting and supporting teacher growth and development in the online environment. Online mentoring of new online teachers. Prerequisites: EDUI 6701, 6702, 6703, and 6704.

| **6724** Current Issues in Online Learning (4.5) |
- Controversies, problems, and promises of online teaching and learning, including examination of the role of gender, class, race in online teaching and learning, the potential impact of corporate influences on traditional educational paradigms, and the future of both online and onground education. Prerequisites: EDUI 6701, 6702, 6703, and 6704.

| **6780** Building the Online Environment (4.5) |
- Designing and implementing an online teaching site, including assignments, interactivity, contact protocols, syllabus, course materials, and research and development resources for student use. Presentation of materials in various formats including PDF, Shockwave, Flash, and HTML. Prerequisites: EDUI 6701, 6702, 6703, and 6704.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>6781</td>
<td>Creating Digital Media for Online Instruction (4.5)</td>
<td>Making multimedia materials available in the online classroom with texts, images, sounds, videos, animations. Needs of students with accessibility challenges. Prerequisites: EDUI 6701, 6702, 6703, and 6704.</td>
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<tr>
<td>6782</td>
<td>Designing and Implementing User Interfaces for Online Instruction (4.5)</td>
<td>Using principles of user interface, audience analysis, discourse communities, and educational psychology to design online educational sites which reflect the needs of teachers, learners, and the global community. The effectiveness of colors, images, animations, and interactivity to facilitate communication with online students. Accessibility issues will be stressed. Prerequisites: EDUI 6701, 6702, 6703, and 6704.</td>
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<tr>
<td>6783</td>
<td>Providing Interactivity in the Online Environment (4.5)</td>
<td>Using latest and most sophisticated web resources to create learning environments that maximize interactivity, collaboration, document sharing, assessment, and access to multimedia materials. Prerequisites: EDUI 6701, 6702, 6703, and 6704.</td>
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</tr>
<tr>
<td>6899</td>
<td>Project (2-5)</td>
<td>Development of an original product (teaching project, implementation plan, program evaluation proposal) which is identified in the research course and summarized in a written abstract. Both the project and the abstract are submitted to the program faculty which specify their formats. Supervision by a faculty committee, at least one of whom must be a Cal State East Bay faculty member. Prerequisites: EDUI 6500 or 6705 and Advancement to Candidacy. Maximum of 5 units per student.</td>
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<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
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<tr>
<td>6910</td>
<td>University Thesis (4-5)</td>
<td>Developmental writing of a formal research paper on online teaching and learning for submission to the university in a specified format. Supervised by an EDUI committee, at least one of whom must be a Cal State East Bay faculty member. Defense normally required. Prerequisites: EDUI 6701, 6702, 6703, and 6704, and graduate standing.</td>
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</tr>
<tr>
<td>6999</td>
<td>Issues in Education Interdisciplinary Studies (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in education interdisciplinary studies. May be repeated for credit when content varies, for a maximum of 8 units.</td>
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Educational Leadership

Program Description

The mission of the Department of Educational Leadership is to prepare bold, socially responsible leaders who will transform the world of schooling. Our central role is to help build the leadership capacity needed to create vital, democratic, professional learning communities for equitable learning and teaching.

The department offers graduate study leading to Doctor in Educational Leadership for Social Justice (Ed. D.), the Master of Science degree in Educational Leadership (MS) as well as programs approved by the California Commission on Teacher Credentialing leading to the Preliminary Administrative Services Credential (Tier I), Professional Administrative Services Credential (Tier II), and Internship Credential in Administrative Services (Education Code 44225 et al.). Students seeking the degree and any of the Administrative Services Credentials must meet the general university requirements as well as the departmental requirements listed below. Additional advising and information are available through the department and on the College of Education and Allied Studies website at: http://www20.csueastbay.edu/ceas/departments/el/index.html. The delivery format of all these programs include online for students residing away from CSUEB areas of service, and a combination of online and regular face to face classes for the program serving our direct area of service. Entry to the regular program is currently fall quarter, winter quarter for the online program, and summer quarter for the Ed.D.

Student Learning Outcomes

Students graduating with an M.S. in Education with an Option in Urban Teacher Leadership from Cal State East Bay will have: (1) explored leadership in general and teacher leadership in particular including evaluation of personal leadership knowledge, skills, dispositions and style; (2) developed leadership skills to support learning and teaching for equity and high achievement for all students; (3) developed systems thinking and strategic approaches for teacher leaders to help create a learning community that demonstrates ethical, caring and reflective practice.

Career Opportunities

Completion of the credential and master's programs, and the doctoral degree, enables graduates to obtain an administrative credential that allows them to assume administrative positions at all levels of the K-12 public educational system. Various positions include those in school sites administration (e.g., principal, vice principal), and district level administration (curriculum coordinator, staff development coordinator, special programs coordinator, personnel director, assistant superintendent, superintendent, etc.). In addition, graduates also obtain many positions at the county and state level offices.

Faculty

The department has eight full-time professors and instructors with earned doctorates who have had extensive experience in administrative positions at various levels in the public schools before joining the faculty. Their previous positions include leadership coaching, principal, vice-principal, district curriculum coordinator, staff development coordinator, county training center director, personnel director, assistant superintendent and superintendent. Several have extensive experience in large scale school reform efforts and educational research. The faculty draws its strength from their diversity of experiences, professional and research interests, expertise, gender, cultural, racial and ethnic backgrounds. They are actively engaged with schools in the Bay Area, serving as consultants (nationally and internationally) and coaches in many facets of schooling. They are recognized as leaders in numerous regional, statewide, and national networks and professional organizations. The faculty is complemented by a select group of lecturers who are respected practicing administrators in Bay Area school districts and county education offices.

Special Features

Cohort Groups: In the fall quarter, all students are admitted into class groups, called cohorts, whose members take at least three courses and fieldwork together as a group during fall-winter-spring. Preliminary Administrative Credential Candidates (including interns) take three additional required courses on an individual basis. The three-quarter cohort time frame permits examination of issues as recurring themes.
School District Collaboration: Some cohort programs are unique in that they involve school districts in identifying educational leadership candidates.

The Internship Program: The department offers a way to acquire an Internship Administrative Services Credential: the Individual Internship Option. This program allows candidates to serve in an administrative capacity while completing credential requirements and are open only to students who are recommended by their districts and who hold either a full or a part-time administrative position. Students in the Individual Internship Option can participate in any cohort, but must register for internship fieldwork and attend an internship seminar once a month. The common bond of participants is the commitment to improving achievement of all students and to creating an inclusive learning environment that values and reflects the diversity of American society.

Admission

A candidate must be admitted to the university, consistent with requirements and procedures explained in this catalog. Interested candidates apply for admission to the department and to the university at the same time. Candidates should directly contact the department office, 510-885-4145, or go to the department website, http://www20.csueastbay.edu/ceas/departments/el/index.html, in early January for fall quarter entrance. All master's degree candidates enter as credential students and those who become credential candidates must meet credential admission requirements. Applications for admission to the department are online at the departmental website. All admissions materials should be sent to the CSUEB Credential Student Service Center (CSSC), AE 235, 25800 Carlos Bee Blvd., Hayward, CA 94542.

Additional requirements for admission to the M.S. in Educational Leadership and/or the Preliminary Administrative Services Credential include:

- A bachelor's degree
- 3.0 GPA or equivalent on all post-baccalaureate work
- Successful passage of the University Writing Skills Requirement, e.g., CBEST
- A current, valid basic teaching credential or services credential (Pupil Personnel Services, Adult Education, Librarianship, Health Services School Nurse, or Clinical Rehabilitative Services)
- A minimum of three years full-time teaching or service experience as documented by district verification (form available on department website)
- Internship candidates must verify administrative position (form available on department website)
- A current resume showing evidence of leadership experience
- Three recommendations (form available on department website)
- A one-page statement of professional goals
- University application, including two sets of transcripts
- All credential candidates must apply for "Classified Graduate" status. Credential only students must also successfully meet the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Requirements for the Professional Administrative Services Credential Program include:

- Current Preliminary Administrative Services Credential
- Verification of position as a school administrator (form available on the department website)
- A current resume showing evidence of leadership experience
- For "Classified Graduate" status and Advancement to Candidacy, M.S. students must have successfully met the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- For the M.S. degree university admission requirements, see the Admission/Graduate chapter of this catalog.

M.S. Degree Requirements

1. A minimum of 45 quarter units of approved work, at least 32 of which must be in residence, and all completed within a five-year period.
2. A 3.0 GPA or better in all 45 quarter units offered as satisfying the requirements of the degree program.
3. Satisfactory completion of the University Writing Skills Requirement (required for "Classified Graduate" standing).
4. Satisfactory completion of EDLD 6908 Graduate Synthesis in Educational Leadership which includes a comprehensive examination.

Curricular Requirements (45 units)

The established pattern of required and approved courses is designed to meet both the preliminary credential and degree requirements. Students already holding credentials from other institutions take the degree and/or program requirements listed below and any additional courses required by department advisor to meet current MS degree and credential mandates.

A. Complete the following courses (36 units):

- EDLD 6000 Introduction to Educational Leadership (4)
- EDLD 6020 Research in Education (4)
- EDLD 6400 Instructional Leadership (4)
- EDLD 6410 Supervision and Staff Development (4)
- EDLD 6550 School Site Leadership and Organizational Behavior (4)
- EDLD 6650 Educational Law for Equity (4)
- EDLD 6675 School Finance and Human Resources for Equity (4)
- EDLD 6720 Solving School Problems through the Application of Research (4)
- EDLD 6908 Graduate Synthesis in Educational Leadership (4)

B. Electives selected through consultation with advisor (9 units).

M.S. in Educational Leadership, Option in Urban Teacher Leadership

Program Description

The Urban Teacher Leadership Program is a two-year master’s degree cohort (with option for the preliminary administrative services credential) intended to prepare educational leaders for dynamic service in urban communities. Participants develop and expand skills needed to blend an intense commitment to culturally responsive teaching, curriculum, administration, and leadership with a commitment to rigorous academic standards. The purpose is to model the types of engaging, hands-on, culturally responsive, collaborative educational leadership that is required to address the increasing structural inequalities shaping urban public education. Guiding principles include developing a critical race theory lens,
The mission of the Doctoral Program, Educational Leadership for Social Justice (ELSJ), is to work with PK-12 educators and those in other educational leaders each year. Expected time to complete the degree, including writing the dissertation, is three calendar years, including summers.

Recent legislation has authorized the California State University system to award the Doctor of Education (Ed. D.) degree in Educational Leadership. Offered by the Department of Educational Leadership, CSUEB began enrolling students in the Ed.D. program, Educational Leadership for Social Justice, summer 2008. Designed for educators who are employed in full-time positions, the program enrolls one cohort of educational leaders each year. Expected time to complete the degree, including writing the dissertation, is three calendar years, including summers.

The mission of the Doctoral Program, Educational Leadership for Social Justice (ELSJ), is to work with PK-12 educators and those in other agencies to prepare them to assume positions of leadership informed by a commitment to social justice. In particular, a primary objective of the ELSJ program is to prepare educators who will contribute to outcomes of educational equity by dismantling the academic opportunity gap between white students and populations of color. The program provides a blend of theory, research, and practice, in learning communities with faculty and other professionals and peers. Student develop a deeper understanding of themselves as educators, leaders, policy makers, and policy advocates as they develop the knowledge, skills and habits of mind necessary to improve the quality of student learning by enacting bold, socially responsible leadership.

These educators further develop their abilities to engage members of city governments, school boards, businesses, political and parental communities in joint efforts to create policy and make strategic decisions designed to radically improve the life chances of all children. Leaders forge and sustain cultures of change through collaboration, advocacy, and institutional transformation.

The Ed.D. represents the highest level of formal preparation in the discipline of Educational Leadership. Recipients of the degree join a community of individuals who represent not only the attainment of distinction in preparation and practice but who also will serve as stewards of public education, as leaders who will contribute to a vision of education for the public good.

Student Learning Outcomes
The Ed.D. program, Educational Leadership for Social Justice, is organized around the following set of goals:

1. Reflective Practice
   To develop reflective leaders who can use self-analysis, inquiry and purposeful reflection to continually improve their own practice, model and encourage these habits with staff, and create communities of practice that promote high achievement for all students.

2. Equity and Cultural Competency
   To develop culturally competent practitioner-advocates who purposefully work for equity and to dismantle systems of cultural and racial
3. Systems Thinking
To develop skillful leaders who understand the dynamics of educational systems and who are able to leverage those systems in coherent, aligned strategies for educational change by creating democratic learning communities that promote high achievement for all students.

4. Accountability for Equitable Student Performance
To develop instructional leaders who possess the knowledge and ability to ensure that all students are producing high quality work and achieving at optimum levels by fostering effective curricular programs, student-centered learning environments, and accountable school cultures that reflect high expectations for student outcomes.

5. Instructional Leadership
To develop instructional leaders who inspire a shared vision and commitment to high student achievement informed by best practices by developing structures and processes fostering collaboration and inquiry for continuous instructional improvement.

6. Leadership Capacity/Organizational Management
To develop leaders who assess, organize and allocate resources that build and sustain organizational culture, leadership, and change processes that move school systems toward meeting student achievement goals.

7. Policy/Politics
To develop leaders who understand the dynamic nature of school systems and educational politics in order to influence politics and policies at multiple levels in ways that support goals of inclusion and equity for all constituents, especially underrepresented groups.

8. Research
To develop leaders who are practitioner-researchers who purposefully engage in inquiry and construct knowledge that promotes equity in education and advances the public good.

Career Opportunities
Graduates with a doctoral degree in Educational Leadership serve in many different arenas that impact education. One career path for graduates is to become an executive leader in a school district or county office of education. Such positions include superintendents, assistant superintendents or directors of curriculum, programs or human relations. Other professionals obtaining the Ed.D. degree serve as policy makers in state and national departments of education, credentialing agencies or as staff for elected officials. A third group works with local, state or national educational foundations, school reform agencies, research organizations, or publishing companies. Many others direct grants or consult with schools or districts. Finally, people with Ed.D.'s teach or serve in leadership roles in colleges and universities.

Faculty
Core faculty members for the Educational Leadership for Social Justice (ELSJ) Program are drawn from the Department of Educational Leadership and other Colleges from CSUEB. ELSJ core faculty members are active scholars who meet or exceed leadership and publication standards for their disciplines. This core faculty is deeply committed to improving pre-K to 12 education for the least served students. This commitment is deep, and includes participation in public discourse in the region and the State of California as well as formal research publications in national journals.

The core faculty strives for engaging research and theoretical work that leads directly to both, illuminating the issues schools face and designing initiatives for change. They have published in different journals covering a wide range of fields and study areas. In the field of education these journals include the following areas: teacher education, planning, leadership, administration, multicultural education, staff development, elementary, middle and high schooling, literacy, educational research, school reform, childhood, and adolescence. Additionally, core faculty scholarship extends to the fields of anthropology, sociology, psychiatry, religion, mathematics; and the area studies of women, race and ethnicity, gender, Latino studies, social justice, queer studies, and black studies.

Special Features
- Use of a cohort structure that will create and maintain a network of educators with shared goals and purposes; allow for individual interests and needs to enrich the dialogue among cohort members; establish conditions of safety for full exploration of ideas, including competing views; and establish and reinforce norms associated with doctoral level intellectual and professional work.
- Deliberate use of the Summer Quarter as a means for intense "front loading" of content, information, and skills essential to the work that will follow. The first summer will include an induction into doctoral habits of mind, including our focus on equity and reflective practice. In the second summer, students will synthesize survey courses from the first year of curriculum within the context of their own professional interests and begin to identify and explore possible dissertation topics. The third summer will focus on the development, review and approval of the dissertation proposal including clarification of research methodology, development of data instruments and preparation of Institutional Review Board (IRB) submission so that the last year is focused primarily on dissertation work.
- A combination of course formats, including (but not limited to) summer and weekend intensives, standard face-to-face weekly evening courses; online studies; hybrid courses that combine online work with face-to-face seminars; some on-the job site-or district-based practice where theory and practice meet, and individualized studies associated with completion of the dissertation.

Admission Requirements
To be considered for admission to the ELSJ program (1) an applicant must have educational leadership experience in PK-12, alternative education, or other agency settings that serve PK-14 students and be (2) committed to continuing as a public school administrator who will influence excellence and equity.

To be admitted to the ELSJ program, applicants must meet the academic requirements as well as demonstrate professional experiences and academic skills that suggest a strong potential for success as doctoral candidates and as bold, socially responsible educational leaders. Meeting the minimum requirements qualifies an individual for consideration, but does not guarantee admission to the ELSJ program. Admission will be granted on a competitive basis and limited to 20 candidates on an annual basis. The ELSJ program will not include a foreign language requirement.

The ELSJ program requires the following of all applicants for admission to the doctoral program:
- an earned baccalaureate degree and master's degree from accredited institutions of higher education with a GPA in graduate study of 3.0 or above;
- submission of Graduate Record Examination (GRE) scores from within the last five years; GRE(r) General Test Overview;
- demonstrated leadership skills and abilities in PK-12 schools or closely related fields (e.g., school reform networks, policy institutions);
- demonstrated and documented professional or personal commitment to equity and social justice;
- demonstrated academic excellence;
- professional experiences which demonstrate problem-solving ability and an interest in critically assessing current educational policies and practices;
- three confidential recommendation forms attesting to the leadership ability, equity commitment and capacity of the candidate to undertake doctoral-level work;
professional resume;
- a written response to a writing prompt concerning issues of school effectiveness and the challenges facing leaders in bringing about sustained change that will result in equitable outcomes for all students in California;
- a portfolio of at least one, and no more than three, samples of work that demonstrate how the candidate's leadership has made a difference in student learning outcomes - for each item, include a brief paragraph that identifies the issue represented by the item, the desired goal, and what the item illustrates about the candidate's competencies;
- Employer/District Support Agreement stating support for the candidate's doctoral studies from her/his employer or, in the cases where this is not provided, an individual plan for meeting the demands of the program and his/her professional responsibilities, including support systems that the individual expects to access.

Application and Admissions Procedures
The process of applying and being admitted to the ELSJ program is a two-step procedure:
- The first step requires that you apply for admission to the Department of Educational Leadership.
- If you are a successful applicant and you are admitted into the ELSJ program by the department, then you will be authorized to submit your application in order to be officially admitted to the university.

Applications and more information are available on the program website.

Ed.D. Degree Requirements
1. The degree requires a minimum of 90 quarter units of approved doctoral level work including 12 units for dissertation studies all to be completed within a three-year period. Students must take classes at a CSUEB facility for no less than two quarters each year of the program.
2. A 3.0 GPA or better in all 90 quarter units offered as satisfying the requirements of the degree.
3. Satisfactory performance on two qualifying examinations and approval of dissertation prospectus.

Curricular Requirements
A. Schedule of courses for full cycle of program:
Each cohort will begin courses with the summer quarter and enroll for a total of 12 quarters. A sample schedule follows:

- **First Year**
  - **Summer**
    - EDLD 8000 Values and Purposes of Educational Leadership (1)
    - EDLD 8020 Leadership for Equity (4)
    - EDLD 8030 Leadership in Systemic Reform (3)
  - **Fall**
    - EDLD 8031 Schools as Organizations: Linking Theory and Practice (4)
    - EDLD 8040 Program Planning & Evaluation (4)
  - **Winter**
    - EDLD 8080 Conceptual Foundations of Research (4)
    - EDLD 8010 Applied Study of Educational Issues I (3)
  - **Spring**
    - EDLD 8070 Governance, Law & Policy Development (4)
    - EDLD 8081 Qualitative and Quantitative Methods A (3)

- **Second Year**
  - **Summer**
    - EDLD 8082 Qualitative and Quantitative Methods B (3)
    - EDLD 8060 Leadership in Resource Management (4)
    - EDLD 8083 Defining Educational Issues (3)
  - **Fall**
    - EDLD 8084 Applied Research Methods A (4 units)
    - EDLD 8041 Leadership for Educational Accountability (4)
    - EDLD 8011 Applied Study of Educational Issues II (3)
  - **Winter**
    - EDLD 8085 Applied Research Methods B (4 units)
    - EDLD 8050 Leadership in Curriculum and Instructional Reform (4)
  - **Spring**
    - EDLD 8086 Dissertation Seminar (3)
    - EDLD 8032 Sustainability of Educational Reform (4)

- **Third Year**
  - **Summer**
    - EDLD 8021 Leadership for Equity II (4)
    - EDLD 8071 Governance & Policy Development II (4)
  - **Fall**
    - EDLD 8012 Advanced Topics in Educational Leadership (4)
    - EDLD 8087 Dissertation Studies (4)
  - **Winter**
    - EDLD 8087 Dissertation Studies (4)
  - **Spring**
    - EDLD 8087 Dissertation Studies (4)

B. Additional recommended course
EDLD 8900 Independent Study, an elective course, is for students who may require additional study related to elements of dissertation work (e.g., identification of researchable questions, preparation of literature reviews, study design, proposal development, Institutional Review Board process, and academic writing). This course, which may be taken for 2-4 units and repeated once, will be recommended by faculty advisors. Units for this course will not be counted toward the total units required for the degree.
C. Professional Residency

Students will engage in many field-based activities and assessments in their various courses and dissertation work. These field experiences will be designed to meet the specific interests and needs of students with respect to their mastery of goals and learning outcomes as well as with respect to their proposed dissertation studies.

Credentials

Note: Credential requirements specified in this catalog are subject to changes made by the State of California. Contact the Department of Educational Leadership for current regulations.

Preliminary Administrative Services Credential (Tier I) (36 units)

- EDLD 6000 Introduction to Educational Leadership (4)
- EDLD 6400 Instructional Leadership (4)
- EDLD 6410 Supervision and Staff Development (4)
- EDLD 6550 School Site Leadership and Organizational Behavior (4)
- EDLD 6650 Educational Law for Equity (4)
- EDLD 6675 School Finance and Human Resources for Equity (4)
- EDLD 6801 Fieldwork I (12)
- EDLD 6802 Fieldwork II (12)
- EDLD 6803 Fieldwork III (12)

Professional Administrative Services Credential (Tier II) (18 units)

- EDLD 6817 Assessment, Mentoring and Support Practicum (3)
- EDLD 6818 Assessment, Mentoring and Support Practicum (3)
- EDLD 6819 Assessment, Mentoring and Support Practicum (3)
- EDLD 6860 Developing an Inquiring Community (3)
- EDLD 6865 Focus on Learning (3)
- EDLD 6870 Professional and Organizational Development (3)

Internship Credential in Administrative Services (45 units)

- EDLD 6000 Introduction to Educational Leadership (4)
- EDLD 6400 Instructional Leadership (4)
- EDLD 6410 Supervision and Staff Development (4)
- EDLD 6550 School Site Leadership and Organizational Behavior (4)
- EDLD 6650 Educational Law for Equity (4)
- EDLD 6675 School Finance and Human Resources for Equity (4)
- EDLD 6804 Internship Fieldwork I (6 units per quarter)
- EDLD 6805 Internship Fieldwork II (6 units per quarter)
- EDLD 6806 Internship Fieldwork III (6 units per quarter)
- EDLD 6814 Internship Seminar I (1 unit per quarter)
- EDLD 6815 Internship Seminar II (1 unit per quarter)
- EDLD 6816 Internship Seminar III (1 unit per quarter)

Educational Leadership Courses

(Course prefix: EDLD)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>6000</td>
<td>Introduction to Educational Leadership (4) Introductory seminar that includes legal, fiscal and administrative basis for school organization; leadership theories; the governance and relationship of local school districts with county, state, federal agencies and other political entities. Prerequisite: graduate standing and one year of teaching experience.</td>
</tr>
<tr>
<td>6010</td>
<td>Site Practicum I (2) Group supervision of a one-quarter field-based practicum focusing on the leadership roles of teachers in schools. Regularly scheduled seminars. Prerequisite: admission to Department of Educational Leadership master's degree program.</td>
</tr>
<tr>
<td>6011</td>
<td>Site Practicum II (2) Group supervision of a one-quarter field-based practicum focusing on the leadership skills needed by teacher leaders schools. Regularly scheduled seminars. Prerequisite: admission to Department of Educational Leadership master's degree program.</td>
</tr>
<tr>
<td>6012</td>
<td>Site Practicum III (2) Group supervision of a one-quarter field-based practicum focusing on teachers leading change processes in schools. Regularly scheduled seminars. Prerequisite: admission to Department of Educational Leadership master's degree program.</td>
</tr>
<tr>
<td>6020</td>
<td>Research in Education (4) Seminar in methods and procedures of research tools in education; sources and uses of data. Critical analysis of published research; preparation of a research project to include references, rationale, and outline. Prerequisite: Advancement to Candidacy or consent of instructor.</td>
</tr>
<tr>
<td>6025</td>
<td>Research Practicum I (2) Group supervision of a one-quarter field-based practicum focusing on school site needs assessment. Regularly scheduled seminars. Prerequisites: admission to Department of Educational Leadership program; completion of EDLD 6000, 6400, and 6550. Co-requisite: concurrent enrollment in EDLD 6720.</td>
</tr>
<tr>
<td>6026</td>
<td>Research Practicum II (2)</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>6027</td>
<td>Research Practicum III (2)</td>
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<tr>
<td>6124</td>
<td>Teacher Leadership for Equity and Change (2)</td>
</tr>
<tr>
<td>6201</td>
<td>Research Seminar (1)</td>
</tr>
<tr>
<td>6300</td>
<td>The Administration of Curriculum Development (4)</td>
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<tr>
<td>6400</td>
<td>Instructional Leadership (4)</td>
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<tr>
<td>6410</td>
<td>Supervision and Staff Development (4)</td>
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<tr>
<td>6550</td>
<td>School Site Leadership and Organizational Behavior (4)</td>
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<tr>
<td>6610</td>
<td>Service-Learning for School Leaders (3)</td>
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<tr>
<td>6620</td>
<td>Executive Communications for School Leaders (3)</td>
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<tr>
<td>6650</td>
<td>Educational Law for Equity (4)</td>
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<tr>
<td>6675</td>
<td>School Finance and Human Resources for Equity (4)</td>
</tr>
<tr>
<td>6720</td>
<td>Solving School Problems through the Application of Research (4)</td>
</tr>
<tr>
<td>6730</td>
<td>School Administrators’ Application of Computer Technology (3)</td>
</tr>
<tr>
<td>6770</td>
<td>Group Facilitation for School Leaders (2)</td>
</tr>
<tr>
<td>6801, 6802, 6803</td>
<td>Internship Fieldwork I, II, III (4, 4, 4)</td>
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<tr>
<td>6804, 6805, 6806</td>
<td>Internship Fieldwork (8 each)</td>
</tr>
<tr>
<td>6814, 6815, 6816</td>
<td>Internship Seminar (1 each)</td>
</tr>
<tr>
<td>Course Number</td>
<td>Course Information</td>
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<tr>
<td>6822, 6823</td>
<td>Practicum Seminar II, III (3 each) Group supervision of a one-year, advanced fieldwork practicum sequence. Regularly scheduled seminars, on-site visits, and observations with school district administrators and district and university mentors. Individual assessment and design of professional growth plan. Prerequisites: Preliminary Administrative Services Credential; administrative position. CR/NC grading only.</td>
</tr>
<tr>
<td>6860</td>
<td>Developing an Inquiring Community (3) The first course in a three-quarter integrated series. Focus on developing community and inquiry methods such as action research. Based on five major themes: organizational and cultural environment; dynamics of strategic issues management; ethical and reflective leadership; analysis and development of public policy; management of information systems and human and fiscal resources. Prerequisites: EDLD 6817, 6818, 6819; administrative position; Preliminary Administrative Credential; consent of advisor.</td>
</tr>
<tr>
<td>6865</td>
<td>Focus on Learning (3) The second course in a three-quarter integrated series. Focus on student, adult, and organizational learning. Based on five major themes: organizational and cultural environment; dynamics of strategic issues management; ethical and reflective leadership; analysis and development of public policy; management of information systems and human and fiscal resources. Prerequisites: EDLD 6817, 6818, 6819, 6860; administrative position; Preliminary Administrative Credential and consent of advisor.</td>
</tr>
<tr>
<td>6870</td>
<td>Professional and Organizational Development (3) The third course in a three-quarter integrated series. Focus on the professional development of staff and parents and the development of communication and information systems in the school. Based on five major themes: organizational and cultural environment; dynamics of strategic issues management; ethical and reflective leadership; analysis and development of public policy; management of information systems and human and fiscal resources. Prerequisites: EDLD 6817, 6818, 6819, 6860, 6865; administrative position; Preliminary Administrative Credential and consent of advisor.</td>
</tr>
<tr>
<td>6899</td>
<td>Project (2-5) Development of an original product which is summarized in a written abstract. Both the project and abstract are submitted to department, which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Prerequisite: EDLD 6020. Maximum of five units per student.</td>
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<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
</tr>
<tr>
<td>6908</td>
<td>Graduate Synthesis in Educational Leadership (4) Students synthesize their degree program experiences in coursework, fieldwork and research into a coherent framework for their own leadership role and plan their future professional development. Includes comprehensive exam.</td>
</tr>
<tr>
<td>6909</td>
<td>Departmental Thesis (2-5) Development and writing of a research paper for the submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense required. Prerequisite: graduate standing. Maximum of 5 units for credit per student.</td>
</tr>
<tr>
<td>6910</td>
<td>University Thesis (1-6) Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense required. (See also, &quot;University Thesis Writing Guide,&quot; available in Student Services and Administration Building, Suite 4500.) Prerequisite: graduate standing. Maximum of 6 units for credit per student.</td>
</tr>
<tr>
<td>6999</td>
<td>Issues in Educational Leadership (1-4) Readings, discussion, and research on contemporary and/or significant issues in educational leadership. May be repeated for credit when content varies, for a maximum of 8 units.</td>
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</table>

### Educational Leadership Courses (Doctoral Program)

**Course prefix: EDLD**

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<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>8000</td>
<td>Values and Purposes of Educational Leadership (1) Introduction to the doctoral program, with a focus on the purposes of educational leadership, goals of schooling, and current issues. Personal reflection and self-assessment of individual values, goals, and commitments. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.</td>
</tr>
<tr>
<td>8010</td>
<td>Applied Study of Educational Issues I (3) Guided experience working in field to identify and analyze a relevant educational issue. Opportunity for project work under the direction of expert practitioner, including identification of knowledge gap or question of practice and formulation of a researchable focus. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.</td>
</tr>
<tr>
<td>8011</td>
<td>Applied Study of Educational Issues II (3) Guided experience working in field to deepen leadership capacity related to specific area of practice. Opportunity for project work under the direction of expert practitioner, including integration into student's research focus. Prerequisite: Admission to the Educational Leadership Doctoral Program; EDLD 8010. A-F grading only.</td>
</tr>
<tr>
<td>8012</td>
<td>Advanced Topics in Educational Leadership (4) Analysis and application of related literature on topical issues with broad implications for research and practice in educational leadership. Prerequisite: Admission to the Educational Leadership Doctoral Program; Third year standing in the Doctoral Program. A-F grading only.</td>
</tr>
<tr>
<td>8020</td>
<td>Leadership for Equity I (4) Socio-historical, socio-cultural, and social justice theories of addressing issues of diversity, equity and opportunity with a focus on underachieving populations and students of color. Leader's role and responsibility in developing evidence-based decision-making.</td>
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<td>Course Number</td>
<td>Course Title</td>
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<tr>
<td>8021</td>
<td>Leadership for Equity II (4)</td>
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<tr>
<td>8030</td>
<td>Leadership in Systemic Reform (3)</td>
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<tr>
<td>8031</td>
<td>Schools as Organizations: Linking Theory and Practice (4)</td>
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<tr>
<td>8032</td>
<td>Sustainability of Educational Reform (4)</td>
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<tr>
<td>8040</td>
<td>Program Planning and Evaluation (4)</td>
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<tr>
<td>8041</td>
<td>Leadership for Educational Accountability (4)</td>
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<td>8050</td>
<td>Leadership in Curriculum and Instructional Reform (4)</td>
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<td>8060</td>
<td>Leadership in Resource Management (4)</td>
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<td>8070</td>
<td>Governance, Law and Policy Development (4)</td>
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<tr>
<td>8071</td>
<td>Governance and Policy Development (4)</td>
</tr>
<tr>
<td>8080</td>
<td>Conceptual Foundations of Research (4)</td>
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<tr>
<td>8081</td>
<td>Qualitative and Quantitative Methods A (3)</td>
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<tr>
<td>8082</td>
<td>Qualitative and Quantitative Methods B (3)</td>
</tr>
<tr>
<td>8083</td>
<td>Defining Educational Issues (3)</td>
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<tr>
<td>8084</td>
<td>Applied Research Methods A (4)</td>
</tr>
<tr>
<td>8085</td>
<td>Applied Research Methods B (4)</td>
</tr>
<tr>
<td>8086</td>
<td>Dissertation Seminar (3)</td>
</tr>
</tbody>
</table>

**Course Details:**

- **Leadership for Equity II (4):** Advanced work with theories of social justice and equity, as well as data related to achievement gaps between White and Asian groups of students and Blacks and Hispanics. Leader's role in mobilizing and utilizing resources to dismantle patterns of inequity and exclusion. Prerequisite: Admission to the Educational Leadership Doctoral Program. EDLD 8020. A-F grading only.

- **Leadership in Systemic Reform (3):** Concepts of individual and group leadership in educational institutions. Practices and policies of improving academic achievement and sustaining reform efforts in public schools. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.

- **Schools as Organizations: Linking Theory and Practice (4):** Introduction to organizational theory as it applies to school systems; implications of technical/rational, human resource, and open systems perspectives; cultural and institutional theory as emerging analytic tools; implications for organization, management, leadership, and reform. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.

- **Sustainability of Educational Reform (4):** Models and complexities of organizational reform; theoretical frameworks, concepts and analysis of dimensions of sustainability; the equitable and ethical sustaining of organizational programs focusing on the underachieving students; complex models of educational change; impacting entrenched organizational-cultural patterns; facilitating collaborative change. Prerequisite: Admission to the Educational Leadership Doctoral Program; EDLD 8030. A-F grading only.

- **Program Planning and Evaluation (4):** Development of conceptual frameworks for evaluating systems to improve educational programs, educational systems, and educational policymaking. Integration of analytical and retrospective case studies that influence learning outcomes, student interventions and program improvement. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.

- **Leadership for Educational Accountability (4):** Theoretical and analytical basis of school accountability systems; demonstrable effective organizational arrangements leading to equitable student outcomes; internal and external accountability processes and their use in data-driven planning. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.

- **Leadership in Curriculum and Instructional Reform (4):** Theories and practices of curriculum and instruction in diverse school settings. Theories of cognition, learning, assessment and professional development for organizing schools around participation of diverse communities and cultures. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.

- **Leadership in Resource Management (4):** Financing public education; acquisition and management of human, fiscal, information resources; equitable assets to effectively manage public education institutions; financial management, human resources and resolution of conflict. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.

- **Governance, Law and Policy Development (4):** Public education policy development; forces that shape legislative provisions; legal frameworks for operating public schools in CA; legal ramifications of district policy and practices and their impact on leadership; case law at multiple levels and by race, class, culture, and language; community and governmental relations; working with boards and trustees, families, communities, businesses, local, state, and federal governmental agencies. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.

- **Governance and Policy Development (4):** Distributed leadership in democratic schools; application of governance and policy tools in support of access and equity; dismantling institutional racism. Prerequisite: Admission to the Educational Leadership Doctoral Program; EDLD 8070. A-F grading only.

- **Conceptual Foundations of Research (4):** Overview of research theory and design in multiple fields that influence educational policy and practices. Introduction to knowledge construction in socio-economic, community, political, and disciplinary contexts. Prerequisite: Admission to the Educational Leadership Doctoral Program. A-F grading only.

- **Qualitative and Quantitative Methods A (3):** Examine theories of qualitative and quantitative research design. Explore uses, design and techniques of qualitative and quantitative research methodologies. Explore the appropriateness of research theories and methods in specific contexts. Prerequisite: Admission to the Educational Leadership Doctoral Program; EDLD 8080. A-F grading only.

- **Qualitative and Quantitative Methods B (3):** Continued examination and application of theoretical approaches to qualitative and quantitative research design. Refinement of related research skills and use of relevant tools. Identify appropriateness of research theories and methods in specific contexts. Prerequisite: Admission to the Educational Leadership Doctoral Program; EDLD 8081. A-F grading only.

- **Defining Educational Issues (3):** Application of multidisciplinary theory in selection and definition of educational questions. Review of literature for specific educational issues. Initial design of an in-depth study of an educational issue. Prerequisite: Admission to the Educational Leadership Doctoral Program; EDLD 8082. A-F grading only.

- **Applied Research Methods A (4):** Application of foundational coursework in research to the design of an in-depth study of an educational issue. Includes literature review, research design and methodology from ethical and theoretical perspectives. Assess and apply appropriate research methods in collection, analysis and synthesis of data. Prerequisite: Admission to the Educational Leadership Doctoral Program; EDLD 8083. A-F grading only.

- **Applied Research Methods B (4):** Application of foundational coursework in research to the design of an in-depth study of an educational issue. Includes literature review, research design and methodology from ethical and theoretical perspectives. Assess and apply appropriate research methods in collection, analysis and synthesis of data. Prerequisite: Admission to the Educational Leadership Doctoral Program; EDLD 8084. A-F grading only.

- **Dissertation Seminar (3):**
Develop a dissertation proposal that defines an educational policy and practices within a particular community; reviews professional literature from multiple disciplinary perspectives; and, designs an appropriate research methodology (including data collection tools) to study the issue. Prerequisite: Admission to the Educational Leadership Doctoral Program; Satisfactory completion of qualifying examinations 1 & 2; EDLD 8085. A-F grading only.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Grading Option</th>
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<tbody>
<tr>
<td>8087</td>
<td>Dissertation Studies (4)</td>
<td>Ongoing, supported advising on dissertation study data collection, data analysis and reporting. Prerequisite: Admission to the Educational Leadership Doctoral Program; Satisfactory completion of qualifying examinations 1 &amp; 2. May be repeated for credit for a maximum of 12 units. A-F grading only.</td>
<td>Admission to the Educational Leadership Doctoral Program; Satisfactory completion of qualifying examinations 1 &amp; 2.</td>
<td>A-F</td>
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<tr>
<td>8900</td>
<td>Independent Study (2-4)</td>
<td>Interest- and needs-based seminars for small groups of candidates on topics related to dissertation development including (but not limited to): developing a literature review; completing Institutional Research Board processes and forms; advanced statistical analyses; etc. Prerequisite: Admission to the Educational Leadership Doctoral Program. This course does not count toward the 90 Ed.D. units. May be repeated for credit for a maximum of 8 units. A-F grading only.</td>
<td>Admission to the Educational Leadership Doctoral Program.</td>
<td>A-F</td>
</tr>
</tbody>
</table>
Educational Psychology

Department Information

Department of Educational Psychology
College of Education and Allied Studies
Office: Art and Education Bldg. 369
Phone: (510) 885-3011
Email: epsy@csueastbay.edu
Website: www20.csueastbay.edu/ceas/departments/epsy/index.html

Professors Emeriti
J. Dan Romero, Ph.D. University of New Mexico
Arthuriene G. Towner, Ph.D. University of California, Berkeley/San Francisco State University

Professors
Jacki L. Anderson, Ph.D. University of Wisconsin
Ann Halvorsen, Ed.D. University of California, Berkeley/San Francisco State University
R. Greg Jennings, Ph.D. University of California, Berkeley

Associate Professors
John M. Davis (Chair), Ph.D. University of California, Berkeley
Rolla Lewis, Ed.D. University of San Francisco
Janet P. Logan, Ph.D. University of Wyoming
Terry Soo-Hoo, Ph.D. University of California, Berkeley
Linda Smetana, Ed.D. Brigham Young University

Assistant Professors
Wendi J.Y. Cheng, Ph.D. University of Michigan
Randi Cowdery, Ph.D. Loma Linda University
Oanh Kim Tran, Ph.D. University of Oregon
Steven L. Williams, Ph.D. University of Oregon

Graduate Coordinators:
- M.S. Special Education
  Jacki L. Anderson (Moderate/Severe)
  Linda Smetana (Mild/Moderate)
- M.S. Counseling
  Clinical Child/School Psychology: Greg Jennings
  Marriage and Family Therapy (Hayward and Concord campuses): Dan Romero
  School Counseling, and Marriage, Family Therapy: Rolla E. Lewis

Program Description

The Educational Psychology Department is primarily a graduate department offering master’s degrees and credential programs. Educational Psychology post-baccalaureate and graduate courses (5000- and 6000-level courses) are open only to students who have been admitted to, and remain in good standing in, programs within the department. This restriction does not apply to students enrolled in the Special Education Option in Liberal Studies, the combined program in Teacher Education and Special Education (TED/SPED), or EPSY 5021. Potential applicants interested in the master's programs are encouraged to take courses in psychology, sociology, human development, and/or anthropology.

The Department of Educational Psychology offers a number of programs leading to the M.S. in Counseling, the M.S. in Special Education, and/or related credentials. These programs train psychological specialists who desire to work as school counselors, school psychologists, or special education professionals. Other programs prepare individuals for work as counselors or psychotherapists in non-school settings where assistance with problems related to family, marriage, or personal adjustment is provided.

Student Learning Outcomes

M.S. in Counseling

Students graduating with an M.S. in Counseling from Cal State East Bay will:
1. have the knowledge and skills to implement best practice, evidence-based approaches and strategies for clinical counseling and psychoeducational interventions;
2. create counseling environments, systems, and practices in which all individuals are treated with respect, dignity, trust, and fairness;
3. have developed personal/interpersonal aptitudes that respect the standards, ethics, and best practices of the counseling profession;
4. have developed cultural competence and advocacy skills in assessment, counseling, and consultation.

M.S. in Special Education
Students graduating with an M.S. in Special Education (Mild-Moderate or Moderate-Severe Disabilities option) from Cal State East Bay will have achieved the following:

1. ability to assume a leadership role in instruction; professional development; knowledge required for collaboration and reform at school/district level;
2. advanced application of research-based instructional and behavioral methodology; application of skills, technology, knowledge specialization, and demonstrated commitment to the field;
3. successful design, conduct and completion of educational research leading to a university thesis;
4. successful design, conduct and completion of educational research activity leading to a department thesis or project.

Concord Campus

The department offers at the Concord Campus (located in Concord, California) an M.S. degree program in Counseling with an Option in Marriage and Family Therapy. A departmental brochure describing both Hayward and Concord campus programs is available online at www20.csueastbay.edu/ceas/departments/epsy/index.html. Current information on the Concord Campus programs may also be obtained by calling (925) 602-6700.

Program Offerings

Undergraduate

Liberal Studies Option in Special Education

(See the Liberal Studies chapter in the undergraduate section of this catalog.)

Graduate

Master of Science in Counseling

- Option in Clinical Child/School Psychology
- Option in Marriage and Family Therapy
- Option in School Counseling

Master of Science in Special Education

- Option in Mild-Moderate Disabilities
- Option in Moderate-Severe Disabilities

Credentials

Pupil Personnel Services

- School Psychology Specialization
- School Counseling Specialization

Special Education

- Education Specialist: Mild-Moderate Disabilities, Level I (Preliminary) and Level II (Professional)
- Education Specialist: Moderate-Severe Disabilities, Level I and Level II
- Internship (Level I) for Education Specialist Mild-Moderate and Moderate-Severe Disabilities

Other Programs

A department-approved Certificate in Chemical Dependency Studies (available at the Division of Continuing and International Education).

Admission

Educational Psychology students are admitted once a year, in the fall quarter. Students applying for the Level I Special Education credential programs who have general teaching credentials may be admitted conditionally each quarter. The level I TED/SPED joint program begins summer quarter and students must apply for admission through the Teacher Education department during the preceding winter quarter. See the graduate Teacher Education chapter in this catalog for details and deadlines. Teachers who hold valid Level I Specialist credentials may apply directly to the Educational Psychology department for admission to the Level II Professional Credential program.

Only 13 non-residence units taken in undergraduate, "Unclassified Post-baccalaureate," " Classified Post-baccalaureate," and/or extension status can be applied to a degree program. (Transfer units are included in the 13 non-residence units which are permitted.)

Interested individuals should visit the department website to obtain the appropriate admission packet which contains descriptive materials and necessary forms. The department accepts applications in November. All admissions materials, such as recommendation letters, must be in by February 15. Test scores may be submitted after February 15. Also call the Academic Programs and Graduate Studies Office for information on university application procedures and deadlines at (510) 885-3286; or visit the university website (www.csueastbay.edu) and select "Becoming a Student" from the top menu, then "Graduate Admissions" from the pull-down menu. Applications received after this date run the risk of not being accepted by the university or the department. Please note that students are admitted by the university, not the department. The department recommends admission to the university, but only the university may admit students. Only the university admission document can validate and verify admission.

Procedures

1. Apply to the Cal State East Bay Admissions Office. This department cannot process your request for entry until notification that your application and fee have been received at the Cal State East Bay Admissions Office.
2. Complete the departmental application.
3. Recommendation forms should be completed by persons who know of your academic and/or professional abilities. Ask them to fill out the form and send it to you in a sealed envelope. At least one should be from a faculty member who is acquainted with your academic ability and promise. All programs require three letters of recommendation.
4. Complete a personal statement in which you describe your professional goals, the extent of commitment to these goals, and your assessment of your strengths and weaknesses relative to achieving these goals. Most applicants find that an adequate length is two to four pages.
5. Also submit all your official transcripts to the department office, in addition to the official copies you send to the Cal State East Bay Admissions Office.
6. Department applications must be submitted as a complete packet except for GRE or MAT test scores.
7. Send or have sent to the department office, scores from either the aptitude section of the Graduate Record Exam (GRE) or the Miller Analogies Test (MAT). These tests are administered by the Testing Office at Cal State East Bay and the Educational Testing Service.
8. Personal or group interviews with faculty are required for local applicants. Arrangements for these are described in the department admission packet.

9. Special Education students must submit applications in person directly to a faculty member in the Educational Psychology department for admission to the Level I Specialist Credential programs if they have already completed a Multiple or Single Subject (general education) credential. If not, Level I Specialist applicants for admission to the Level I Preliminary Credential program in the areas of mild-moderate or moderate-severe disabilities should submit applications directly to the Teacher Education department (AE 242, ext. 3027) for the "TED/SPED" Option.

Applicants for admission to the Professional Level II Credential programs or the master's degree program in the areas of mild-moderate or moderate-severe disabilities may apply directly for admission to the Special Education Option through the Department of Educational Psychology. Applicants for admission to Level II credential programs must hold a valid Level I credential from an accredited program. Complete applications must be submitted in person to Special Education faculty member at the time of the interview.

10. Degree candidates must begin satisfaction of the University Writing Skills Requirement (UWSR) during the first quarter of attendance after admission to the department if they have not already satisfied the requirement (see the Graduate Degree Information chapter in this catalog). Satisfaction of this requirement is a prerequisite for "Classified Graduate" status. Documentation of the satisfaction of the UWSR must be sent by the applicant to the Educational Psychology office. This information is not automatically forwarded to individual departments. Note: Applicants who receive a CBEST score of 53 or higher in the written section can have this requirement waived. For information on meeting the University Writing Skills Requirement, see the Testing Office website at [www.csueastbay.edu/testing](http://www.csueastbay.edu/testing) or call 510.885.3661.

11. Students applying for a program leading to a credential from the Commission for Teacher Credentialing must take the California Basic Education Skills Test (CBEST) before commencement of the quarter in which they are to be admitted. As the testing is for diagnostic purposes, only a record of completion is required. Consult the Testing Office for times and dates of the testing.

12. Credential candidates must apply through the Cal State East Bay Credentials Office for a "Certificate of Clearance" (which includes a current TB test) if field work in public schools is anticipated (unless they possess a valid California Teacher's Credential).

Applicants may contact the department's Graduate Records Secretary for clarification of their requirements, or for an update on the state of their application or their progress in their degree or credential programs: (510) 885-3011.

Advising

Students who are accepted into the department will normally be admitted in "Conditionally Classified Graduate" status until satisfaction of all prerequisites and the University Writing Skills requirement is documented for the Educational Psychology office, at which time a change to "Classified Graduate" status will be requested by the department. The student is assigned an official advisor from the faculty of the department and must consult his or her advisor prior to registration for each quarter. The student should maintain close contact at all times with the advisor for advice and information.

Advancement to Candidacy

Formal Advancement to Candidacy for the master's degree requires prior completion of the following steps:

1. Successful completion in "Classified Graduate" status of three or more courses at the 6000 level (minimum of 12 units) within the Educational Psychology Department.
2. Successful completion of all required departmental examinations and prerequisites.
3. Maintenance of a 3.0 or better GPA in all departmental coursework and overall coursework.
4. Acceptance by the department of a proposed formal program of study.
5. Recommendation by the student's advisor who has reviewed the student's record and affirmed that the student has met academic and professional conduct standards.

Note: A similar process is followed for Special Education Credential students to be moved from special to full status admission.

Cause for Discontinuance

Students may be discontinued from the program at any time "for cause." This includes poor academic or fieldwork performance. "For cause" also includes behavior which is destructive to students or faculty, and/or interferes with the educational environment, and/or represents a threat to potential clients. It also includes student behaviors which are inconsistent with the legal, ethical, and/or personal responsibilities of professional counselors and teachers.

Degree Requirements

In order to earn a master's degree, students must fulfill all of the following requirements:

1. Satisfy the University Writing Skills Requirement or pass the CBEST writing portion with a score of 53 or higher.
2. Hold Advanced to Candidacy standing.
3. Complete 72 units (Counseling) or 45-47 units (Special Education) of approved graduate work, of which:
   a. all must have been earned within the five years just preceding completion of the requirements for the degree.
   b. not fewer than 32-34 units (for 45-47-unit degrees) or 59 units (for 72-unit degrees) must have been completed in residence.
   c. not fewer than 23-24 units (for 45-47-unit degrees) or 36 units (for 72-unit degrees) must have been in courses in the 6000 series.
   d. not more than 9 units may have been for a University Thesis or 5 for a project or a Departmental Thesis.
   e. not more than 13 units may be transfer, extension (including Open University), and/or taken in "Unclassified" or "Classified Post-baccalaureate" status.
   f. not more than 15 units with a "CR" grade may be used for a 45-unit degree; not more than 24 units with a "CR" grade may be used for a 72-unit degree in Counseling.
4. Complete a satisfactory program of study as determined by the department with any substitutions approved by the Dean of the College of Education and Allied Studies.
5. Obtain at least a 3.0 grade point average in
   a. all post-baccalaureate units undertaken
   b. all post-baccalaureate units undertaken at Cal State East Bay
   c. all units offered as satisfying the requirements of the degree program
6. Successfully complete an acceptable thesis, project or comprehensive examination as determined and approved by the department
There are three options and two areas of emphasis within the M.S. degree in Counseling. These are designed to ensure the most thorough preparation for the profession and its subspecialties, as well as to provide the student a broad experience with points of view and philosophy in both theory and practice. The faculty is committed to the intellectual and social-emotional growth of the student as well as his or her professional preparation.

For administrative purposes, faculty and students are organized into three programs, all of which lead to the M.S. in Counseling. Potential applicants are invited to seek appointments with faculty representatives of the three programs to discuss their interests and philosophical orientations.

**Licenses Related to Counseling Programs**

The department does not issue licenses but does offer courses which are designed to meet the educational requirements of two State of California licenses. All licenses require additional experience beyond degrees, as well as written and oral exams administered by the appropriate board of the State of California.

**MFT**

The M.S. Counseling degree has an option designed to meet the requirements of Sections 4980.37, 4980.40 and subdivisions (a) and (d) of Section 4980.41, Article 1 (Regulation: Chapter 13, Marriage, Family Therapy, of the Business and Professions Code, State of California). Students are advised to acquire and read the laws governing MFT licensure from the Board of Behavioral Sciences in Sacramento.

See your program advisor in the Educational Psychology department for the procedures required for application for this license. State documents must be requested by the applicant from the Board of Behavioral Science Examiners, 400 R Street, Sacramento, CA 95814-6240.

Grades: If a candidate for the university recommendation for MFT licensure has more than one "C" grade among the courses listed on the Board of Behavioral Sciences approval form, that form cannot be approved by the Designee of the Chief Academic Officer of Cal State East Bay.

Field Work Credit: Field work or internship courses represent the student's efforts and growth in the interpersonal skills basic to marriage, family, and child counseling. A student who receives a grade of "NC" (no credit) for one quarter is on probation regarding continuation in the MFT approval track. A second grade of "NC" will disqualify the student for continuation in the MFT option and ultimate university recommendation for the license. Further, candidates may be disqualified from this program for actions judged by the faculty to reflect unethical, unprofessional, or incompetent behavior or interpersonal skills.

**Educational Psychology License**

The Educational Psychology license is issued by the Board of Behavioral Sciences. A credential in School Psychology and three years of related experience are currently required.

**Core Requirements for M.S. in Counseling (72 units)**

The M.S. degree in Counseling requires 72 units organized according to university requirements (see the Graduate Degree Information chapter in this catalog). Core requirements are established to ensure that each degree candidate obtains adequate breadth in subject matter, field experiences, and research.

**I. Prerequisites (15 units minimum)**

A baccalaureate degree with a major in psychology or in child or human development plus a statistics course. For applicants with baccalaureates in other majors, the following courses are required and will provide adequate background for a counseling graduate program:

1. An introductory course in descriptive statistics (3 units)
2. A course in abnormal or pathological behavior (3 units)
3. A course in learning (3 units)
4. A course in developmental psychology or human or child development (3 units)
5. A course in personality theory or development (3 units)

**II. Core Requirements (36-45 units)**

**A. Competency Area Requirements (27 units)**

Students are required to demonstrate competency in the seven areas listed below. With the Dean's approval, students may substitute alternative related courses.

1. Basic theoretical and research knowledge of systems of counseling and psychotherapy (4 units)
   - EPSY 6750 Foundations of Counseling (4)
2. Knowledge of psychological, biological, and social development over the lifespan and related psycho-therapeutic interventions (4 units)
   - EPSY 6302 Individual Development (4)
3. Knowledge of group counseling and psychotherapy, consultation, systems analysis and change agents in organizations (4 units)
   - EPSY 6762 Group Procedures and Facilitation (4)
4. Knowledge of theory and procedures for collecting and evaluating clinical assessment data (4 units)
   - EPSY 6701 Appraisal Procedures: Standardized (4)
   or EPSY 6720 Theory and Assessment of Cognition (4)
5. Cultural perspectives in counseling: acquiring understanding of, and sensitivity to, individuals from diverse backgrounds and the interpersonal skills to work with them. Included are social class, ethnic, racial, sexual, and lifestyle differences (4 units)
   - EPSY 6752 Cross Cultural Counseling (4)
6. Ability to conduct and interpret research (4 units)
   - EPSY 6023 Research in Applied Behavioral Sciences (4)
7. Laws and ethical principles as they apply to the practice of professional counseling (3 units)
   - EPSY 6875 Law and Ethics in Counseling (3)

**B. Fieldwork Requirement (9 units)**
A minimum of three quarters of fieldwork is required in the application of counseling procedures and assessment techniques in fieldwork settings.

- EPSY 6670 Field Work Group Supervision I (3)
- EPSY 6671 Field Work Group Supervision II (3)
- EPSY 6672 Field Work Group Supervision III (3)

C. Capstone Experience (0-9 units)
Students must successfully complete either a University Thesis, a Departmental Thesis, a Project, or a Comprehensive Examination, and should select option (1), (2), (3), or (4).
1. EPSY 6899 Project (2-5)
   or EPSY 6021 Thesis-Project Seminar (3)
2. EPSY 6909 Departmental Thesis (2-5)
   or EPSY 6021 Thesis-Project Seminar (3)
3. EPSY 6910 University Thesis (1-9)
   or EPSY 6021 Thesis-Project Seminar (3)
4. Comprehensive Examination (0)

III. Option/Area of Emphasis (16-23 units)
A student may choose to complete an option and/or an area of emphasis. Options can be recognized on diplomas and transcripts, emphases will not.

A. Options (19-22 units)
1. Clinical Child/School Psychology (19 units)
   - EPSY 6403 Psychotherapy for Children (4)
   - EPSY 6500 Cognitive Behavior Therapy (4)
   - EPSY 6669 Seminar in Mental Health Consultation (3)
   - EPSY 6911 Developmental Assessment Practicum (4)
   - EPSY 6912 Personality Assessment (4)
2. Marriage and Family Therapy (20-22 units)
   - EPSY 6025 Psychopathology of Childhood (4)
     or EPSY 6026 Psychopathology in Adulthood (4)
   - EPSY 6027 Chemical Dependence Theory (4)
     or EPSY 6029 Seminar in Chemical Dependence (2)
   - EPSY 6400 Family Psychotherapy (4)
   - EPSY 6403 Psychotherapy for Children (4)
   - EPSY 6406 Seminar in Human Sexuality (2)
   - EPSY 6500 Cognitive Behavior Therapy (4)
     or EPSY 6751 Counseling and Psychotherapy Theory (4)
3. School Counseling (23 units)
   - EPSY 6023 Research in Applied Behavioral Science (4)
   - EPSY 6403 Psychotherapy for Children (4)
   - EPSY 6500 Cognitive Behavior Therapy (4)
   - EPSY 6669 Seminar in Mental Health Consultation (3)
   - EPSY 6711 Career and Life Planning (4)
   - EPSY 6784 Intervention Strategies for Systems and Organizational Change (4)

B. Areas of Emphasis (16-23 units)
1. Cross-cultural Counseling (16 units)
   - EPSY 6751 Counseling and Psychotherapy Theory (4)
   - EPSY 6754 Cross-Cultural Consultation (4)
   - EPSY 6764 Intervention Strategies for Systems and Organizational Change (4)

   Choice of one course from the following (4 units):
   - ANTH 3740 Cross-Cultural Studies in Child Rearing (4)
   - SOC 3520 Sociology of Minority Groups (4)

2. Child/Adolescent Psychotherapy (22-23 units)
   - EPSY 5021 Introduction to Educating all students in Diverse Classrooms (4)
   - EPSY 6025 Psychopathology of Childhood (4)
   - EPSY 6400 Family Psychotherapy (4)
   - EPSY 6403 Psychotherapy for Children (4)
   - EPSY 6500 Cognitive Behavior Therapy (4)
   - EPSY 6783 Seminar: Contemporary Issues (2-3)

C. Electives (3-20 units)
These electives are in addition to the option or emphasis selected above. Courses listed above as alternatives under emphases may be used as electives if not otherwise chosen.

Other courses recommended as electives:
- ANTH 3740 Cross-Cultural Studies in Child-Rearing (4)
- ANTH 3745 Human Sexuality: Anthropological Perspectives (4)
- COMM 4830 Intercultural Communication (4)
- EPSY 5610 Micro Counseling I (2)
- EPSY 5620 Micro Counseling II (2)
Public Administration courses may be used as electives by students completing the combined program with Public Administration.

Counseling Programs of Study

Clinical Child/School Psychology

Clinical Child/School Psychology Option

Marriage and Family Therapy Option

School Psychology Credential

Faculty: John M. Davis, Greg Jennings (Coordinator), Rolla E. Lewis, Janet Logan, Oanh Tran

The Clinical Child/School Psychology (CCSP) program at CSUEB is committed to a training philosophy that promotes the educational and social-emotional development of children, youth, and families. It is considered essential that each student develop sound professional values along with the acquisition of professional knowledge. An ecological human development perspective and collaborative consultation skills are emphasized, with the understanding that the ability to work collaboratively with families, teachers, and communities is critical to helping children succeed. As a fundamental principle of ethical practice, assessment, consultation, and intervention skills are inextricably linked throughout the curriculum. Program development and evaluation skills are also emphasized in order to ensure that graduates are well prepared to promote effective system-level intervention programs for meeting the needs of children, schools, families, and communities.

Multicultural issues are addressed as an integral and essential component of every course the department offers. It is the mission of the department, College of Education and Allied Studies, and the university to prepare leaders for a diverse society. It is also the explicit goal of the Clinical Child/School Psychology program to prepare students to work effectively with children and families across the full spectrum of culture, ethnicity, and individual differences. The program is also developing training experiences that emphasize the development of skills in cultural competency.

The Clinical Child/School Psychology program provides the only course of study in the department leading to the School Psychology credential. This program also offers the academic and minimum fieldwork requirements for the Marriage and Family Therapy license and the Educational Psychology license.

The candidate for a credential must demonstrate an increasing ability to establish constructive interpersonal relationships with persons of differing ages, cultures, and experiential backgrounds (including children who may have endured severe physical or emotional trauma) in a manner that promotes confidence, mental health, social adjustment, and learning. The candidate must demonstrate increasing ability to establish satisfactory working relationships with parents, teachers, school personnel, and other community members involved in a particular case. The candidate must also demonstrate increasing ability to apply professional methods and techniques at proficiency levels significantly higher than those generally required in academic coursework.

To ensure that candidates have opportunity to develop the skills necessary for credential eligibility, specific credential competencies have been
integrated into all courses required for a credential. In order to demonstrate at least minimal competencies in the required skills, therefore, the credential candidate must earn a grade of "B" or higher in each of these courses. In the event that a candidate does not achieve the criterion of "B" work in a required course, (s)he must consult immediately with the faculty, to determine a plan that will provide opportunity for remediation. Any candidate who receives a grade of "C" or lower in a required course will be classified automatically as probationary in the credential program; a second grade of "C" or lower will be considered sufficient basis for disqualification from the credential program and the related Master of Counseling degree program. Students are expected to have completed all prerequisites before entering the program. Candidates must take all courses that are required by the program, degree, and credential at California State University, East Bay.

Fieldwork and practical experiences, as evaluated by faculty and field supervisors, must also reflect a candidate's ability to meet the competencies specified in the program documents. Professional and interpersonal skills are the primary determinants of success in these settings. Any candidate who receives a grade of "NC" (No Credit) in a required fieldwork or internship course will be classified automatically as probationary in both the credential program and the Master of Counseling degree program. A meeting with the Coordinator of the School Psychology program will be required before additional registration in fieldwork or internship courses will be considered valid for credit toward a credential. A second grade of "NC" will be considered sufficient basis for disqualification from the credential program and the Master of Counseling degree program.

The program supports the development of the professional maturity of all candidates. The CCSP faculty evaluates candidates' professional and interpersonal maturity throughout the program. Only students who have demonstrated a high level of professional and personal integrity consistent with the role of the school psychologist will be recommended for the Pupil Personnel Services Credential in School Psychology upon completion of coursework, fieldwork, internship and Praxis exam results.

Candidates who fail to demonstrate professional and personal responsibility (as evidenced by violations of professional, interpersonal trust, or ethical practice) are subject to termination from the CCSP Program.

Candidates are to apply for their credential upon graduation. After graduation a recommendation for the credential will be based on the University currency limitation of 5 years and determined by the currency of the required course work, fieldwork experience, and portfolio.

**Marriage and Family Therapy**

**Marriage and Family Therapy Option**

**Child/Adolescent Psychotherapy Emphasis**

**Faculty:** Wendi J.Y. Cheng, Randi Cowdery, John M. Davis, Dan Romero (Coordinator) Terry Soo-Hoo

The faculty supervising this program are committed to training psychotherapists and mental health specialists for a variety of settings, such as private practice, school social agencies, agencies, universities, hospitals, businesses, and industry.

Students admitted to this program of study will focus on the M.S. in Counseling with the option in Marriage and Family Therapy. The main focus of this program is on training psychotherapists who eventually plan to obtain a California license to practice marriage and family therapy. The program provides a course of study leading toward completion of the academic requirements and the 150 hours clinical experience required for application for the MFT license.

Graduates have been hired to work with clients in a wide range of agencies and businesses. Some are counselors in junior colleges and college counseling centers. Others are drug and alcohol abuse counselors in hospitals, family therapists-on-site in schools, advocates for the mentally ill, child therapists in therapeutic nursery schools, assessment counselors, information and referral clinicians in employee assistance programs, individual and family therapists for police departments, organizational development specialists, and human resource professionals in business and industry.

Some graduates have pursued doctoral-level work in clinical and counseling psychology or education after completing their master's degree in this program. Over the years, students have been accepted to programs in many universities, including the University of Missouri, the University of California at Berkeley, Michigan State University, Stanford University, California School of Professional Psychology, the Wright Institute, the University of Florida, the University of Texas, and the University of Wisconsin.

Students are trained for clinical work with individuals who are struggling with normal life problems, as well as individuals with more extensive psychopathology. Coursework covering various theories of individual, child, couple and family therapy prepares students well for advanced postgraduate internship work in clinical specializations of their choice. Students, as part of their clinical skills development, are also trained to lead counseling groups of children or adults.

Students take both evening and day classes. The program, however, cannot be completed entirely through evening classes. Groups of students are admitted annually at the Hayward campus and every other year at the Concord campus.

The Marriage and Family Therapy program is designed to encourage growth and development of the students enrolled. Expansion of students' awareness and perspectives is emphasized. The faculty are licensed as marriage and family therapists or as psychologists. They are involved in clinical practices and are committed to preparing psychotherapists and consultants.

**School Counseling, and Marriage and Family Therapy**

**Marriage and Family Therapy Option**

**School Counseling Credential**

**Faculty:** John M. Davis, Greg Jennings, Rolla E. Lewis (Coordinator), Janet Logan, Oanh Tran

Students enrolled in this program complete the M.S. in Counseling with a focus on both School Counseling and Marriage and Family Therapy (MFT). They are prepared to participate in, and to provide leadership for, a highly collaborative, prevention-based model for service delivery in the 21st century. This model involves the weaving together of educational services with community health, mental health, and other social services, as well as a strong focus on family issues and school-based/linked services.

The School Counseling and MFT program is a two-year course of study that leads to the Pupil Personnel Services (PPS) School Counseling Credential and meets the academic requirements, as well as the minimum 150 hours of experience required for the MFT license. Students enroll in a full-time course load each quarter (fall, winter, and spring) for two academic years. Courses are offered during the day, in the evening, and on weekends. The trainees participate in fieldwork at least 1 1/2 to 2 days per week (approximately 12-15 hours/week) each year, for a total of 600 hours.

Coursework and fieldwork experiences emphasize the development of the student's ability to provide comprehensive developmental school counseling programs meeting national and state standards. Students acquire the skills to develop classroom and small group guidance curriculum. They also learn to conduct individual and group therapy, guidance counseling, consultation, and to provide leadership in the creation and evaluation of integrated, comprehensive prevention and intervention programs. In the fieldwork experience, trainees have specific assigned activities and supervised experiences related to the California Credentialing Standards for the PPS School Counseling Credential, and to the MFT licensing qualifications of the Board of Behavioral Sciences.
To be admitted to the program, students must complete five departmental prerequisites with a grade of "B" or higher (see prerequisites listed under "Core Requirements for M.S. in Counseling" earlier in this chapter. In addition, applicants must have taken the GRE or MA and CBEST exams prior to entering the program.

The department is committed to interdisciplinary training and the delivery of prevention, family-centered, school-based/linked mental health services. Students enrolled in this program, therefore, take many of their basic courses with faculty and students who are enrolled in other specialist programs such as marriage and family therapy, school psychology, and special education. The candidate must satisfy all credential competency requirements as defined in the approved credential document. Specifically, the candidate must achieve a grade of "B" or higher in the required courses. If a grade of "B" or higher is not earned, the candidate must immediately consult with the faculty to determine the academic work necessary to achieve competency level. (The original grade will not be changed, however.) Two grades of "C" or lower in required courses are sufficient basis for disqualification from the program (as stated in the University Catalog). Candidates must also successfully complete 600 hours of fieldwork in schools, take the Praxis School Guidance and Counseling Exam, and pass the CBEST exam in order to be eligible for the PPS School Counseling Credential.

Candidates are to apply for their credential upon graduation. After graduation a recommendation for the credential will be based on the University currency limitation of 5 years and determined by the currency of the required course work, fieldwork experience, and portfolio.

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**Credentials in Counseling**

**Pupil Personnel Credential: School Counseling Specialization (90 units)**

The Pupil Personnel Credential (School Counseling Specialization) is offered through the School Counseling, and Marriage, Family Therapy program. This credential is required for work as a counselor in the public schools, and is approved by the California Commission of Teacher Credentialing (CTC). The commission sets the standards and competencies for the state, and Cal State East Bay's program is designed to incorporate all knowledge, skills and practical experiences required to meet those expectations.

The School Counseling Credential program is a two-year course of study that reflects an integration of local program needs, the campus mission, and the direction provided by the National Standards and National Model of the American School Counselor Association (ASCA) and the National Career Development Guidelines (NOICC). The program is designed to train competent practitioners who are prepared to be leaders in building comprehensive, results-based school counseling programs that serve the needs of all pupils. The program provides training in mental health services using an integrated model designed to serve marriage and family therapists, school counseling and school psychology students. The school counseling students, however, will receive additional training and experience to prepare them to effectively perform the functions of a school counselor. The School Counseling Credential program includes specific training in guidance program models, guidance program development/implementation, and in the comprehensive and developmental school guidance curricula for academic, career, and personal/social development. Students also learn team building, management, and accountability for a comprehensive guidance program.

The M.S. in Counseling (or an acceptable equivalent) is required.

**I. Prerequisites (15 units)**

The prerequisites are the same as for the M.S. in Counseling. (Prerequisites are not included in the 76-87 units required for the Pupil Personnel Credential.) Coursework as follows:

- Learning (3)
- Statistics (3)
- Personality (3)
- Abnormal psychology (3)
- Human, child, or adolescent development (3)

**II. Course Requirements (84 units)**

- EPSY 5610 Micro-Counseling I (2)
- EPSY 6023 Research in Applied Behavioral Sciences (4)
- EPSY 6025 Psychopathology of Childhood (4)
- EPSY 6302 Individual Development (4)
- EPSY 6400 Family Psychotherapy (4)
- EPSY 6403 Psychotherapy for Children (4)
- EPSY 6500 Cognitive Behavior Therapy (4)
- EPSY 6610 Graduate Seminar I (2)
- EPSY 6620 Graduate Seminar II (2)
- EPSY 6630 Graduate Seminar III (2)
- EPSY 6669 Seminar in Mental Health Consultation (3)
- EPSY 6701 Appraisal Procedures: Standardized (4)
- EPSY 6750 Foundations of Counseling (4)
- EPSY 6752 Cross-Cultural Counseling (4)
- EPSY 6762 Group Procedures and Facilitation (4)
- EPSY 6765 Psychological and Counseling Services in Schools and Higher Education (2)
- EPSY 6785 Law and Ethics in Counseling (3)
- EPSY 6786 Child Abuse Assessment (1)
- EPSY 6810 Advanced Graduate Seminar I (2)
- EPSY 6820 Advanced Graduate Seminar II (2)
- 3 units of graduate level coursework covering the topic of Program Evaluation, with consent of department

**III. Fieldwork (minimum 18 units)**

- EPSY 6670 Fieldwork Group Supervision I (3)
- EPSY 6671 Fieldwork Group Supervision II (3)
- EPSY 6672 Fieldwork Group Supervision III (3)
- EPSY 6770 Internship (2-6) (may be taken multiple quarters)

**IV. Capstone Experience (4 units)**

Complete both A and B

A. EPSY 6205 Advanced Pupil Personnel Specialist (4)
B. Passing score on Comprehensive Exam in School Counseling (0)
Pupil Personnel Credential: School Psychology Internship and School Psychology Specialization

This combined credential program is offered by the Clinical Child/School Psychology faculty.

The school psychologist is a clinical child psychologist who functions within the school organization. The school psychologist provides consultation and services for enhancement of the cognitive, social and emotional development of children and adolescents within the school environment; provides programs for the development of the staff; has responsibility for the prevention, assessment, and remediation of the behavioral and learning difficulties of children; and often becomes the primary resource for the emotionally troubled children and their parents.

The school psychologist serves the schools as the expert in psycho-educational measurement, program evaluation, and research.

School Psychology Internship (95 units)

This program prepares students to undertake a full-time (1200-hour) Internship in School Psychology, as required by the National Association of School Psychologists and, as of July, 1996, by the Commission on Teacher Credentialing of the State of California. (Note that the Internship Credential would serve to qualify a student for internship status, and thus would have to be earned prior to the actual internship year itself.)

Prerequisites are not included in the 95 units required for the School Psychology Internship Program. Prerequisite units are minimum values; all Cal State East Bay courses have more units.

I. Prerequisites (18 units)
- An Introduction to Statistics (e.g., STAT 1000) (3)
- Abnormal Psychology (e.g., PSYC 4410) (3)
- Developmental Psychology (e.g., PSYC 4420) (3)
- Learning Theory (e.g., PSYC 4210) (3)
- Personality Theory (e.g., PSYC 4610) (3)
- Psychological Tests and Measurements (e.g., PSYC 3200) (3)

II. Required Courses (77 units)
- EPSY 5610 Microcounseling I (2)
- EPSY 6023 Research in Applied Behavioral Sciences (4)
- EPSY 6025 Psychopathology of Childhood (4)
- EPSY 6301 Pediatric Psychology (4)
- EPSY 6302 Individual Development (4)
- EPSY 6400 Family Psychotherapy (4)
- EPSY 6403 Psychotherapy for Children (4)
- EPSY 6500 Cognitive Behavior Therapy (4)
- EPSY 6610 Graduate Seminar I (2)
- EPSY 6620 Graduate Seminar II (2)
- EPSY 6630 Graduate Seminar III (2)
- EPSY 6669 Seminar in Mental Health Consultation (3)
- EPSY 6720 Theory and Assessment of Cognition (4)
- EPSY 6746 Neuropsychology of Learning Disabilities (4)
- EPSY 6752 Cross-Cultural Counseling (4)
- EPSY 6762 Group Procedures and Facilitation (4)
- EPSY 6765 Psychological and Counseling Services in Schools and Higher Education (2)
- EPSY 6785 Law and Ethics of Counseling (3)
- EPSY 6810 Advanced Graduate Seminar I (2)
- EPSY 6820 Advanced Graduate Seminar II (2)
- EPSY 6830 Advanced Graduate Seminar III (2)
- EPSY 6911 Developmental Assessment Practicum (4)
- EPSY 6912 Personality Assessment (4)
- 3 units of graduate level coursework covering the topic of Program Evaluation, with consent of department

III. Required Fieldwork (18 units)
- EPSY 6670 Fieldwork Group Supervision I (3)
- EPSY 6671 Fieldwork Group Supervision II (3)
- EPSY 6672 Fieldwork Group Supervision III (3)
- EPSY 6870 Advanced Fieldwork Group Supervision I (3)
- EPSY 6871 Advanced Fieldwork Group Supervision II (3)
- EPSY 6872 Advanced Fieldwork Group Supervision III (3)

School Psychology Specialization (144 units)

This program includes the 95 units required for the School Psychology Internship specialization described in the previous section (77 units of required courses; 18 units of required fieldwork). In addition students must complete the following:

Required Fieldwork (45 units)
- EPSY 6880 Advanced Internship (taken three times, 15 units each)

Required Capstone Experience (4 units)
Complete both A and B
- A. EPSY 6205 Advanced Pupil Personnel Specialist (4)
- B. Passing score on Praxis II exam, National Examination for School Psychology Certification

Special Education Programs of Study

Faculty: Jacki L. Anderson (Coordinator, Moderate-Severe Disabilities), Ann T. Halvorsen, Linda Smetana (Coordinator, Mild-Moderate Disabilities)
The Special Education program prepares its students for careers in direct teaching and for leadership roles in Special Education. Programs are offered which lead to the Master of Science degree and/or to the Education Specialist: Mild-Moderate and Moderate-Severe Credentials. The Preliminary Level I Credential is obtained in conjunction with the Multiple Subject Credential through the Department of Teacher Education. Applicants who have a general education credential or those who are applying for a Professional Level II Credential are admitted through the Department of Educational Psychology.

The emphasis is on providing students with a wide range of practical methods for enhancing the lives of individuals with exceptional needs. To this end, coursework is taught by successful practitioners in the field. Also, the programs provide extensive supervised fieldwork in settings that are appropriate to each student's professional goals.

M.S. in Special Education

The M.S. in Special Education may be obtained (a) in conjunction with Level I and II credentials, or (b) through a combination of Level I, II, and research coursework listed below. Candidates who want to pursue only the master's degree without Specialist teaching credentials will follow the program outlines below. These candidates may obtain an M.S. degree in either Mild-Moderate or Moderate-Severe Disabilities. The master's degree requirements include both preliminary Level I coursework and fieldwork, as well as Level II advanced study.

Applicants will apply for admission to the Department of Educational Psychology: Special Education Option, and will follow the departmental as well as the university application procedures.

The number of units required for the degree is 45-47 units (32-34 units in residence).

I. Prerequisite Course (4 units)
   EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)

II. Options
    Choose one option.
    A. Mild-Moderate Option (33-34 units in Mild-Moderate core)
       1. Level I (20-21 units)
          - EPSY 6120 Communication: Collaborative Teaming and Management (4)
          - EPSY 6127 Instructional and Behavioral Support: Mild-Moderate Disabilities (4)
          - EPSY 6128 Instructional and Behavioral Support Fieldwork (4) or EPSY 6870 Advanced Fieldwork Group Supervision (3)
          - EPSY 6131 Assessments: Students with Mild to Moderate Disabilities (5)
          - EPSY 6133 Curriculum: Students with Mild to Moderate Disabilities (4)
       2. Level II (13 units)
          - EPSY 6129 Advanced Study in Collaborative Service Delivery, Education and Transition (4)
          - EPSY 6134 Advanced Instructional and Behavioral Supports: Mild-Moderate (5)
          - EPSY 6206 Advanced Studies in the Education of Students with Mild to Moderate Disabilities: Emerging Research and Practice (2)
          - EPSY 6830 Advanced Graduate Seminar III (2)
    
    B. Moderate-Severe Option (33-34 units in Moderate-Severe core)
       1. Level I (20-21 units)
          - EPSY 6120 Communication: Collaborative Teaming and Management (4)
          - EPSY 6137 Instructional and Behavioral Support: Moderate-Severe Disabilities (4)
          - EPSY 6140 Curriculum: Students with Moderate-Severe Disabilities (4)
          - EPSY 6142 Assessment: Students with Moderate-Severe Disabilities (5)
          - EPSY 6860 Advanced Fieldwork (2-4) or EPSY 6870 Advanced Fieldwork Group Supervision (3)
       2. Level II (13 units)
          - EPSY 6129 Advanced Study in Collaborative Service Delivery, Education and Transition (4)
          - EPSY 6141 Advanced Instructional and Behavioral Supports: Moderate-Severe (5)
          - EPSY 6207 Advanced Studies in the Education of Students with Moderate to Severe Disabilities: Emerging Research and Practice (2)
          - EPSY 6830 Advanced Graduate Seminar III (2)

Mild-Moderate and Moderate-Severe Options Elective (3 units)

Choose one of the following:
- EPSY 6124 Advanced Study in Augmentative Communication and Assistive Technology (3)
- EPSY 6130 Advanced Studies in Service Learning and Positive School Climate (3)
- EPSY 6143 Advanced Studies in Individual and School-wide Positive Behavior Supports (3)
- EPSY 6145 Advanced Studies in Adolescent Learning and Secondary Curriculum (3)

III. Additional Master's Degree Requirements (9-10 units)

- EPSY 6023 Research in Applied Behavioral Sciences (4)

   Select five or six units from the following:
   - EPSY 6021 Thesis-Project Seminar (3) or
   - EPSY 6899 Project (2-5) or
   - EPSY 6909 Departmental Thesis (2-5) or
   - EPSY 6910 University Thesis (1-9)
Credentials in Special Education

Education Specialist Credential: Mild-Moderate and Moderate-Severe Disabilities (Level I) (46 units)

Required Courses

- EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)
- EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4)
- EPSY 5126 Special Education Law and Program Design (4)
- EPSY 6120 Communication: Collaborative Teaming and Management (4)
- EPSY 6127 Instruction and Behavioral Support: Mild-Moderate Disabilities (4)
- EPSY 6128 Instructional and Behavioral Support Fieldwork (4), SPED students only
- EPSY 6131 Assessments: Students with Mild to Moderate Disabilities (5)
- EPSY 6133 Curriculum: Students with Mild-Moderate Disabilities (4)
- EPSY 6170 Internship (2, 2, 2)
- EPSY 6783 Seminar: Contemporary Issues (3)
- EPSY 6783 Seminar: Contemporary Issues (3)
- EPSY 6783 Seminar: Contemporary Issues (3)
- EPSY 6810 Advanced Graduate Seminar I (2)
- EPSY 6870 Advanced Fieldwork Group Supervision I (3)
- EPSY 6880 Advanced Internship (4, 2)

Concurrent Education Specialist: Mild-Moderate and Moderate-Severe (Level I) and Multiple Subject Credential Program (72 units; 80 units for TED students only)

If you are in the Concurrent Education Specialist and Multiple Subject Credential program (TED/SPED), complete the courses listed for TED/SPED in the Teacher Education chapter of this catalog in addition to the 42 units listed above for the Level I Mild-Moderate or Moderate-Severe Disabilities Education Specialist Credential.

Special Education Teacher Internship Program for Education Specialist Credentials

- Mild-Moderate Disabilities, Level I (49 units plus TED units listed for TED/SPED in the Teacher Education chapter of this catalog)
- Moderate-Severe Disabilities, Level I (49 units plus TED units listed for TED/SPED in the Teacher Education chapter of this catalog)

The internship program will allow you to earn your Education Specialist credential while continuing to teach part-time. You will complete all coursework that students would complete who are pursuing currently approved Education Specialist Level I credential programs. You will, however, be able to work up to 80% time in one of the area districts with which CSUEB has an approved Specialist Intern Program. In addition you will be placed as a student teacher under the supervision of a master teacher for required fieldwork across ages and with general and special education students.

Mild-Moderate Disabilities: Required Coursework (49 units)

- EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)
- EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4)
- EPSY 5126 Special Education Law and Program Design (4)
- EPSY 6120 Communication: Collaborative Teaming and Management (4)
- EPSY 6127 Instruction and Behavioral Support: Mild-Moderate Disabilities (4)
- EPSY 6133 Curriculum: Students with Mild-Moderate Disabilities (4)
- EPSY 6770 Internship (2, 2, 2)
- EPSY 6783 Seminar: Contemporary Issues (3)
- EPSY 6783 Seminar: Contemporary Issues (3)
- EPSY 6870 Advanced Fieldwork Group Supervision I (3)
- EPSY 6880 Advanced Internship (4, 2)

Moderate-Severe Disabilities: Required Coursework (49 units)

- EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)
- EPSY 5126 Special Education Law and Program Design (4)
- EPSY 5136 Educational Practices: Moderate-Severe Disabilities (4)
- EPSY 6120 Communication: Collaborative Teaming and Management (4)
- EPSY 6137 Instructional and Behavioral Support: Moderate-Severe Disabilities (4)
- EPSY 6140 Curriculum: Students with Moderate-Severe Disabilities (4)
- EPSY 6142 Assessment: Students with Moderate-Severe Disabilities (5)
- EPSY 6783 Seminar: Contemporary Issues (3)
- EPSY 6770 Internship (2, 2, 2)
- EPSY 6870 Advanced Fieldwork Group Supervision I (3)
- EPSY 6880 Advanced Internship (4, 2)

In addition to Specialist courses you will complete the TED portion of TED/SPED as well, unless you hold a valid California general education credential.

Professional Education Specialist Credential: Mild-Moderate and Moderate-Severe Disabilities (Level II) (26 units)

Prerequisite

- CSUEB Level I Credential Program or equivalent from Level I approved credential programs.

Required Coursework

- EPSY 6129 Advanced Study in Collaborative Service Delivery, Education and Transition (4)
- EPSY 6134 Advanced Instructional and Behavioral Supports: Mild-Moderate (5)
or EPSY 6141 Advanced Instructional and Behavioral Supports: Moderate-Severe (5)

- EPSY 6206 Advanced Studies in the Education of Students with Mild to Moderate Disabilities: Emerging Research and Practice (2)
- EPSY 6207 Advanced Studies in the Education of Students with Moderate to Severe Disabilities: Emerging Research and Practice (2)
- EPSY 6630 Graduate Seminar III (2)
- EPSY 6810 Advanced Graduate Seminar I (M/S) (2)
- EPSY 6820 Advanced Graduate Seminar II (M/W) (2)
- EPSY 6830 Advanced Graduate Seminar III (2)
- EPSY 6871 Advanced Fieldwork Group Supervision II (M/M) (3)
- EPSY 6872 Advanced Fieldwork Group Supervision III (M/S) (3)

Electives
Select 6 units (two courses) from the following:

- EPSY 6124 Advanced Studies in Augmentative Communication and Assistive Technology (3)
- EPSY 6130 Advanced Studies in Service Learning and Positive School Climate (3)
- EPSY 6143 Advanced Studies in Individual and School-wide Positive Behavior Supports (3)
- EPSY 6145 Advanced Studies in Adolescent Learning and Secondary Curriculum (3)

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<td>6765</td>
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<td>6783</td>
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<td>6810, 6820, 6830</td>
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<td>Advanced Fieldwork I, II (2-4 each)</td>
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<td>6870, 6871, 6872</td>
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<td>6880</td>
<td>Advanced Internship (2-15)</td>
</tr>
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<td>6898</td>
<td>Cooperative Education (1-4)</td>
</tr>
</tbody>
</table>
Supervised work experience in which students complete academic assignments integrated with off-campus paid or volunteer activities. May be repeated once for credit for a maximum of 8 units. CR/NC grading only.

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>6899</td>
<td>Project (2-5)</td>
<td>Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required. Prerequisite: graduate standing. Maximum of 5 units per student.</td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
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<tr>
<td>6909</td>
<td>Departmental Thesis (2-5)</td>
<td>Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally is required. Prerequisite: graduate standing. Maximum of 5 units per student.</td>
</tr>
<tr>
<td>6910</td>
<td>University Thesis (1-9)</td>
<td>Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense is normally required. (See also, &quot;University Thesis Writing Guide,&quot; <a href="http://www.csueastbay.edu/thesiswritingguide.">www.csueastbay.edu/thesiswritingguide</a> Prerequisite: graduate standing. Maximum of 9 units for credit per student.</td>
</tr>
<tr>
<td>6911</td>
<td>Developmental Assessment Practicum (4)</td>
<td>Clinical practice under supervision with individually administered tests. Prerequisite: EPSY 6720. Miscellaneous course fee. See the quarterly Class Schedule for current fee. Twelve hrs. lab.</td>
</tr>
<tr>
<td>6912</td>
<td>Personality Assessment (4)</td>
<td>Study of instruments and procedures commonly employed in clinical study of emotional and social adjustments. Prerequisite: EPSY 6720. Miscellaneous course fee. See quarterly Class Schedule for current fee.</td>
</tr>
<tr>
<td>6999</td>
<td>Issues in Educational Psychology (2)</td>
<td>Readings, discussion, research, and applications on contemporary and/or significant issue in Educational Psychology. May be repeated 5 times for credit when content varies, for a maximum of 12 units.</td>
</tr>
</tbody>
</table>

**Footnotes**

1. Students completing a Project or a Departmental Thesis and registering for 6899 or 6909, even if combined with EPSY 6021, are limited to a total of 5 units. EPSY 6021 can be repeated for a total of 6 units; however, only five of these six units may be applied to the M.S. degree for students doing a Project or Departmental Thesis.
2. Students completing a University Thesis may enroll in EPSY 6021 for up to 9 units.
3. California Commission of Teacher Credentialing (CCTC) approval of revised program documents for new Standards and Competencies pending.
Engineering Management

Department Information

Department of Engineering
College of Science
Office: VBT 346
Phone: (510) 885-2654
Website: www.sci.csueastbay.edu/engineering/

Professors
Saeid Motavalli (Chair), Ph.D. University of Pittsburgh
Mohammad H. Qayoumi, Ph.D. University of Cincinnati
Zinovy Radovilsky (joint appointment in Engineering and Management), Ph.D. Scientific Research Institute of Labor, Moscow
Eric A. Suess (joint appointment in Engineering and Statistics), Ph.D. University of California, Davis
Helen Zong, Ph.D. University of Houston

Associate Professors
David Bowen, Ph.D. University of California, Berkeley
Farnaz Ganjeizadeh, Ph.D. University of Alabama at Huntsville

Assistant Professors
Roger Doering (joint appointment in Engineering and Mathematics/Computer Science), Ph.D. University of California, Berkeley
Farzad Shahbodaghfou, Ph.D. Purdue University

M.S. in Engineering Management

Program Description

The Department of Engineering, in cooperation with the College of Business and Economics, offers an interdisciplinary Master of Science degree in Engineering Management. This degree is designed for working engineers and professionals who are in leadership/management positions or who are planning to advance their careers into the management of technical enterprises. It is also designed to benefit engineering or science graduates who are interested in assuming leadership positions in industry.

The objectives of the M.S. in Engineering Management are:
1. to prepare future managers of technical enterprises;
2. to enable current and future engineers/scientists to assume leadership positions as they advance in their careers; and
3. to meet the demand for effective engineering managers who are able to lead technically complex industries.

This degree is different from other Engineering Management degrees in that it includes a well-balanced curriculum consisting of quantitative courses in industrial engineering and qualitative management courses. The curriculum gives students an understanding of both the engineering and management perspectives. This is valuable for individuals managing engineering/high tech firms.

Students take required courses in design and management of human work systems, systems simulation, applied quality assurance, product process design, project management, and research methods in engineering management. Also included in the core are courses in financial management and enterprise planning and control. Students also have a broad choice of electives, allowing them to select from many areas of specialization.

Career Opportunities

There is a great need for individuals who possess both technical background and management skills to run the large variety of technical enterprises. Traditionally, engineers move into management positions in technical enterprises without having a formal academic background in management. The Engineering Management graduate, however, is better equipped to recognize the effects of new technology on management issues and to understand the products and services produced by these technical firms. This understanding gives Engineering Management graduates an edge over M.B.A.s and traditional managers, and enables them to become effective leaders in the engineering industry.

Features

The M.S. in Engineering Management is designed to accommodate working adults with courses generally meeting in the evening. The interdisciplinary design of the program allows students to take courses from faculty in engineering, business, computer science and/or statistics. The elective courses in the curriculum give students the opportunity to concentrate study in their areas of interest.

Admission

The M.S. Degree in Engineering Management is open to students planning a career, or seeking to advance their career in managing technical enterprises who: (1) have a baccalaureate degree in engineering, basic science or related fields from an accredited institution, and (2) have earned an overall grade point average of 2.5 (4.0 basis) or better in their undergraduate work. Degrees from foreign institutions will be individually evaluated.

In addition to the University Graduate and Postbaccalaureate Application, all applicants should: (1) submit a personal statement with the application stating their reasons for wanting to pursue the M.S. in Engineering Management degree, describing relevant work experience, and explaining their past academic performance; (2) submit two letters of recommendation; and (3) submit a resume.
Admission to the university and admission to the M.S. in Engineering Management degree program are separate steps.

Student Standing and Progress Toward the Degree

There are three categories of student status which reflect student progress toward the degree: "Conditionally Classified Graduate," "Classified Graduate," and "Advancement to Candidacy.

1. Students achieve "Conditionally Classified Graduate" status when they have been admitted to the M.S. in Engineering Management degree program, but have not yet completed the prerequisites for "Classified Graduate" status in the M.S. in Engineering Management degree program.

2. Students achieve "Classified Graduate" status when they have satisfactorily completed the three prerequisites for the M.S. in Engineering Management degree program or their equivalents, and satisfied the University Writing Skills Requirement. (See "Prerequisites for Classified Graduate Status" below.)

3. Students are Advanced to Candidacy when they have completed the required courses with a 3.0 or better GPA.

Note: Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two or more consecutive quarters will be academically disqualified from the university.

Prerequisites for "Classified Graduate" Status

As prerequisites for "Classified Graduate" status, students must satisfy the University Writing Skills Requirement and satisfactorily complete the following three courses. Each course must be completed with a grade of "B" or better.

- ACCT 2253 Accounting for Management Decision-Making
- ENGR/ECON 3140 Engineering Economy
- STAT/ENGR 3601 Statistics and Probability for Science and Engineering I
  OR STAT/ENGR 5601 Introductory Statistics and Probability for Science and Engineering.

Students can request to have one or more of these prerequisites waived based upon coursework taken at other schools. These prerequisite courses should be taken before attempting the core graduate courses. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

The M.S. degree program in Engineering Management requires completion of 48 quarter units distributed among required courses, elective courses, and the Project course (or comprehensive examination and an additional four-unit elective course). Of these units, at least 35 units must be completed in residence (transfer units are limited to 13 quarter units); at least 24 units must be in courses in the 6000 series. No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 48-unit graduate degree program.

No more than 4 units of Independent Study (ENGR 6900) may be counted toward the 48 units required for the degree. Project credit may not exceed 4 units.

A grade point average of 3.0 must be maintained in all 48-quarter units taken to satisfy the degree requirements. All graduate degree requirements must be completed within five (5) years.

Curricular Requirements (48 units)

1. Required Courses (32 units)
   - ENGR 5180 Product/Process Design (4)
   - ENGR 5200 Systems Simulation (4)
   - ENGR 5280 Design and Management of Human Work Systems (4)
   - ENGR 6200 Project Management (4)
   - ENGR 6300 Applied Quality Assurance (4)
   - ENGR 6400 Research Methods in Engineering Management (4)
   - FIN 6215 Corporate Financial Management (4)
   - MGMT 6130 Enterprise Planning and Control (4)

2. Elective Courses (12 units)
   Twelve (12) quarter units of graduate courses in Engineering, Business and Economics, Computer Science, Statistics, or related areas with advisor approval.
   The following is a sample list of electives:
   - ENGR 6150 Production Planning and Control
   - ENGR 6350 Reliability Engineering
   - ENGR 6420 Systems Modeling
   - ENGR 6430 Facilities Planning and Design
   - ENGR 6440 Computer Integrated Manufacturing Systems
   - ENGR 6899 Issues in Engineering
   - ENGR 6900 Independent Study
   - ITM 6070 Graduate Introduction to Information Technology Management
   - MGMT 6150 Global Supply Chain Management
   - MGMT 6470 Management of Technology and Innovation
   - MGMT 8560 High Performance Management

3. Capstone Experience (4 units)
   ENGR 6899 Project; or pass the comprehensive examination and complete an additional 4-unit elective course.

Incompletes

Students accumulating more than 8 units of work graded "I" may not register for courses applicable to the degree until the "I" grades are removed.

Capstone Experience

To complete a research project, students enroll in ENGR 6899 Project (4 units). The Project is a capstone cumulative experience based on the coursework completed for the degree and is accompanied by a written document. A faculty member from the department supervises the
student's work. One bound copy of the written component of the Project is required for the department.

Grades of "RP" (Report in Progress) may be given for a Project that is not completed at the end of the quarter. The "RP" grade must be removed within one year or it will become an "F."

Instead of enrolling in ENGR 6899 Project, students can elect to take a comprehensive examination and complete an additional four-unit elective course. The comprehensive exam can be taken upon completion of the required courses.

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Master of Science degree in Engineering Management. Students must file for graduation by the end of the second week of the quarter prior to the quarter in which they expect to graduate.

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Certificates

The Department of Engineering offers accelerated post-baccalaureate certificate programs in Engineering Management and Quality Management. The Engineering Management Certificate is designed for engineering practitioners who wish to expand their careers to management and want to acquire a basic understanding of the theory and fundamentals of management. The Quality Management Certificate is designed for engineers and scientists working in production facilities who are engaged in quality improvement projects and who wish to acquire a basic understanding of the fundamentals of quality management and the application of quality improvement techniques. In addition, these certificate programs offer advanced students currently enrolled in the B.S. in Engineering program an opportunity to broaden their employment options.

Prerequisite for enrollment in the Engineering Management Certificate or Quality Management Certificate programs: calculus background equivalent to MATH 1304 and 1305, or a B.S. in Engineering or one of the other sciences.

Engineering Management (16 units)

Required Courses

- ENGR 4180 or 5180 Product/Process Design (4)
- ENGR 6200 Project Management (4)
- ENGR 6300 Applied Quality Assurance (4)
- MGMT 6115 E-Commerce Enterprise Management (4)

Quality Management (16 units)

Required Courses

- ENGR 5300 Quality Engineering (4)
- ENGR 6300 Applied Quality Assurance (4) (or completion of STAT 3503 and 6509)
- ENGR 6350 Reliability Engineering (4)
- STAT 5601 Introductory Statistics and Probability for Science and Engineering (4) (or completion of STAT 3401 and 3502)

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Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

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Post-baccalaureate Courses

(Course prefix: ENGR)

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<td>5180</td>
<td>Product/Process Design (4)</td>
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<td>Investigation of the product and process design cycle as a source of competitive advantage. Topics include functional maps, aggregate planning, cross-functional integration, design for manufacturability, and the design-build-test cycle. Case studies and site visits used extensively to reinforce concepts presented in lectures and reading assignments. Prerequisites: ENGR 2070, 3140 or departmental approval.</td>
</tr>
<tr>
<td>5200</td>
<td>Systems Simulation (4)</td>
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<td></td>
<td>Design and analysis of manufacturing and service systems by simulation. Function of random variables. Random number and function generators, programming and characteristics of simulation languages. Prerequisites: CS 1160, ENGR 3841, STAT/ENGR 3601 or departmental approval. Three hrs. lect.; 3 hrs. lab.</td>
</tr>
<tr>
<td>5280</td>
<td>Design and Management of Human Work Systems (4)</td>
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<td>Qualitative principles and techniques used to maximize labor productivity, employee satisfaction, and organizational performance in work settings. Topics include worker motivation and incentive systems, leadership, worker autonomy, work groups and participatory organizational structures including quality control circles, total productive maintenance teams, and socio-technical systems. Prerequisites: ENGR 3020, ENGR/PSYC 3190 or departmental approval.</td>
</tr>
<tr>
<td>5300</td>
<td>Quality Engineering (4)</td>
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<td></td>
<td>Quality control, reliability, maintainability, and integrated logistic support. Statistical theory of process control and sampling inspection. Risks associated with decisions based on operating characteristics of control charts and sampling plans. Reliability and life testing methods. Economics of statistical QC. Prerequisites: STAT/ENGR 3601 or 5601, or departmental approval. Cross-listed with STAT 5300.</td>
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## Graduate Courses

### Course Information

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<th>Course Name</th>
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<th>Prerequisites/Notes</th>
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<tr>
<td>6150</td>
<td>Production Planning and Control (4)</td>
<td>Implementation of manufacturing resource planning including demand forecasting, production planning, master scheduling, bill-of-material, and inventory master file. Capacity requirements planning and shop floor control. Project management. Prerequisite: ENGR 2070, 3841; STAT/ENGR 3601 or departmental approval. Not open to students with credit for ENGR 4100. A-F grading only. Three hrs. lect., 3 hrs. lab.</td>
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<tr>
<td>6200</td>
<td>Project Management (4)</td>
<td>Application of project management from both strategic and operational points of view. Quantitative methods such as project planning, budgeting, evaluation, selection, scheduling and control are demonstrated by using MS project via PERT/CPM. Early identification of potential problems, with implementation of alternative solutions and risk management. Prerequisites: STAT 1000 or STAT/ENGR 3601 or 5601, or departmental approval. A-F grading only.</td>
<td></td>
</tr>
<tr>
<td>6300</td>
<td>Applied Quality Assurance (4)</td>
<td>Application of quality engineering and management techniques during the design and improvement of processes and procedures. Topics include the application of statistical and optimization techniques used for process improvements. Design of Experiments (DOE), multivariate regression, and quality improvement techniques such as Six Sigma will be presented. Prerequisites: STAT/ENGR 3601 or 5601, or departmental approval. Cross-listed with STAT 6300.</td>
<td></td>
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<tr>
<td>6350</td>
<td>Reliability Engineering (4)</td>
<td>Reliability concepts and mathematical models, mechanical device reliability, electrical device reliability, systems reliability and maintainability, reliability data, assurance program elements. Prerequisite: ENGR 3841 or departmental approval. Not open to students with credit for ENGR 4350. A-F grading only.</td>
<td></td>
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<tr>
<td>6400</td>
<td>Research Methods in Engineering Management (4)</td>
<td>Application-oriented course with emphasis on quantitative techniques in engineering management. Topics include: decision-making under uncertainty, risk analysis, network analysis such as PERT and CPM, multi-criteria decision-making and cost optimization.</td>
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<tr>
<td>6420</td>
<td>Systems Modeling (4)</td>
<td>Integration, problem identification, and the application of problem resolution techniques in manufacturing and service domains. System approach to problem identification, description, modeling, and resolutions derived by traditional optimization techniques as well as artificial intelligence methods. Supply chain modeling methods, logistics support analysis, procurement, and outsourcing strategies. Prerequisite: ENGR 4100 or departmental approval. A-F grading only.</td>
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<tr>
<td>6430</td>
<td>Facilities Planning and Design (4)</td>
<td>Design concepts and input requirements in planning and design of new, or renovation of, existing manufacturing systems. Product, process, and flow and activity analysis techniques. Flow lines and buffering techniques. Computer-aided layout design and evaluation. Design of handling systems. Math models of location problems. Prerequisites: ENGR 3020 and 3841 or departmental approval. Not open to students with credit for ENGR 4430. A-F grading only. Three hrs. lect., 3 hrs. lab.</td>
<td></td>
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<tr>
<td>6899</td>
<td>Project (1-4)</td>
<td>Completion of a research or applied project, accompanied by a written report. The report is submitted to the department, which specifies its format. A departmental faculty member supervises the project. Oral defense may be required. Prerequisites: Advancement to Candidacy and consent of project advisor.</td>
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<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
<td>Course is based on selected research topics agreed upon by the student and the faculty supervising the course. A plan of work completion must be submitted and approved prior to proceeding with the project. The student will provide progress reports and a final report prior to final presentation to the committee.</td>
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</tr>
<tr>
<td>6999</td>
<td>Issues in Engineering (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in engineering. May be repeated for credit when content varies, for a maximum of 8 units. A-F grading only.</td>
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5601 Introductory Statistics and Probability for Science and Engineering (4)
(See STAT 5601 for course description.)
M.A. in English (Literature, Composition, Creative Writing)

Program Description

The university offers the Master of Arts degree in English. Although there is no separate degree offered in Creative Writing, it is possible to satisfy the thesis option for the M.A. in English by work in fiction, poetry, or drama. The student seeking a degree must observe the general university requirements stated elsewhere in this catalog as well as the specific departmental requirements stated here. (Note: The M.A. TESOL Program is described below.)

Student Learning Outcomes

Students graduating with an M.A. in English from Cal State East Bay will:

1. be able to analyze and interpret various kinds of texts in clear and cogent prose;
2. be able to discuss several theoretical perspectives about literature or about applied linguistics (e.g., pedagogy, second language learning);
3. demonstrate facility with conducting research in traditional/nontraditional ways, including library research, the Internet, and data collection and analysis;
4. demonstrate the ability to learn independently.

Students completing the M.A. degree in English will demonstrate in-depth knowledge of two areas including British/American literature, and literature or composition theory or creative writing; those in the TESOL option will demonstrate in-depth knowledge of adult ESL pedagogy and the linguistic underpinnings of this enterprise.

Admission

To apply for admission to the Master of Arts program in English, the student must fill out the proper forms obtained from and returned to the Admissions Office. (Contact the Graduate Coordinator for details on additional materials to be sent directly to the English Department.) The Admissions Office will then send the application to the English Department where it will be accepted or rejected. Also see admission requirements for the TESOL Option.

To be admitted to the M.A. program in English, the student must:

1. hold the B.A. degree from an accredited college or university, with a major in English, and
2. have an undergraduate GPA in English courses of at least 3.0. If the student cannot comply with these requirements, he or she may petition the department by letter for special consideration.

Upon admittance to the graduate program in English, the student should immediately arrange through the English Department Office to consult
a graduate adviser on selecting courses and satisfying the department's M.A. Foreign Language Requirement (see "Foreign Language Requirement" in the "Degree Requirements" section).

All students except those who are "Classified or Conditionally Classified Graduate" students in English must have the written permission of an English graduate adviser to enroll in a graduate course in English.

"Classified Graduate" Status and Advancement to Candidacy

The student is normally admitted to the program in English as a "Conditionally Classified Graduate" student. One condition to his or her being a "Classified Graduate" is that (s)he pass ENGL 6001 with a grade of "A" or "B". Another is that the student must satisfy the University Writing Skills Requirement. There may be other conditions to his or her "Classified Graduate" status if (s)he has been admitted to the program with deficiencies; the student should consult with a graduate adviser to determine whether this is the case. After all conditions have been met, the student will be granted "Classified Graduate" status as a graduate student in English. To Advance to Candidacy for the M.A. in English, the student must satisfy the department's M.A. Foreign Language Requirement and complete 20 quarter-units of graduate coursework (including ENGL 6001) acceptable for the M.A. Also see admission requirements for the TESOL Option. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

Students must complete, with a grade point average of 3.0 or better, 48 quarter-units of credit approved by a graduate adviser. At least 32 of these units must be in 6000-level courses (excluding 6900, 6909, and 6910) and must include English 6001 (4 units); an additional FOUR 6000-level literature courses (one in American literature, one in British literature, two in literature before 1900) (16 units); and an additional THREE 6000-level courses in literature, creative writing, composition studies, or linguistics (12 units). The remaining 16 units may include English 6910, University Thesis (a maximum of 4 thesis units may be counted for the degree), English 6900 or 4900, Independent Study (a maximum of 4 independent study units may be counted for the degree), and 4000-level and/or 6000-level courses. (English 6909, Department Thesis, may NOT be used for the regular M.A. degree in English. It is the thesis specifically required in the M.A. TESOL degree option.)

The university thesis, English 6910, is optional. Students may petition to take 1-4 units to write a thesis or equivalent work in fiction, poetry, drama, or non-fiction prose. (Note: Students who wish to submit a thesis for the degree must register for at least one unit of English 6910.)

Students who elect to submit a thesis must comply with the thesis instructions of the Department of English as well as those in the University Thesis Writing Guide available online at: www.csueastbay.edu/theseswritingguide. Thesis proposals must be approved by two regular members of the English faculty, one as 'director' and one as 'second reader', before a thesis can be undertaken. Faculty members are not obliged to accept thesis proposals or to direct thesis.

For those who elect to submit an approved thesis, ONE exit examination in a historical period of British and/or American literature or in composition studies is required. For those who do not elect to submit an approved thesis, TWO exit examinations in the areas named above are required. Students should consult a graduate adviser for details.

Foreign Language Requirement

Students must demonstrate a reading knowledge of a foreign language. Students should consult a graduate adviser for details. (American Sign Language may be used for the foreign language requirement, in which case, a year of college-level coursework is required.)

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Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement (UWSR). For information on meeting the University Writing Skills Requirement, see the Testing Office website at http://www.csueastbay.edu/testing or call 510.885.3661.

Applying for Graduation

A student must apply formally to graduate with a master's degree, by submitting a "Candidate for Degree" card during the Add period for the quarter before the one in which (s)he expects to graduate. Also during the quarter before the one in which the student expects to graduate, (s)he must ask the department's Graduate Coordinator to send a "Major Check" sheet to the Graduate Evaluations Office.

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M.A. in English: TESOL Option

Admission

To be admitted to the M.A. in English with a Teaching English as a Second Language (TESOL) Option, students must hold a relevant baccalaureate degree (English, Linguistics, Speech Communication are obvious examples), with a 3.0 overall GPA, and have completed the following prerequisite courses (40 units) or their equivalents

- ENGL 3005 Study of Language (4)
- ENGL 3010 Modern English Grammar (4)
- ENGL 3015 Introduction to Phonology (4)
- or SPPA 3855 Phonetics (4)
- ENGL 3020 Advanced Expository Writing (4)
- ENGL 3040 Linguistic History of the English Language (4)
- ENGL 4040 Language in the U.S.A. (4)
- COMM 4830 Intercultural Communication (4)
- ANTH 3800 Language and Culture (4) or HDEV 4520 Language Acquisition and the Symbolic Function (4)
- Two courses in modern British or American literature (8)

Required Courses (45 units)

- ENGL 6501 and 6502 Theory and Practice of Teaching ESL I and II (8)
- ENGL 6503 Second-Language Acquisition (4)
- ENGL 6504 Morphology and Lexical Semantics (4)
- ENGL 6506 Sociolinguistics (4)
- ENGL 6507 Testing and Evaluation for Teaching ESL (4)
- ENGL 6508 Supervised Tutoring/Teaching (8)
Applying for Graduation

Students must formally graduate with a master's degree by submitting a "Candidate for Degree" card during the Add/Drop period for the quarter before the one in which they expect to graduate. They must ask the English Department's Graduate Coordinator to send a "Major Check" sheet to the Graduate Evaluations Office.

Classified Graduate Status and Advancement to Candidacy

Students are normally admitted to the master's program in English as "Conditionally Classified Graduate" students. Once the students have completed any outstanding prerequisite courses and have passed the Writing Skills Test, they may apply for "Classified Graduate" status. In order to advance to candidacy, students must have completed 24 units of graduate-level coursework with grades of "B" and higher.

Graduate Courses

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<th>Course Number</th>
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<tr>
<td>6001</td>
<td>Introduction to Graduate Studies (4)</td>
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<tr>
<td>6060</td>
<td>The Literary Magazine (4)</td>
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<td>6070</td>
<td>Graduate Workshop in Fiction (4)</td>
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<td>Graduate Workshop in Poetry (4)</td>
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<td>6100</td>
<td>Seminar in Medieval Literature (4)</td>
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<td>6215</td>
<td>Seminar in Renaissance Literature (4)</td>
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<td>6350</td>
<td>Seminar in Restoration and 18th-Century British Literature (4)</td>
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<tr>
<td>6405</td>
<td>Seminar in 19th-Century British Literature (4)</td>
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<tr>
<td>6501</td>
<td>Theory and Practice of Teaching ESL I (4)</td>
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<tr>
<td>6502</td>
<td>Theory and Practice of Teaching ESL II (4)</td>
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<td>6503</td>
<td>Second-Language Acquisition (4)</td>
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<td>Morphology and Lexical Semantics (4)</td>
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<td>6506</td>
<td>Sociolinguistics (4)</td>
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<td>6507</td>
<td>Testing and Evaluation for Teaching ESL (4)</td>
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<tr>
<td>6508</td>
<td>Supervised Tutoring/Teaching (4)</td>
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<tr>
<td>6509</td>
<td>Computer Assisted Language Learning and Teaching (4)</td>
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</tbody>
</table>

ENGL 6509 Computer Assisted Language Learning and Teaching (4)

ENGL 6750 Theory and Practice of Composition (4)

ENGL 6909 Departmental Thesis (5)

"Classified Graduate" Status and Advancement to Candidacy

Students are normally admitted to the master's program in English as "Conditionally Classified Graduate" students. Once the students have completed any outstanding prerequisite courses and have passed the Writing Skills Test, they may apply for "Classified Graduate" status. In order to advance to candidacy, students must have completed 24 units of graduate-level coursework with grades of "B" and higher.

Applying for Graduation

Students must formally graduate with a master's degree by submitting a "Candidate for Degree" card during the Add/Drop period for the quarter before the one in which they expect to graduate. They must ask the English Department's Graduate Coordinator to send a "Major Check" sheet to the Graduate Evaluations Office.
6600 Seminar in American Literature to 1900 (4)  
Study of major works, authors, and literary topics before 1900. Prerequisite: graduate standing in English or consent of instructor. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

6608 Supervised Composition Teaching/Tutoring (4)  
Supervised practice in composition classes and tutorials. Prerequisite: ENGL 6750.

6650 Seminar in Women’s Literature (4)  
Literary works written in English by women authors throughout the ages. Prerequisite: graduate standing in English. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

6660 Seminar in 20th Century British Literature (4)  
Study of major British works, authors, and literary topics of the 20th century. Prerequisite: graduate standing in English or consent of instructor. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

6665 Seminar in 20th Century American Literature (4)  
Study of major American works, authors, and literary topics of the 20th century. Prerequisite: graduate standing in English or consent of instructor. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

6670 Studies in Literary Nonfiction (4)  
Historical, cultural, and/or pedagogical perspectives on various forms of literary nonfiction. Prerequisite: graduate standing. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

6675 Studies in Poetry and Poetics (4)  
Prosody and other formal issues; theory and practice of one poet or of a particular “school” or movement; relationships between poetry and cultural contexts. Prerequisite: graduate standing. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units.

6690 Seminar in African-American Literature (4)  
Major works, authors, and literary topics of the 19th and 20th centuries. Prerequisite: graduate standing in English or consent of instructor. May be repeated for credit with consent of instructor.

6695 Post-Colonial Literature (4)  
The politics and poetics of the literature of previously colonized peoples in the aftermath of European and American imperialism. Prerequisite: graduate standing. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units.

6750 Theory and Practice of Composition (4)  
Focus on current research in theory and methods of teaching composition. Prerequisite: consent of instructor.

6760 Theory and Practice of Writing Across the Curriculum (4)  
Pedagogies incorporating writing throughout the disciplines; writing problems encountered by native and non-native English speakers; strategies for responding to student writing; technologies helpful for student writers; methods for working with students individually and in groups. Prerequisite: consent of instructor.

6770 Theory and Practice of Teaching Literature (4)  
Theory and methods for teaching literary genres and periods appropriate for high school and community college literature courses. Prerequisite: graduate standing in English or consent of instructor.

6898 Cooperative Education (1-4)  
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 3.0 GPA, departmental approval of activity. A maximum of 4 units will be accepted toward the English major. May be repeated for credit, for a maximum of 8 units. CR/NC grading only.

6900 Independent Study (1-4)

6909 Departmental Thesis (1-5)  
Development and writing of a research paper for submission to the department, which specifies its format. The written project, focusing on TESOL research, includes a survey of current literature and a bibliographical essay on an important issue in the field. Supervised by a departmental committee, at least one member of which must be a Cal State East Bay faculty member. Oral defense is normally required. Prerequisite: graduate standing. Maximum 5 units per student.

6910 University Thesis (4)  
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one member of which must be a Cal State East Bay faculty member. Oral defense normally required. (See also, "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.) Prerequisites: Advancement to Candidacy and an approved thesis proposal. Maximum of 4 units per student.

6999 Issues in English Language and Literature (4)  
Readings, discussion, and research on contemporary and/or significant issues in English language and literature. May be repeated for credit when content varies, for a maximum of 8 units.
2011-2012 University Catalog

Graduate Chapters

Geography - Graduate

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Appendices

Geography

- Department Information
- M.A. in Geography
- Graduate Courses

Department Information

Department of Geography and Environmental Studies
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3193; FAX: (510) 885-2353
Website: http://class.csueastbay.edu/geography

Professors
Karina Garbesi, Ph.D. University of California, Berkeley
David Larson (Chair), Ph.D. University of California, Berkeley
Michael Lee, Ph.D. London School of Economics (England)
Gary Li, Ph.D. State University of New York at Buffalo
Scott Stine, Ph.D. University of California, Berkeley

Associate Professor
David Woo, Ph.D. University of California, Santa Barbara

Graduate Coordinator: David Woo

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M.A. in Geography

Program Description

Graduate study is offered leading to the degree of Master of Arts in Geography, with a choice of ten specialties: biogeography, cartography, environmental resource management, economic geography, regional planning, historical geography, geographic information systems (G.I.S.), physical geography, regional geography, and urban geography. The seminars focus on intensive, directed readings interspersed with discussions of the content, principles, methods, and techniques of the selected topic or theme. The intent is to develop a subject to its research frontiers emphasizing an awareness of problems and their significance for the discipline. Seminars are accompanied or followed by directed research yielding oral and written reports. Their purpose is to expand beyond the recognition of problems to the guided investigation of a topic or theme. The seminars are supplemented by independent study and ultimately by research culminating in a University Thesis or a Departmental Thesis or a Project that allows and motivates the student to advance further in a chosen specialty. The candidate is responsible for the fulfillment of the specific requirements of the department stated below.

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on the currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Student Learning Outcomes

Students graduating with an M.A. in Geography from Cal State East Bay will: (1) have developed advanced written and communication skills; (2) demonstrate the ability to independently and rapidly formulate and conduct thorough and insightful research using a range of literary tools; (3) have acquired advanced research skills; (4) exhibit substantial expertise concerning a particular geographic problem, process and/or region; (5) have prepared one or more mentored research project reports or research thesis.

Admission

"Conditionally Classified Graduate" Status

Admission to this university in some category of post-baccalaureate status is the prerequisite for entry into the graduate program. Graduate courses in Geography are open to students who have completed the prerequisites and/or obtained the consent of the instructor. Credit may be given for equivalent courses taken at other accredited institutions; undergraduate deficiencies may be corrected while the student is in "Conditionally Classified Graduate" status.

A student must complete the following requirements to be admitted to the program with "Conditionally Classified Graduate" status:

1. File the CSU "Graduate and Post-baccalaureate Application," which is available from CSUMentor. The student should also submit two copies each of transcripts from all universities or colleges attended. Students should contact department office to learn of additional support materials required for admission into the M.A. degree program in Geography.

2. Have a 2.5 or higher GPA in all undergraduate work; and have a 3.0 or higher GPA in all upper division and graduate work in Geography prior to request for entry into the program.

Note: If a student has earned less than a 2.5 grade point average in all undergraduate work, or if (s) he has less than a 3.0 grade point average in upper division and graduate courses in Geography, (s) he must continue coursework in "Unclassified Post-baccalaureate" status until (s) he has removed the deficiencies and demonstrated his/her ability to meet the requirements of the graduate program.

3. The Graduate Record Examination (GRE) Aptitude Test is not required, but students are strongly encouraged to take this test and submit their scores to the Geography Department prior to application for admission to the M.A. degree program in Geography.

"Classified Graduate" Status

A student must complete the following requirements to be admitted to the program with "Classified Graduate" status:

1. Complete the following undergraduate courses or their equivalents, or demonstrate a competency by examination in:
   - GEOG 3120 Climate Change (4)
   - or GEOL 3110 Principles of Geomorphology (4)
   - or GEOG 3115 Physical Landscape Analysis (4)
   - GEOG 3140 Air-Photo Interpretation (4)
Degree Requirements

All upper division Geography courses are acceptable for the M.A. degree program.

Upper Division Courses Acceptable for the Master's Degree

Note: Up to 10 units of undergraduate courses may be taken as electives applicable toward the 45 units for the M.A. degree.

1. GEOG 3600 Cartographic Principles and Graphic Communication (4)
2. GEOG 3480 Applied Field Studies (4)
3. GEOG 4000-level course on the growth of geographic thought, with consent of advisor (4)

2. File an intended program of study with the departmental Graduate Advisor;
3. Complete the upper division course prerequisites for the seminars in the intended program of study;
4. Complete at least 12 quarter units considered applicable by the department toward the M.A. degree requirements, including at least 3 quarter units of graduate-level (6000 series) work in residence at this university;
5. Be recommended for "Classified Graduate" status by the department; and
6. Fulfill the University Writing Skills Requirement.

Maintenance of "Classified Graduate" Status

To maintain "Classified Graduate" status a student must maintain a 3.0 or higher GPA on all work taken in the approved program of study, whether at Cal State East Bay or at any other college or university. Only courses with grades of "C" and higher are acceptable for courses applicable to degree requirements in Geography.

If a candidate's GPA drops below 3.0, the department will notify the Graduate Dean to place the student in "Conditionally Classified Graduate" status and the university will place the student on Academic Probation until (s)he has remedied his or her deficiencies and has been recommended by the department for return to "Classified Graduate" status. Failure by a student to return to "Classified Graduate" status in two additional quarters of study (or following completion of 15 additional quarter units) shall result in his or her being academically disqualified from the departmental program.

Advancement to Candidacy

Admission to "Classified Graduate" status does not imply that a student will be Advanced to Candidacy for the M.A. degree. A student with "Classified Graduate" status will be Advanced to Candidacy for the M.A. degree when (s)he has satisfied the following requirements:

1. Demonstrated proficiency in either a modern foreign language, or in statistical methods as they apply to geography, or in mathematics.
   a. Languages which are acceptable without special arrangements are Chinese, French, German, Japanese, Russian, Spanish, and Swedish. Any other modern foreign language may be substituted, provided the thesis advisor, the student, and the graduate advisor agree that the language is an integral part of the projected program of study for the M.A. degree.
   "Proficiency" in a foreign language means the completion (with a grade point average of 2.5 or better) of two years of college-level instruction in the language or demonstrating, by written examination, a reading competency at this level.
   b. Statistical methods may be used to satisfy this requirement provided the thesis advisor, the student, and the graduate advisor agree that such methods form an integral part of the projected program of study for the M.A. degree.
   "Proficiency" in statistical methods is defined as satisfactory completion of the equivalent of STAT 1000 Elements of Probability and Statistics and STAT 3010 Statistical Methods in the Social Sciences, plus one 4000-level statistics course (STAT 4601 recommended). The student will also be required to demonstrate by examination the ability to solve a geographic problem using the computer.
   c. Mathematics may be used to satisfy this requirement provided the thesis advisor, the student, and the graduate advisor agree.
   "Proficiency" in mathematics is defined as satisfactory completion of the equivalent of Trigonometry and Analytic Geometry (MATH 1300); Calculus I, II, III (MATH 1304, 1305, 2304); and either Linear Algebra (MATH 2101) or one other upper division mathematics course, except Math 4021, 4022, 4023.

2. Declared an intention to complete either a thesis or a project.
3. Been recommended for Advancement to Candidacy by the department.

Degree Requirements

To be eligible for the M.A. degree in Geography a student must:

1. have been Advanced to Candidacy;
2. have completed 45 quarter units of graduate work of which:
   a. all must have been earned within the five years just preceding the completion of the requirements for the degree;
   b. not fewer than 32 units must have been completed in residence;
   c. not fewer than 23 units must have been in geography courses in the 6000 series, including the thesis or project;
   d. not more than 6 units may have been for a University Thesis (GEOG 6910) nor more than 4 for a project (GEOG 6899); and
   e. not more than 13 units may have been for extension and/or transfer course credit, as approved by the department;
3. have completed a satisfactory program of study as approved by the department, to include:
   a. GEOG 6010 Seminar on Research Theory and Philosophy of Geography (4)
   b. four graduate seminars in geography (12)
   (Note: GEOG 6900 Independent Study may not be used to meet this requirement.)
   c. elective courses (graduate or upper division) in geography taken as a graduate student (12-15)
   d. elective courses (graduate or upper division) outside of geography in one or more closely related fields (8-13)
   (Note: A student with a baccalaureate degree in a closely related field may take these elective courses in geography.)
   e. a University Thesis or Departmental Thesis or Project (4-6)
4. have obtained a grade point average of 3.0 or higher in
   a. all post-baccalaureate units undertaken;
   b. all 45 units offered as satisfying the requirements of the M.A. degree program;
5. have been recommended for the M.A. degree in Geography by the department.
6. have satisfied the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Upper Division Courses Acceptable for the Master's Degree

All upper division Geography courses are acceptable for the M.A. degree program.
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<th>Course Number</th>
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| 6010          | Seminar on Research Theory and Philosophy of Geography (4)  
A search for common theory and philosophy in modern geography. Focus on proposal development with the intent of giving graduate students a framework for their thesis or project research development. Prerequisite: GEOG 4000-level course on the growth of geographic thought, with consent of instructor. |
| 6100          | Seminar in Physical Geography (3)  
Selected topics and directed research in physical geography based upon intensive readings, group discussion, and oral and written reports. Prerequisite: two upper division courses in physical geography (3100–4100 series), or equivalent, or consent of instructor. |
| 6300          | Seminar in Cultural Geography (3)  
Selected topics and directed research in cultural geography based upon intensive readings, group discussion, and oral and written reports. Prerequisite: two upper-division courses in cultural geography, or equivalent, or consent of instructor. |
| 6400          | Seminar in Historical Geography (3)  
Selected topics and directed research in historical geography based upon intensive readings, group discussion, and oral and written reports. Prerequisite: GEOG 3360 or two upper division courses in history or consent of instructor. |
| 6500          | Seminar in Regional Geography (3)  
Selected regions of the world based upon directed research, group discussion, and oral and written reports. Prerequisites: two regional courses in geography or consent of instructor. |
| 6600          | Seminar in Human Impacts on the Natural Environment (3)  
Selected topics in human/environment relationships and their effects upon landscape change and environmental problems. Prerequisites: one of ENVT 4100; GEOG 4320, 4330, 4350; or consent of instructor. |
| 6780          | Seminar in Environmental Planning (4)  
Emerging developments in environmental planning; interactions between citizens and project proponents, governmental agencies and non-governmental organizations; collaborations for producing and implementing sustainability policies. Bay Area urban and regional focus. Field observations. |
| 6820          | Seminar in Sustainable Cities (4)  
Urban sustainability goals, progress, and process, evident from local, regional, and global initiatives. Off-campus site visits to Bay Area projects and forums when appropriate. |
| 6899          | Project (2)  
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required. Prerequisite: graduate status. Maximum of 4 units per student. |
| 6900          | Independent Study (1-4) |
| 6909          | Departmental Thesis (1-5)  
Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. Prerequisite: graduate status. Maximum of 5 units per student. |
| 6910          | University Thesis (1-6)  
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, "University Thesis Writing Guide," [www.csueastbay.edu/thesiswritingguide](http://www.csueastbay.edu/thesiswritingguide).) Prerequisite: graduate status. Maximum of 6 units per student. |
| 6999          | Issues in Geography (4)  
Readings, discussion, and research on contemporary and/or significant issues in geography. May be repeated for credit when content varies, for a maximum of 8 units. |
Geology

- Department Information
- M.S. in Geology
- Graduate Courses

Department Information

Department of Earth and Environmental Sciences
College of Science
Office: North Science 329
Phone: (510) 885-3486
Email: geology@csueastbay.edu
Website: www.sci.csueastbay.edu/earth

Professor
Jeffery C. Seitz (Chair), Ph.D. Virginia Polytechnic Institute and State University

Associate Professors
Mitchell Craig, Ph.D. Georgia Institute of Technology
Luther M. Strayer, Ph.D. University of Minnesota

Assistant Professor
Jean Moran, Ph.D. University of Rochester

Graduate Coordinator: Mitchell Craig

M.S. in Geology

Faculty: Research Interests
- Mitchell S. Craig, Ph.D., 1990, Georgia Institute of Technology; applied geophysics, seismology, coastal observing, sediment transport
- Jean Moran, Ph.D., 1994, University of Rochester; geohydrology, aqueous geochemistry, isotope hydrology
- Jeffery C. Seitz, Ph.D., 1994, Virginia Polytechnic Institute and State University; geochemistry, petrology, astrobiology, science education
- Luther M. Strayer, Ph.D., 1998, University of Minnesota, Minneapolis; structural geology, tectonics, Bay Area earthquake geology, field geology

Program Description

The Department of Earth and Environmental Sciences offers graduate study leading to the Master of Science degree in Geology. This program is designed to prepare students for:

1. employment as geologists in government (city, county, regional, state, and federal) and private enterprise (engineering and geotechnical firms, mining and oil companies, etc.);
2. research at the doctoral level in various aspects of geology, geochemistry, geophysics, and oceanography, depending on their undergraduate background; and
3. the Community College Instructor Credential (the master's degree requirement). The department also provides continuing education for professional geologists, engineers, planners, etc.

To serve graduate students who are employed during the day, all graduate courses in the Department of Earth and Environmental Sciences are offered in the evenings and on weekends. In addition to regular catalog courses, recent graduate seminars and advanced topics courses have dealt with such subjects as computer applications in geology, rock mechanics, applied geophysics, isotope geochemistry, marine geology, sedimentary models, tectonics and sedimentation. Students registered at Cal State East Bay may enroll in courses through cross-registration at the University of California, Berkeley. Additional facilities and part-time employment may be secured through Co-op programs, the Lawrence Berkeley and Livermore National Laboratories, and the U.S. Geological Survey in Menlo Park.

Candidates for this degree must be prepared to engage in significant individual research. Lately, student research in this department has included such topics as contaminant hydrogeology, areal geology and slope stability, engineering geology, glacial geology, marine and geothermal geochemistry, volcanic petrology, neotectonics, and fluvial and marine sedimentology. It is very important that prospective candidates determine whether their research interests coincide with those of the faculty members before applying. Interested persons are invited to contact the department directly for more details on the program. Qualifications and advancement in the graduate program are decided by the department Graduate Coordinator with the concurrence of the department faculty.

Student Learning Outcomes

Students graduating with an M.S. in Geology will:
- be able to conduct independent geologic research, including preparation of a University Thesis or Project; the result should be of high enough quality to be presented at scientific meetings;
- be able to write reports, based on research carried out on behalf of an employer;
- be able to evaluate reports written by other earth scientists, and to use written materials and data sets available in the library or on the world-wide-web;
- be able to communicate complex geological concepts.

Environmental Geology Option

Students who complete a combination of appropriate courses in the Department of Earth and Environmental Sciences and other departments and who complete an environmentally related thesis, will be allowed to receive the M.S. degree with the Environmental Geology Option. A list of appropriate courses for the option must be developed in consultation with the department faculty.

Admission
With the qualifications listed under "Conditionally Classified Graduate" status below, the M.S. degree program is open to any student in possession of a baccalaureate degree in Geology with coursework equivalent at least to the core requirements for the B.S. degree in Geology at Cal State East Bay. Students who do not meet those requirements will be considered on an individual basis and accepted only after approval by a majority of regular faculty members.

Applicants must have a GPA of at least 2.5 in all undergraduate work and at least 2.75 in all geology courses. Any undergraduate geology course with a “D” grade will have to be repeated. Students transferring from another graduate program must have a GPA of at least 3.0 in all graduate geology courses. (No more than 13 units may be transferred.)

Applications must be accompanied by two letters of recommendation from faculty members or work supervisors.

Conditionally Classified Graduate Status

Students who are otherwise qualified but have course deficiencies and/or have not satisfied the University Writing Skills requirement, will be accepted as "Conditionally Classified Graduate" students. Course deficiencies may be removed by enrolling on a "CR/NC" basis. (Students who wish to develop their writing skills should enroll in English 3000 or 3001.)

Classified Graduate Status

Students who fulfill all the requirements for admission to the program will be accorded "Classified Graduate" status once they have satisfied the University Writing Skills requirement. All deficiencies have to be removed, and the University Writing Skills requirement satisfied no later than the completion of 20 units of coursework applicable to the degree or the student will be disqualified.

Selection of Thesis/Project or Academic Advisor

Once "Classified Graduate" status has been attained, each student will be assigned a thesis or project advisor by the department chair after consultation with the student and the graduate coordinator. The faculty member chosen also will act as academic advisor.

Advancement to Candidacy

In order to be Advanced to Candidacy, the student must have:

1. been accorded "Classified Graduate" status
2. been assigned a thesis or graduate project advisor; and
3. submitted to the department an acceptable Thesis or graduate Project Prospectus describing the thesis research or graduate project work to be attempted (guidelines for preparation of the Prospectus may be obtained from the department office). The research topic must be approved in advance by the advisor.

Degree Requirements

1. Advancement to Candidacy
2. Satisfaction of university requirements described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.
3. Completion of the study plan outlined below (45 units):
   - Two Graduate Seminars (GEOL 6811) (2, 2)
   - University Thesis (GEOL 6910) (9) or Project (GEOL 6899) (1-2)
   - Geology Graduate Courses (20-27)
     - Upper division/graduate electives in Geology and related fields (12)
4. Completion and defense of the University Thesis or completion (and defense, if required) of the graduate Project.

Curricular Requirements

A. Graduate Geology Course Requirements
   All students are required to take two graduate seminars (GEOL 6811), each 2 units. In addition, any combination of graduate geology courses and additional seminars except GEOL 6420 (Internship), GEOL 6900 (Independent Study), and GEOL 6910 (University Thesis) or GEOL 6899 (Project), must be taken for a total of 20-27 units.

B. Elective Course Requirement
   Twelve units must be completed in courses selected from a list of approved upper division and graduate courses in Geology and related disciplines which is available from the department office; at least 4 units must be in Geology courses.

C. Basic University Requirement
   These include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Students cannot receive credit toward the master's degree for:

- Courses taken to remove deficiencies
- Independent Study, GEOL 6900, in excess of 4 units
- Internship, GEOL 6420, in excess of 4 units
- University Thesis (GEOL 6910) in excess of 9 units, or Project (GEOL 6899) in excess of 2 units.
- Cooperative Education (GEOL 3898)

University Thesis

Requirements: Students must submit to the Thesis Committee, and defend orally, an acceptable University Thesis. The University Thesis is a formal paper reporting the results of original research. This research normally involves field and/or laboratory investigation. The thesis is submitted to the university in the bound format specified in the "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide. A minimum of two copies of the thesis must be submitted to the Thesis Office (Academic Programs and Graduate Studies, Student Services and Administration Building, Suite 4500); one copy will be filed in the Department Office. The Thesis Committee comprises the faculty thesis advisor plus either (1) two other faculty members from the Department of Earth and Environmental Sciences or other appropriate Cal State East Bay faculty, or (2) one other faculty member from the department and one or more qualified individuals from outside the university.

Units Required: GEOL 6910, University Thesis, for a total of 9 units; students may not register for more than 50% of the total units prior to starting the writing of their thesis.

Graduate Project
Requirements: Project students must submit to the department an abstract and acceptable graduate project (manuscript, map, computer model, education module). An oral defense may be required.

Units Required: GEOL 6899, Project, for a total of 1-2 units.

Other Requirements

Students filing for graduation are expected to know the procedures described in this catalog. (See "Apply for Graduation" in the Baccalaureate Degree Information chapter.)

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Graduate Courses

### Geology Courses (Course prefix: GEOL)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</table>
| 6020          | Seismic Exploration  
Seismic exploration methods, including data acquisition, processing, modeling, and interpretation. Survey design, source and receiver types, selection of acquisition parameters. Static and gain corrections, deconvolution, velocity analysis, migration and inversion methods. Graduate research project required. Prerequisites: GEOL 2101, MATH 1304, and PHYS 2701, or consent of instructor. Not open to students with credit for GEOL 4020. Three hrs. lect., 3 hours lab. |
| 6030          | Earthquake Seismology  
Methods for using seismic data from earthquakes to study geologic properties. Stress and strain, seismic raypaths, travel times, amplitude and phase, body and surface waves. Seismic source theory, including focal mechanisms and moment tensors. Earthquake location methods. Travel-time inversion methods for the determination of velocity structure. Seismic coda and attenuation. Array analysis. Prerequisite: GEOL 4010 or permission of instructor. A-F grading only. |
| 6300          | Quaternary Geology  
Evolution of climate and landforms of the Quaternary. Emphasis on interpretation of sedimentary deposits and erosional landforms. Techniques for determination of age relationships. Prerequisite: graduate standing in geology, geography, or permission of instructor. |
| 6320          | Groundwater (4)  
| 6411          | Engineering Geology (4)  
Application of geology in location and planning of engineering works. Study of case histories. Use of geophysical techniques to solve engineering geologic problems. Prerequisite: Graduate standing or consent of instructor. Three hrs. lect., 3 hrs. lab. and/or field trips. |
| 6412          | Advanced Igneous and Metamorphic Petrology (4)  
Chemical characteristics of igneous rocks and magmatic evolution. Petrography of igneous and metamorphic rock suites using the polarizing microscope, emphasizing thorough description of mineralogy and textures. Prerequisite: GEOL 3701. A-F grading only. Two hrs. lect.; 6 hrs. lab. |
| 6415          | Advanced Sedimentary Petrology (4)  
Advanced study of terrigenous-clastic and chemical sedimentary rock petrogenesis, including depositional environments and facies models, diagenesis, and basic analysis techniques. Prerequisites: GEOL 3801 or equivalent course. A-F grading only. Three hrs. lect., 3 hrs. lab. Field trip(s). |
| 6420          | Internship (1-4)  
Professional experience for at least one quarter with a public or private organization involved in geologic studies, summarized in a written report. Prerequisites: "Classified Graduate" status and advisor's approval. No more than 4 units can be applied toward the master's degree. CR/NC grading only. |
| 6620          | Advanced Topics in Geology (4)  
Selected advanced topics in geology. Prerequisite: graduate standing or consent of instructor. May be repeated with consent of instructor. Four hrs. lect. |
| 6811          | Graduate Seminar (2)  
Investigation of a selected geologic topic. Prerequisite: graduate standing or consent of instructor. May be repeated once for credit with consent of instructor, for a maximum of 4 units. Two hrs. seminar. |
| 6899          | Project (1-2)  
Development of an original product (e.g., manuscript, education module, field map, computer model) that is summarized in a written abstract. Both project and abstract are submitted to the department, which specifies their format. Supervised by a departmental committee. Oral defense may be required. Prerequisite: graduate status and 32 units of coursework applicable to the master's degree. May be repeated for credit, for a maximum of 4 units. CR/NC grading only. |
| 6900          | Independent Study (1-4)  
No more than 4 units may be applied toward the master's degree. CR/NC grading only. |
| 6910          | University Thesis (1-9)  
Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least two of whom must be Cal State East Bay faculty members. Oral defense required. (See also "University Thesis Writing Guide," [www.csueastbay.edu/thesiswritingguide](http://www.csueastbay.edu/thesiswritingguide). Prerequisites: "Classified Graduate" status and advisor's approval. Maximum of 9 units credit per student. CR/NC grading only. |
| 6999          | Issues in Geological Sciences (4)  
Readings, discussion, and research on contemporary and/or significant issues in geological sciences. May be repeated for credit when content varies, for a maximum of 8 units. |
Marine Science Courses
(See the graduate Marine Science chapter for descriptions of the following courses.)

- MSC 6202 Oceanographic Instrumentation (6)
- MSC 6204 Sampling and Experimental Design (6)
- MSC 6242 Plate Tectonics (4.5)
- MSC 6246 Geology of the Monterey Bay Region (6)
- MSC 6248 Marine Benthic Habitat Techniques (6)
- MSC 6261 Ocean Circulation and Mixing (6)
- MSC 6262 Satellite Oceanography (6)
- MSC 6263 Application of Computers in Oceanography (6)
- MSC 6274 Advanced Topics in Oceanography (1.5-6)

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Health Care Administration

Department Information

Department of Public Affairs and Administration
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4122
Phone: (510) 885-3282
Website: http://class.csueastbay.edu/publicadmin

Associate Professor Emeritus
George F. Goerl, Ph.D. University of California, Davis

Professors
Linda Dalton, Ph.D. Radcliffe College/Harvard University
O. Jombo ("Jay") Umeh, Ph.D. Texas Tech University

Associate Professors
Jennifer L. Eagan, Ph.D. Duquesne University
Toni E. Fogarty (Chair), Ph.D. University of California, Berkeley
Frank E. Scott, D.P.A. University of La Verne

Assistant Professors
Michael Y. Moon, Ph.D. Teachers College, Columbia University

M.S. in Health Care Administration

Program Description
The Department of Public Affairs and Administration offers an interdisciplinary Master of Science in Health Care Administration degree. This degree is primarily designed for health care professionals who are currently in leadership/management positions and for health care professionals who aspire to leadership/management positions in either non-profit, for profit, or voluntary health care organizations. It is secondarily designed for students who are not currently in the health care field, but who desire a career in health care administration.

The objectives of the Master of Science in Health Care Administration are to prepare future health care administrators; enable current and future health care administrators to be more humanistic, effective, and change oriented; meet the need of health care organizations for well-trained and innovative administrators; and help health care organizations successfully meet the challenges of a rapidly changing environment.

This program is different from other health care administration master's degree programs because most of them emphasize the managed health care model. While this is the dominant model currently, our program takes a more comprehensive look at the role of health care in society, including a critical look at the managed care model, the need for client-centered models, alternative medical models, wellness, and the development of healthy organizations and communities.

Students take required courses in leadership and change in health care organizations, health care financing and budgeting, health care policy, research methods, information technology in health care, and legal and ethical issues in health care.

They also take additional courses in the Management and Change in Health Care option.

Students in the M.S. in Health Care Administration program acquire the analytical skills needed to explore new models of health care delivery and organizational design. They also develop the leadership skills needed to discover and implement creative solutions to problems in the current health care system.

The fully online M.S. Health Care Administration program was pending implementation at the time this catalog was produced. Please check with the department for the status of this program. Once the online program is implemented, please see the Division of Continuing and International Education's course schedule for classes offered each quarter.

Student Learning Outcomes

Students graduating with an M.S. in Health Care Administration from Cal State East Bay will: (1) be able to demonstrate the ability to understand theoretical and practical knowledge they need to successfully pursue their health care career goals; (2) demonstrate an understanding of the role of theory in the study of health care administration; (3) demonstrate the ability to articulate a clear sense of purpose as professionals in the health care field; (4) demonstrate an understanding of research and analytical (interpretive and quantitative research methodologies) skills needed to explore new models of health care delivery and organizational design.

Career Opportunities

The nation's growing and aging population needs effective health care services from a variety of providers and community organizations. The M.S. in Health Care Administration prepares students for careers in health care administration in public organizations such as county health care agencies, hospitals, health care provider organizations such as HMO's, community health care organizations such as non-profit health care community-based organizations, and alternative community health care organizations. Health care professionals in nursing, radiology, physical therapy, and other medical services can advance their knowledge of health care policy-making, administration, and leadership with the M.S. in Health Care Administration.

Special Features

The M.S. in Health Care Administration is designed for working adults, and courses generally meet one night per week.
Admission

The HCA degree program is open to applicants planning a career or advancing a career in the health care field who have a baccalaureate degree from an accredited institution. Admission will be granted based upon the Admission Committee's overall assessment of the student's qualifications and academic/career potential, using the following criteria:

a. Cumulative undergraduate GPA of at least 2.5;

b. Statement of Purpose in pursuing the HCA degree (1-2 page essay double-spaced, explaining who you are, your career goals and how the MS HCA degree will help you achieve those goals);

c. Two letters of academic and/or professional recommendation (on letterhead). The letter writers should include how they know you, if they think you would be successful in the program and why;

d. Professional resume/vita;

e. All undergraduate/graduate transcripts. (These must be sent directly to University Admissions 0 NOT the Department.)

All applicants must submit an online Graduate Admission application declaring Health Care Administration as a degree objective, and transcripts, at http://www.csumentor.edu along with a non-refundable fee. In addition, applicants must also submit a statement of purpose, 2 letters of reference and a resume directly to the Department of Public Affairs and Administration at CSUEB, Dept of Public Affairs and Administration, 25800 Carlos Bee Blvd., MI 4122, Hayward, CA 94542-3040.

Please review the detailed application instructions on the Department's website at http://class.csueastbay.edu/publicadmin/Healthcare_Admin.php.

Student Standing and Progress toward the Degree

There are three categories of student status, which reflect student progress toward the degree: "Conditionally Classified Graduate" student, "Classified Graduate" student, and Advancement to Candidacy.

1. Students achieve "Conditionally Classified Graduate" status when they have been admitted to the M.S. in Health Care Administration degree program, but have not yet completed the prerequisites for the "Classified Graduate" status in the M.S. in Health Care Administration degree program.

2. Students achieve "Classified Graduate" status when they have satisfactorily completed the three foundation courses for the M.S. in Health Care Administration degree program or their equivalents, and satisfied the University Writing Skills requirement. (See "Prerequisites for "Classified Graduate" status below.)

3. Students are Advanced to Candidacy when they have completed the core courses with a 3.0 or better GPA.

Prerequisites for "Classified Graduate" Status

As prerequisites to "Classified Graduate" status, students must satisfy the University Writing Skills Requirement and satisfactorily complete the foundation course:

- STAT 1000 Elements of Probability and Statistics, or its equivalent (with a grade of "C" or better) or request to have one or more of them waived based upon coursework taken outside the Departments of Public Affairs and Administration, Management and Finance, or Statistics.

STAT 1000 or its equivalent should be taken before enrolling in the core graduate courses. Since no specific undergraduate major is required for admission to the program, when additional deficiencies are apparent, a student may be required to complete preparatory work in the deficient areas before attempting graduate-level study. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

The M.S. in Health Care Administration program requires completion of 48 quarter units consisting of required core courses and the capstone experience. Of the 48 units, at least 35 units must be completed in residence (transfer units are limited to 13 quarter units). No course numbered 1000 to 2999 (or the equivalent, if taken elsewhere) may be used as part of the 48-unit graduate degree program.

A grade point average of 3.0 must be maintained in all 48 quarter units taken to satisfy the degree requirements. Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two consecutive quarters will be academically disqualified by the university. All graduate degree requirements must be completed within five years.

Students accumulating more than 8 units of work graded "I" may not register for courses applicable to the degree until the "I" grades are removed.

Curricular requirements (48 units)

Option in Management and Change in Health Care

1. Foundation Course
   Students must complete the foundation course with a grade of "C" or better. STAT 1000 (4) or its equivalent

2. Curricular requirements (48 units)
   Required Courses (44 units)
   Students must complete HCA 6200 and HCA 6225 before they may take any other HCA courses.
   
   - HCA 6200 US Health Care Systems (4)
   - HCA 6210 Leadership and Change in Health Care Organizations (4)
   - HCA 6225 Organization Theory and Behavior in Health Care (4)
   - HCA 6230 Information Technology in Health Care (4)
   - HCA 6240 Health Care Financing and Budgeting (4)
   - HCA 6250 Strategic Management of Health Care Organizations (4)
   - HCA 6260 Health Care Policy Analysis (4)
   - HCA 6270 Health Care Management (4)
   - HCA 6275 Evolution of Managed Health Care (4)
   - HCA 6280 Legal and Ethical Issues in Health Care (4)
   - HCA 6290 Health Care Quality Assessment and Improvement (4)

   Note: Foundation course STAT 1000 or equivalent must be completed before taking the required 6000-level courses.

3. Capstone Experience (4 units)
   HCA 6899 Project (4)
### Capstone Experience

HCA 6899 Project (4 units) serves as the capstone experience in the degree program. HCA 6899 must be taken as the last 4 units in the program. Students must satisfy the University Writing Skills Test requirement before they will be allowed to enroll in HCA 6899. A project has a strong practical action-oriented component accompanied by a written document. A project is directed by one faculty member.

Grades of “RP” (Report in Progress) may be given for a project that is not completed at the end of the quarter. The “RP” grade indicates that work is in progress, but that a final grade cannot be assigned until additional work is completed. The “RP” grade must be removed within four quarters or it will become an “F”.

### Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Master of Science Degree in Health Care Administration. Students must file for graduation by the second week of the quarter prior to the quarter in which they expect to graduate.

Note: The Capstone Experience must be taken as the last 4 units.

### Graduate Courses

**Course prefix: HCA**

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<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>6200</td>
<td>US Health Care System (4) Major characteristics of the US health care system, its strengths and weaknesses, the roles of different stakeholders including providers, patients, policymakers and payers; the role of health insurance and its impacts, and definitions of health and health determinants. Prerequisites: STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
<tr>
<td>6210</td>
<td>Leadership and Change in Health Care Organizations (4) Issues and practices of health care administrators that impact leadership style. Emphasis on developing capacities for leading health organizations in a changing environment, in particular strategic planning, human resources management, facilitation, negotiation and collaboration skills, as well as those needed for innovation and creative management practice. Prerequisites: HCA 6200, HCA 6225, and STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
<tr>
<td>6220</td>
<td>Development of Healthy Organizations and Communities (4) Creation and maintenance of healthy organizations and healthy communities. Development of administrative practice to sustain well communities within the organization and without. Administering programs to sustain and promote well-being in the community and activate community resources. Prerequisites: HCA 4200, and either PUAD 4830 or MGMT 3614.</td>
</tr>
<tr>
<td>6225</td>
<td>Organization Theory and Behavior in Health Care (4) Explores the application of classical and emerging theories in organizational design, behavior, and effectiveness to health care organizations. Topics include organizational purpose, design, structure, change, power and politics, and the impact of internal and external factors on structure and design. Prerequisite: STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
<tr>
<td>6230</td>
<td>Information Technology in Health Care (4) The impact of information systems on the design and delivery of health care; different information technologies; use of information systems in policy making and quality assurance and improvement; relationship of information technology to organizational design. Prerequisites: HCA 6200, HCA 6225, and STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
<tr>
<td>6240</td>
<td>Health Care Financing and Budgeting (4) Functioning of health care markets; impact of economic incentives on health care decision-making; U.S. health care financing; impact of uninsured; role of nonprofit organizations; impact of managed care model; forecasting expenditures; role of technology, prices, utilization rates, and demographics. Prerequisites: HCA 6200, HCA 6225, and STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
<tr>
<td>6250</td>
<td>Strategic Management of Health Care Organizations (4) Explores the application of strategic management principles to health care organizations. Topics include analyzing the external and internal environments, responding to change, developing mission and goal statements, strategy formulation, evaluation of strategic alternatives, and implementation. Prerequisites: HCA 6200, HCA 6225, and STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
<tr>
<td>6260</td>
<td>Health Care Policy Analysis (4) The health care policy process; impact of health care on broader social policy; influence of political and economic forces on health policies; impact of emerging models of health care such as community-based programs. Critical analysis of market-based models. Prerequisites: HCA 6200, HCA 6225, and STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
<tr>
<td>6270</td>
<td>Health Care Management (4) Develop the knowledge and skills needed to manage organizational resources: develop clear policies, position descriptions and expectations; build cohesive employee teams, coach and discipline employees, provide effective employee feedback and development, maximize advantages of diversity, and provide leadership. Prerequisite: HCA 6200, HCA 6225, and STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
<tr>
<td>6275</td>
<td>Evolution of Managed Health Care (4) Overview of managed health care organizations, including their history, evolution, regulation, and financing. The course explores issues that are common to most managed care organizations, including accreditation and performance measurement, compensation, use of incentives, and the regulatory environment. Prerequisites: HCA 6200, HCA 6225, and STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
<tr>
<td>6280</td>
<td>Legal and Ethical Issues in Health Care (4) Contemporary legal issues in health care administration. Overview of recent health legislation and regulations. Personal and organizational liability; ethical issues in health care administration. Impact of the market model on health care delivery. Prerequisites: HCA 6200, HCA 6225, and STAT 1000 or its equivalent. A-F grading only.</td>
</tr>
</tbody>
</table>
| 6290 | Health Care Quality Assessment and Improvement (4) Development of skills in evaluation methods and performance management with particular emphasis on the management of quality, standard setting, and performance assessment processes. Course includes historical beginnings, state-of-the-art voluntary and
governmental efforts and proposed means of quality assessment and improvement. Prerequisites: HCA 6200, HCA 6225, and STAT 1000 or its equivalent. A-F grading only.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>6893</td>
<td>Internship in Health Care Administration (4)</td>
<td>Academically challenging field placements in half-time or full-time positions with health care organizations under the supervision of university faculty member. Examination of the relationship of theory to practice in the health care field. Prerequisites: STAT 1000, HCA 6200, HCA 6225, approval of internship supervisor. A-F grading only.</td>
</tr>
<tr>
<td>6898</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 3.0 GPA, the approval of the Health Care Administration Graduate Coordinator. A maximum of 4 units will be accepted toward the M.S. in Health Care Administration degree. May be repeated for credit, for a maximum of 4 units. CR/NC grading only.</td>
</tr>
<tr>
<td>6899</td>
<td>Project (4)</td>
<td>Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department, which specifies their formats. Supervision by a departmental faculty member. Oral defense may be required. Prerequisites: Advancement to Candidacy, approval of project supervisor. A-F grading only.</td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
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<tr>
<td>6909</td>
<td>Department Thesis (4)</td>
<td>Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a departmental faculty member. Oral defense normally required. Prerequisites: Advancement to Candidacy and consent of thesis advisor.</td>
</tr>
<tr>
<td>6910</td>
<td>University Thesis (4)</td>
<td>Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also &quot;University Thesis Writing Guide,&quot; <a href="http://www.csueastbay.edu/thesiswritingguide">www.csueastbay.edu/thesiswritingguide</a>.) Prerequisites: Advancement to Candidacy and consent of Thesis Committee.</td>
</tr>
<tr>
<td>6999</td>
<td>Issues in Health Care Administration (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in health care administration. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
</tbody>
</table>
M.A. in History

Program Description

The Master of Arts degree in History is designed to meet the varied needs and interests of students seeking an advanced degree in history. The program trains students in advanced skills in historical research, writing, and teaching. Four options permit students to plan their coursework to best suit their goals within the overall program requirements and the range of courses offered.

The program includes graduate course offerings in historical research and historiography, conference (seminar) courses, undergraduate or graduate elective units, and a culminating master's project. Elective units may be taken in other fields with the approval of the graduate coordinator. The master's project may be a university thesis, departmental thesis, examinations in major and minor fields, or a graduate teaching project, depending on the option chosen.

Because the majority of students in the master's program are employed full-time during the day, graduate courses are offered in the evening, usually on a one-night-a-week basis, in fall, winter, and spring quarters. This schedule allows students time to complete regular assignments, carry on research, and make regular progress toward the M.A. degree.

Student Learning Outcomes

Students graduating with an M.A. in History from Cal State East Bay will have achieved the following:

Content/ Knowledge

M.A. graduates should:

1. demonstrate in-depth knowledge of at least two of the following fields, one of which must be outside the U.S.: Ancient and Medieval Europe, Modern Europe, Modern China, Modern Japan, California and the West, Early America, the Civil War, U.S. Women's History, American Intellectual History, Native American History, and/or Latin America;
2. possess an understanding of the main arguments and themes in contemporary historiography;
3. demonstrate command of a special research area;
4. demonstrate familiarity with Bay Area research libraries, archives, and special collections.

Skills/Methods:

M.A. graduates should:

1. possess advanced writing and interpretative skills for analyzing both secondary and primary sources;
2. demonstrate advanced research abilities, in conventional historical collections and in Internet sources;
3. demonstrate the ability to complete a major independent project in history.

Disposition

M.A. graduates should:

1. be familiar with cross-cultural approaches to historical study and the humanistic values underlying a historical worldview;
2. adhere to the standards of academic honesty, including appropriate attribution of all sources;
3. be familiar with the values of the historical profession, including ethics and standards for work in research libraries, on the Internet, at professional conferences, and at interviews for employment.
Career Opportunities
The master's program is especially suited to individuals interested in enhancing their careers as secondary school teachers, in qualifying as community college faculty, or training as historical editors, archivists and Bay Area or California historians. It is also useful for individuals interested in retraining for careers in history or in preparing for doctoral programs in history.

Faculty
Although most graduate students find it convenient to specialize in American and California history, the History Department faculty also includes specialists in European, Asian, and Latin American history. Qualified graduate students may usually carry out research and specialize in these areas as well. The full-time faculty are professional scholars, widely published in their respective fields and active in regional and national historical associations. The department has many years' experience in advising and training master's students in history.

Option Areas
The master's program offers four options: Thesis, Examination, Teaching, and Public History. The Thesis, Examination, and Teaching options differ chiefly in their required M.A. projects. The Public History Option has a distinct set of course requirements designed for training in that specialty.

Both the Thesis and Examination options are appropriate for those who plan to continue beyond the master's degree. The Teaching option is especially useful for individuals who currently teach or plan careers in teaching. The Public History option prepares students for non-academic work in history, such as Bay Area or California projects in the private or public sector or museum and archival work. It is generally expected that students in the Thesis and Public History options will pursue research at libraries and historical collections outside the university in completing their master's projects. Students in the Examination and Teaching options are more likely to complete their projects on campus.

Special Features
Research opportunities in Bay Area and California history abound at the University of California, Berkeley; the Bancroft Library; the National Archives at San Bruno; and numerous private collections in the region. The University Library provides excellent reference, Internet, and interlibrary loan services and contains substantial print and microfilm holdings.

Scholarships
Qualified history graduate students are eligible for graduate financial aid through the loan and fellowship programs administered by the Financial Aid Office. Small scholarships of $100 to $500, pending available funds, are awarded annually to assist graduate students in completing their master's projects.

Admission
Admission to the master's program generally requires a B.A. degree major in History, or the equivalent, and a minimum GPA of 3.0 ("B") in the last two years of undergraduate work and 3.25 ("B+"*) in history. A one-page statement of purpose, a writing sample, and two letters of recommendation must accompany applications. In addition, applicants must submit their scores on the Graduate Record Exam (GRE) to the History Department office. Interested students with degrees in related disciplines, such as American Studies, Ethnic Studies, Political Science, Art or Theater History, and Literature, and suitable academic backgrounds in history are encouraged to apply but will be required to complete prerequisite coursework in history.

Students without necessary background in research or writing may also be admitted to the program as "Conditionally Classified Graduate" students with the requirement that they complete HIST 4030 and/or 4031 at a specified grade level before being admitted to "Classified Graduate" status. Students meeting all admissions requirements, and who have satisfied the University Writing Skills Requirement, are eligible to be admitted as "Classified Graduate" students. Applicants should consult with the History Graduate Coordinator for advising. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements
The Master of Arts degree in History consists of 45 units. Each of the four options in the master's program requires a prescribed program of 45 units listed below. Reading proficiency in a foreign language is strongly encouraged, especially for those planning to pursue doctoral degrees or research careers.

I. Thesis Option (45 units)
   A. Required Courses (17 units)
      - HIST 6010 Seminar in History (5)
      - HIST 6030 Graduate Historiography (4)
      - HIST 6910 University Thesis (8)
   B. Conference Course (16 units)
      Four courses, including repeats, from the following in at least two areas. One Conference Course must be in the general area of the thesis topic.
      - HIST 6100 Conference Course in Ancient and Medieval History (4)
      - HIST 6200 Conference Course in European History (4)
      - HIST 6300 Conference Course in Asian History (4)
      - HIST 6400 Conference Course in United States History (4)
   C. Electives (12 units)
      Twelve (12) units of upper division or graduate courses in History.
   D. Complete an approved University Thesis. (See HIST 6910 under "Required Courses" for this option.)

II. Examination Option (45 units)
   A. Required Courses (13 units)
      - HIST 6010 Seminar in History (5)
      - HIST 6030 Graduate Historiography (4)
      - Four units of HIST 6909 Departmental Thesis (1-4) (4)
   B. Conference Course (20 units)
      Five courses, including repeats, from the following in at least two areas.
      - HIST 6100 Conference Course in Ancient and Medieval History (4)
      - HIST 6200 Conference Course in European History (4)
C. Electives (12 units)
Twelve (12) units of upper division or graduate courses in History.

D. Comprehensive Examination
Pass comprehensive written examinations in major and minor fields as prescribed by the department.

III. Teaching Option (45 units)
  A. Required Courses (17 units)
      • HIST 6010 Seminar in History (5)
      • HIST 6030 Graduate Historiography (4)
      • HIST 6909 Departmental Thesis (4)
      • HIST 6900 Independent Study (4)
  B. Conference Course (16 units)
Four courses, including repeats, from the following in at least two areas.
      • HIST 6100 Conference Course in Ancient and Medieval History (4)
      • HIST 6200 Conference Course in European History (4)
      • HIST 6300 Conference Course in Asian History (4)
      • HIST 6400 Conference Course in United States History (4)
  C. Electives (12 units)
Twelve (12) units of upper division or graduate courses in History.
  D. Departmental Thesis
Complete an approved Department Thesis. (See HIST 6909 under "Required Courses" for this option.)

IV. Public History Option (45 units)
  A. Required Courses (25 units)
      • HIST 4032 Introduction to Public History (4)
      • HIST 6010 Seminar in History (5)
      • HIST 6030 Graduate Historiography (4)
      • HIST 6400 Conference Course in United States History (4)
      • HIST 6901 Internship in Public History (5)
      • HIST 6909 Departmental Thesis (3)
  B. Conference Course (12 units)
Selected from the following:
      • HIST 6100 Conference Course in Ancient and Medieval History (4)
      • HIST 6200 Conference Course in European History (4)
      • HIST 6300 Conference Course in Asian History (4)
      • HIST 6400 Conference Course in United States History (4)
  C. Electives (8 units)
Eight units of upper division or graduate courses in History.
Recommended Skills Courses: With the approval of the Public History and Internship Coordinator, select two or three courses in other disciplines specific to professional goals.
  D. Internship and Department Thesis
Complete an approved Internship and Department Thesis. (See HIST 6901 and HIST 6909 under "Required Courses" for this option.)

Upper Division Courses Acceptable for the Master's Degree
All History courses in the 3000-4000 series except 3400, 4030, and 4031 are acceptable courses in a master's program.

Advancement to Candidacy
In addition students must meet the requirements of Advancement to Candidacy confirming that a student is prepared to finish the degree and is recommended as a degree candidate. A Classified Graduate student in good standing is eligible to be advanced to candidacy for the master's degree after:

1. completing 12 quarter units applicable to the degree program
2. completing HIST 6010 and 6030
3. submitting a proposal for the Master's thesis, project, or two fields of examination to the Graduate Committee
4. obtaining the Graduate Coordinator's approval of the student's committee, comprised of at least two faculty members.

Graduate Courses

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<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tr>
<td>6010</td>
<td>Seminar in History (5)</td>
</tr>
<tr>
<td></td>
<td>Historical methodology including critical analysis and use of source materials, research and writing. Investigation of selected topics in political, economic, diplomatic, intellectual, and social history. Reports and discussion. Prerequisite: consent of instructor.</td>
</tr>
<tr>
<td>6030</td>
<td>Graduate Historiography (4)</td>
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<tr>
<td></td>
<td>Intensive readings in the classics of historical writing and the philosophy of history. Written critical analyses, both in- and out-of-class, are required. Prerequisite: consent of instructor. Open only to postbaccalaureate students.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<td>--------------------------------------------------</td>
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<tr>
<td>6100</td>
<td>Conference Course in Ancient and Medieval History</td>
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<td>6200</td>
<td>Conference Course in European History</td>
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<tr>
<td>6300</td>
<td>Conference Course in Asian History</td>
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<td>6400</td>
<td>Conference Course in United States History</td>
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<td>6898</td>
<td>Cooperative Education</td>
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<td>6899</td>
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<td>6901</td>
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<td>6909</td>
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<td>6910</td>
<td>University Thesis</td>
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<tr>
<td>6999</td>
<td>Issues in History</td>
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Interdisciplinary Studies Majors and Special Certificates

- Department Information
- Program Description
- Major Requirements (M.A./M.S.)
- Special Certificates

Department Information

Academic Programs and Graduate Studies
Student Services and Administration Building, 4th Floor
Phone: (510) 885-3716, Fax: (510) 885-4777

Professor
Susan B. Opp (Associate Vice President, Academic Programs and Graduate Studies), Ph.D. University of Massachusetts

Coordinator: Rosanne Harris

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Program Description

The purpose of the Interdisciplinary Studies Major and the Special Certificate programs is to allow students, with the advice and approval of knowledgeable faculty and administrators, to design their own academic programs tailored to their unique needs and interests.

At least two separate degree-granting programs must be involved. A graduate Interdisciplinary Studies Major must be approved no later than the time when the student has fewer than 32-39 quarter units to complete for the degree. This is to ensure that a significant portion of the program is planned in advance by the student and his/her faculty advisors, and that the residence requirement can be met. The diploma will read "Interdisciplinary Studies Major in (program title),"

The Interdisciplinary Studies Major program should not be seen as a device to avoid certain requirements of a regular major, nor as a means to gain admission to an impacted program. Likewise, an Interdisciplinary Studies Major cannot be developed in areas such as architecture, agriculture, and home economics where the campus currently lacks the necessary faculty expertise and physical facilities. Finally, an Interdisciplinary Studies Major is not a self-study, independent study, or external degree program.

Student Learning Outcomes

Because Interdisciplinary Studies Majors are individualized courses of study, student learning outcomes will be individually created for each student by the student's Interdisciplinary Studies Major Committee. All students, however, who graduate with an M.A. or M.S. Interdisciplinary Studies Major from Cal State East Bay will (1) learn how to approach an issue or problem from at least two disciplinary perspectives; and (2) demonstrate mastery of an interdisciplinary approach to an issue or problem in a capstone assignment (project, thesis, or comprehensive exam).

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Major Requirements (M.A./M.S.)

The university offers the Interdisciplinary Studies Major program for both the M.A. and M.S. degrees. There is not a clear distinction between the two degrees so normally the decision about the assignment of an Interdisciplinary Studies Major reflects the type of degree offered by the departments involved. An Interdisciplinary Studies Major must be a coherent program of 45-52 units organized around a broad academic theme. The title should be short (three to five words) and should describe the central academic theme of the program and not the student's career objective unless the two coincide. A graduate Interdisciplinary Studies Major must be fully approved before the student has fewer than 32-39 quarter units to complete for the degree so the residence requirement can be met. (A maximum of 13 non-resident units is allowed.)

A department with a regular master's degree program (the sponsoring department) must certify that the prospective Interdisciplinary Studies Major student would be eligible for admission to its program as a "Conditionally Classified" or "Classified Graduate" student. (However, the student who obtains an approved Interdisciplinary Studies Major is not admitted to the regular graduate program, but to the Interdisciplinary Studies Major program under the Office of Academic Programs and Graduate Studies.)

A graduate Interdisciplinary Studies Major must consist of 45-52 quarter units of which at least half must be in graduate (6000-level) courses and at least 32-39 must be in residence in the program at Cal State East Bay. No more than 9 units may be in supervisory courses such as Independent Study, Project, Department or University Thesis, Field Work, Co-op Ed, and/or Internship. Graduate level courses in at least two different departments must be involved in the program. No course enrollment used in the Interdisciplinary Studies Major can be older than five years at the intended time of graduation. A 3.00 grade point average is required for completion of the graduate Interdisciplinary Studies Major. If a student has not satisfied the University Writing Skills requirement, admission is in "Conditionally Classified" status until the requirement is satisfied. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

A student is Advanced to Candidacy if, after completion of half the program, a 3.0 GPA is attained by a "Classified Graduate." Failure to achieve Candidacy will void the Interdisciplinary Studies Major contract. The student must comply with the standard master's degree requirements for all students listed in the Admission/Graduate chapter in this catalog.

Procedure

A student who contemplates developing an Interdisciplinary Studies Major must have an overall undergraduate and postbaccalaureate grade point average of at least 3.0 ("B," Adequate). Forethought and planning will need to precede any formal action. You may make an appointment to discuss all the necessary steps for getting your Interdisciplinary Studies major approved by emailing the Interdisciplinary Studies Coordinator at rosanne.harris@csueastbay.edu.

The prospective Interdisciplinary Studies Major student must prepare a one-page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular master's degree program, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the degree, and other pertinent information. A
Special Certificates

A program leading to the award of a Special Certificate must consist of at least 20 quarter units of upper division and/or graduate courses. A minimum grade point average of 2.00 is required for all the courses comprising the Special Certificate program. The program must provide a logical and coherent pattern of preparation for a limited objective. The title of the proposed certificate should be brief (three to five words) and must carry no connotation of meeting a licensing requirement for professional practice.

Procedure

The following procedure applies to Special Certificate programs consisting largely of postbaccalaureate and/or graduate courses:

The student develops a proposed program with the advice and approval of a faculty member knowledgeable in the field of study. The completed "Undergraduate/Graduate Special Certificate Proposal" (found at Certificate Information Sheet), with advisor and student approval, is forwarded by the advisor to the dean of the college in which the preponderance of courses will be taken. If the dean approves, s/he signs and sends the proposal to the Interdisciplinary Studies Major Coordinator in the Office of Academic Programs and Graduate Studies. The coordinator then sends a copy of the proposal to each of the other three college deans.

The deans have ten working days to enter an objection. If none is received and the Associate Vice President of Academic Programs and Graduate Studies judges the proposal to be sound, the program will be approved. If any college dean objects, s/he must file written objections with the Interdisciplinary Studies Major Coordinator within the ten days. These will be considered by the Associate Vice President in deciding whether or not to approve the program.

The student is notified in writing by the Interdisciplinary Studies Major Coordinator as to the final action on his/her proposal. A copy of an approved program is filed in the student's on-line file and in the Interdisciplinary Studies Major Coordinator's office. Upon completion of the Special Certificate program, the student applies to the Registrar's Office and pays the required fee to receive the certificate.

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Kinesiology

Department Information

Department of Kinesiology
College of Education and Allied Studies
Office: Physical Education Bldg. 130
Phone: (510) 885-3061
Website: http://edschool.csueastbay.edu/departments/kpe

Professors
Rita M. Liberti, Ph.D. University of Iowa
Penny McCullagh (Chair), Ph.D. University of Wisconsin
Donald T. Sawyer, Ed.D. University of San Francisco

Associate Professors
Rebecca Beal, Ed.D. University of Northern Colorado
Catherine Inouye, Ed.D. University of Northern Colorado
Jeffery P. Simons, Ph.D. University of Illinois, Urbana-Champaign

Assistant Professors
ZaNeen D. McClain, Ph.D. Oregon State University
Susan J. Rodearmel, Ed.D. University of Northern Colorado

Graduate Coordinator: Catherine Inouye

M.S. in Kinesiology

Program Description

The Department of Kinesiology offers programs focusing on physical education. The purpose of the Master of Science degree program is to give students a broad knowledge of Kinesiology and the profession of Physical Education and to develop their scholarly skills. The program serves as a terminal degree for professionals as well as preparation for those intending to complete a doctorate. The high standards and academic rigor required of students pursuing this program is characteristic of an excellent graduate-level education. Because most students are working professionals, graduate courses are offered primarily during the evening hours.

Student Learning Outcomes

Students graduating with an M.S. in Kinesiology from Cal State East Bay will be able to demonstrate:

1. the ability to read and make critical analysis of original research;
2. the ability to synthesize and critically analyze original research and present their analyses in written and oral formats;
3. an understanding and appreciation of a variety of research methods including both qualitative and quantitative techniques employed in the various sub-disciplines in Kinesiology.

Career Opportunities

- Athletic Director
- Athletic Trainer
- Cardiopulmonary Rehabilitation Specialist
- Community College Teacher
- Corporate Fitness Director
- Intercollegiate and Interscholastic Coach
- Exercise Physiologist
- Personal Trainer
- Physical Education Administrator
- Physical Education Teacher
- Physical Therapist
- Sport Psychology Consultant
- University Instructor
- Wellness Counselor

Faculty: Areas of Specialization

- Rebecca Beak, Ed.D.: Philosophy, sociology
- Catherine Inouye, Ed.D.: Exercise physiology, exercise nutrition
- Rita Liberti, Ph.D.: Sport sociology, sport history, sport philosophy
- Penny McCullagh, Ph.D.: Sport and exercise psychology
- ZaNeen D. McClain, Ph.D.: Sport pedagogy
- Susan J. Rodearmel, Ed.D.: Exercise physiology, exercise nutrition, childhood obesity
- Donald T. Sawyer, Ed.D.: Skill acquisition, motor learning and control, sport psychology, sport sociology
- Jeffery P. Simons, Ph.D.: Sport and exercise psychology, lifetime physical activity participation, motor learning and control
The Master of Science degree will be awarded when the general requirements listed below have been successfully completed:

### Degree Requirements

**Waivers**

such waivers and their justification must be submitted in writing to the graduate coordinator.

Requests for waiver of one or more of these area requirements will be considered if comparable coursework has been completed, or if the student has strong compensating academic strengths in areas related to the graduate program (a degree in Physical Therapy, for example). All requests for waiver must also have attained at least a 3.00 grade point average in the major and have satisfied the University Writing Skills requirement.

The department encourages students to meet university prescribed deadlines for admission into the program beginning in the fall quarter, although the department is willing to accept graduate students into the program during the Winter and Spring quarters.

**"Conditionally Classified Graduate" Status**

Students who are judged to be admissible, but who do not meet all of the admission requirements specified above for "Classified Graduate" status, receive "Conditionally Classified Graduate" standing. Such students may need to complete certain undergraduate prerequisites in preparation for graduate study and/or may have other deficiencies, such as the University Writing Skills requirement, that must be removed within a reasonable period of time. Each student will be judged on an individual basis. The department may require the Graduate Level Examination (GRE), Aptitude Test Score, three letters of recommendation from former professors, and/or the repeat of undergraduate coursework in the case of below-standard grade point averages.

Generally, courses taken to remove deficiencies will not count for credit in the M.S. program. In no case will more than 13 quarter units taken in "Unclassified Post-baccalaureate" standing or at another university be counted toward the M.S. degree.

**Advancement to Candidacy**

"Classified Graduate" students are eligible for Advancement to Candidacy based on the criteria given below.

1. Maintain a 3.0 grade point average in all graduate work completed.
2. Complete KIN 6000 in the first two quarters in the program.
3. Submit to the graduate coordinator an approved program of study developed in conjunction with the appropriate faculty committee.

**Prerequisite Courses (35-37 units)**

In the absence of an appropriate undergraduate degree, prerequisite coursework must be completed. Generally, courses taken to remove deficiencies will not count for credit in the M.S. program. Preparatory work for students with undergraduate degrees in other fields is described below. Note: these courses must be completed with a grade of "B" or higher in each course.

- **A. KIN 3300 Measurement and Evaluation (5)**
  (Applied statistics background is acceptable equivalent.)
- **B. KIN 3305 Structural Kinesiology (4)**
  (Functional anatomy background is acceptable equivalent.)
- **C. Three courses (14-15 units) completed from:**
  - KIN 3310 Biomechanics (5)
  - KIN 3320 Exercise Physiology (5)
  - KIN 3330 Motor Learning and Control (5)
  - KIN 4340 Motor Development (4)

- **D. Three courses (12-13 units) completed from:**
  - KIN 3700 History of Sport and Physical Education (4)
  - KIN 3740 Philosphic Foundations of Kinesiology (4)
  - KIN 3750 Sport in Contemporary Society (4)
  - KIN 4410 Sport and Exercise Psychology (5)

Waiver of one or more of these area requirements will be considered if comparable coursework has been completed, or if the student has strong compensating academic strengths in areas related to the graduate program (a degree in Physical Therapy, for example). All requests for such waivers and their justification must be submitted in writing to the graduate coordinator.

**Degree Requirements**

The Master of Science degree will be awarded when the general requirements listed below have been successfully completed:

1. Completion of a minimum of 45 quarter units of approved upper division and graduate courses
2. A minimum grade point average of 3.0
3. Completion of one Capstone Experience:
   a. University Thesis
   b. Department Thesis
   c. Comprehensive Examination
4. In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the [Graduate Degree Information chapter](#) in this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.0 grade point average, and the University Writing Skills requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at [www.csueastbay.edu/testing](http://www.csueastbay.edu/testing) or call 510.685.3661
Curriculum Requirements (45 units)

I. Required Course (5 units)
   KIN 6000 Foundations of Graduate Research (5)

II. Core Requirements (16 units)
   - KPE 6655 Physiological Perspectives of Health and Wellness (4)
   - KPE 6411 Psychology of Physical Activity (4)
   - KPE 6425 Political Issues in Kinesiology (4)
   - KPE 6710 Leadership in Kinesiology (4)

III. Electives (15-24 units)
   The number of elective units you take is determined by the Capstone Experience you choose in IV below (e.g. 15 units of electives with a 9-unit University Thesis). Total units for III. Electives and IV. Capstone Experience must be 24. Total units for degree is 45.
   Selection of appropriate courses in consultation with advisor.

IV. Capstone Experience (0-9 units)
   1. KIN 6909 Departmental Thesis (2-5)
   2. KIN 6910 University Thesis (6-9)
   3. Comprehensive Examination (no unit credit).

Post-Baccalaureate Courses

Consult an advisor to determine if these courses can be applied to the M.S. degree.

(Course prefix: KIN)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
</tr>
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<tbody>
<tr>
<td>5000</td>
<td>Sports Officiating (3) Theory and practical experience in officiating men's and women's sports and games. Coeducational. Sports to be covered rotate quarterly. May be repeated two times for credit when content varies, for a maximum of 9 units. Two hrs. lect., 2 hrs. act.</td>
</tr>
<tr>
<td>5900</td>
<td>Independent Study (1-4)</td>
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</table>

Graduate Courses

(Course prefix: KIN)

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<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>6000</td>
<td>Foundations of Graduate Study and Research (5) Analysis of physical education and kinesiological variables. Scientific thought and inquiry. Application of research methods to specific problems. Statistics/technology module included. Prerequisite: KIN 3300 or equivalent. CR/NC grading only.</td>
</tr>
<tr>
<td>6400</td>
<td>Seminar in Biomechanics (4) Critical review of research related to the biological and mechanical analysis of human movement. Prerequisite: KIN 3310 or equivalent. May be repeated once for credit with consent of instructor, for a maximum of 8 units.</td>
</tr>
<tr>
<td>6410</td>
<td>Seminar in Sport Psychology (4) Kinesiological analysis of sensory-motor control and integration in skill acquisition and performance. Emphasis on theory and empirical evidence related to sport and exercise. Prerequisite: KIN 3330 or equivalent. May be repeated once for credit with consent of instructor, for a maximum of 8 units.</td>
</tr>
<tr>
<td>6411</td>
<td>Psychology of Physical Activity (4) Psychological issues in physical activity participation. Emphasis on motivation, group processes, psychological health and development, and psychological skills for teaching and performance. Prerequisite: KIN 4410 and graduate standing. May be repeated once for credit with consent of instructor, for a maximum of 8 units. A-F grading only.</td>
</tr>
<tr>
<td>6412</td>
<td>Psychomotor Skill Acquisition (4) Principles of motor skill learning and skilled performance. Emphasizes on theory and research in areas of motor learning and motor control as applied to sport, rehabilitation, and physical skill development and performance. Prerequisites: KIN 3330 and graduate standing. May be repeated once for credit with consent of instructor, for a maximum of 8 units. A-F grading only.</td>
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<tr>
<td>6413</td>
<td>Mental Skills for Physical Performance (4) Theory and practice in the development of psychological skills for learning and performance. Various models and methods are explored with emphasis on cognitive-behavioral methods of educational sport psychology. Prerequisites: KIN 4410 and graduate standing. May be repeated once for credit with consent of instructor, for a maximum of 8 units. A-F grading only.</td>
</tr>
<tr>
<td>6415</td>
<td>Seminar in Motor Learning and Control (4) Kinesiological analysis of sensory-motor control and integration in skill acquisition and performance. Emphasis on empirical evidence and underlying theories related to sport and exercise. Prerequisite: KIN 3330 or equivalent. May be repeated once for credit with consent of instructor, for a maximum of 8 units.</td>
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<tr>
<td>6416</td>
<td>Exercise Psychology (4) Application of psychological principles to the promotion and maintenance of exercise. Psychological and emotional consequences of exercise participation. Emphasis on physical activity epidemiology, theories and models of exercise behavior, physical activity interventions, anxiety and exercise, emotional well-being, self-esteem, health-related quality of life, social influences, and body image. Prerequisites: KIN 4410 and graduate standing. May be repeated once for credit with consent of instructor, for a maximum of 8 units. A-F grading only.</td>
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<tr>
<td>6420</td>
<td>Seminar in Exercise Physiology (4)</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>6425</td>
<td>Political Issues in Kinesiology (4)</td>
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<tr>
<td>6430</td>
<td>Seminar in the History of Sport (4)</td>
</tr>
<tr>
<td>6435</td>
<td>Critical Perspectives on the Body (4)</td>
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<tr>
<td>6440</td>
<td>Seminar in Sport in Contemporary Society (4)</td>
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<td>6450</td>
<td>Seminar in Motor Development (4)</td>
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<td>6460</td>
<td>Seminar in Philosophy of Sport (4)</td>
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<td>6470</td>
<td>Seminar in Exercise and Nutrition (4)</td>
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<td>6480</td>
<td>Legal Applications in Kinesiology (4)</td>
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<td>6495</td>
<td>Social Inclusion in Physical Activity (4)</td>
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<tr>
<td>6500</td>
<td>Seminar in Personal Education Programs and Facilities (4)</td>
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<td>Seminar in Sports Medicine (4)</td>
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<td>6555</td>
<td>Physiological Perspectives on Health and Wellness (4)</td>
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<td>6600</td>
<td>Training for Physical Performance (4)</td>
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<td>6610</td>
<td>Seminar: Contemporary Issues in Kinesiology (4)</td>
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<td>6620</td>
<td>Leadership in Kinesiology (4)</td>
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<td>6630</td>
<td>Supervised Research (2-4)</td>
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<tr>
<td>6899</td>
<td>Project (2-5)</td>
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<td>6909</td>
<td>Departmental Thesis (2-5)</td>
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<td>University Thesis (2-6)</td>
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<tr>
<td>6999</td>
<td>Issues in Kinesiology and Physical Education (4)</td>
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Marine Science

Graduate Courses

Department Information

Moss Landing Marine Laboratories

Professors Emeriti
Greggor Cailliet (Emeritus Professor, Ichthyology)
Michael Foster (Emeritus Professor, Phycology)
G. Jason Smith (Environmental Biotechnology)
Richard Starr (California SeaGrant Advisor, Fisheries)
Stacy Kim (Benthic Ecology, Polar Ecology)
John Oliver (Benthic Ecology)
Larry Breacker (Climate Change, Modelling)
Valerie Loeb (Ichthyoplankton, Polar Ecology)

Professors
Kenneth Coale (Director, Biogeochemistry)
Nicholas A. Welschmeyer (Biological Oceanography)
Erika McPhee-Shaw (Physical Oceanography)
James T. Harvey (Vertebrate Ecology)
Ivano Aiello (Geological Oceanography)
Jon Geller (Invertebrate Zoology/Molecular Ecology)
Michael H. Graham (Phycology)
Joan Parker (Research Librarian)
Scott Hamilton (Ichthyology)

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Moss Landing Marine Laboratories

The California State University operates the Moss Landing Marine Laboratories (MLML) at Moss Landing on Monterey Bay, California. This facility functions as a seaside extension of the campuses of seven cooperating California State Universities (East Bay, Monterey Bay, San Jose, San Francisco, Sacramento, Stanislaus, and Fresno) and offers course work in marine biology, geology, oceanography, and other marine sciences.

Facilities

Since January 2000, the Laboratories have occupied new facilities in Moss Landing overlooking Monterey Bay, replacing the original laboratory demolished in the 1989 Loma Prieta earthquake. The stunning new building provides modern, up-to-date classrooms, laboratories, research facilities, library and conference room for faculty, staff and students of the consortium campuses.

MLML's Marine Operations Center, located also in Moss Landing, facilitates oceanographic and near-shore classes and research by providing shore support. The Center houses equipment used for in-port maintenance of scientific equipment, SCUBA air compressor, shore-based radio operations, and other support needs.

The MLML maintains a collection of nautical charts and topographical maps with an emphasis on the West Coast and there is a growing collection of reprints. It also subscribes to abstracting services such as "Oceanic Abstracts" and "Aquatic Sciences and Fisheries Abstracts." A terminal is available for computer literature searches. Close ties are maintained with libraries at Stanford's Hopkins Marine Station, U.C. Santa Cruz, Naval Postgraduate School, San Jose State University, and the Monterey Bay Aquarium Research Institute. Materials are borrowed from these agencies or further afield as the need arises. A special effort has been made to collect materials relating to Monterey Bay and Elkhorn Slough.

As a member of the Central California Oceanographic Cooperative (CENCAL), MLML operates the 135-foot Research Vessel Point Sur. The R/V Point Sur, built in 1981, is well-equipped for instructional use and research, with a trawl winch, two hydrographic winches and three laboratories, scientific equipment for sampling and oceanographic profiling, Smith-McIntyre grabs, rock dredges, and various types of coring devices. Also available is a variety of nets for bottom and midwater trawls.

The Laboratories also own and operate the 56-foot R/V John Martin and the 35-foot R/V Ed Ricketts. These boats are used for trawling, water sampling and other work near shore, and serve as diving platforms.

In addition, faculty and students at MLML utilize other University National Oceanographic Laboratory System (UNOLS) vessels when they have research requirements for larger vessels or for vessels in a different area of the world. MLML personnel have participated in cruises to Baja California, Hawaii, the Bahamas, Mexico, South America, the Arctic, and the Antarctic.

Graduate Program

A Master of Science in Marine Science degree program is offered at MLML for students from Cal State East Bay and the other consortium schools. Details of this program follow. In addition, graduate students from Cal State East Bay may take such courses at Moss Landing as are appropriate to their degree objectives, including that of an M.S. in Biological Science or an M.S. in Geology. (See the Biological Science and Geology chapters in the graduate section of this catalog.) A major part of the work leading to the M.S. degree in Biological Science, particularly in the environmental biology option, or to the M.S. degree in Geology, may be completed at the Marine Laboratories. Normally, a minimum of one or two quarters enrollment for other necessary courses on the Hayward campus may also be required.

Courses Offered

Full-time coursework and research in marine sciences are offered the year around. Emphasis in instruction and research is at the upper-division undergraduate and graduate levels. The Laboratories operate on a semester system during the academic year.
A total of thirty to forty units is offered each term in marine biological and physical sciences. Contact the Cal State East Bay Department of Biological Sciences for a current list of courses for the term you wish to attend, or you can write to Moss Landing Marine Labs, 8272 Moss Landing Road, Moss Landing, CA 95039. Basic courses offered every term include marine ecology, marine science diving, graduate seminar, and selected topics in marine sciences. See graduate course offerings listed at the end of this section. Also see the Marine Science chapter in the Undergraduate section of this catalog for undergraduate course listings.

Nature of Instructional Program

Classes usually are small, with major emphasis upon field and laboratory instruction, and with a strong independent study or directed research component. Coursework usually is organized into large blocks of time (all day on a given day). Since field and laboratory activities are more demanding of time and energy than is usual for on-campus courses, the staff recommends that the student limit his or her academic load to twelve units. While it is possible to commute to Moss Landing for part-time work, this is not recommended because of the time and energy drain. In addition to standard course offerings, independent study (undergraduate) and graduate research and thesis work may be undertaken under supervision of staff members currently in residence.

Research Areas and Emphases at Moss Landing

Stress is upon field-oriented studies of marine and estuarine ecosystems, with physical science research concerned particularly with geological, chemical, and physical limiting factors, and biological investigations dealing with relationships of organisms to these factors. Where possible, physical and biological studies are paired to provide reciprocal benefits from a team approach and from interdisciplinary faculty sponsorship. The near-shore shallow waters of Monterey Bay, Elkhorn Slough, and the deep waters of the Monterey Submarine Canyon provide a wide diversity of habitats.

Housing in Moss Landing Area

Commercial housing (apartments, small furnished houses, rooms with or without board, etc.) is available at communities near Moss Landing (Castroville, Salinas, Watsonville, Aptos, Monterey). Short-distance commuting from these areas is necessary; thus, availability of a car or participation in a car pool usually is required.

Registration Procedures

Since MLML courses are offered on the semester system (fall and spring semesters), there are special registration procedures.

Students must complete and submit a "Space Reservation" form to MLML (available through the Cal State East Bay Department of Biological Sciences and through MLML). Permission must be given by Cal State East Bay Biological Sciences for East Bay MLML students to register online. Students must also attend the first day of classes at MLML.

Fall and spring registration for MLML courses is at the same time as Cal State East Bay's regular fall and spring registration. Fall registration fees are paid at the same time as regular fall registration fees. Spring registration fees must be paid at the beginning of spring semester MLML classes (end of January).

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M.S. in Marine Science

Program Description

This degree program, offered through the Department of Biological Sciences and the Department of Earth and Environmental Sciences, provides the opportunity for students to acquire a practical and theoretical education in the marine sciences to prepare them for careers as marine specialists, scientists, and teachers. The program at Moss Landing provides interdepartmental work and a field facility for advanced study in the marine sciences which cannot be duplicated on the Cal State East Bay campus.

Admission to the Program

The master's degree program is administered through either the Department of Biological Sciences or Department of Earth and Environmental Sciences, depending on the choice of the student. The prospective student must meet the admission requirements of either of these departments. Refer to descriptions of these department graduate programs for complete information. Students will be accepted as "Conditionally Classified Graduate" students in the department of their choice upon completion of the admission requirements. The student will become a "Classified Graduate" student upon completion of MLML's requirements (below).

MLML Classification in the Program

A "Conditionally Classified Graduate" student may become a fully "Classified Graduate" student in the marine science program as set forth in the following steps:

1. Obtain an adviser at MLML and one from the science department at the home campus. Each new student in the master’s program at MLML will be assigned an adviser who may or may not be the final thesis advisor.
2. Make up any coursework deficiencies in either the home campus department (see their regulations) and/or at MLML. MSC 4104 Quantitative Marine Science, and three of the following five courses are prerequisites for "Classified Graduate" standing: MSC 4103 Marine Ecology, 4141 Geological Oceanography, 4142 Physical Oceanography, 4143 Chemical Oceanography, and 4144 Biological Oceanography. These courses may be waived by the graduate committee upon certification that equivalent courses have been satisfactorily completed. MSC 4104 Quantitative Marine Science cannot be counted toward the 45 unit degree requirement.
3. Students who do not receive a grade of "B" or better in the courses described in (2) above taken at MLML, or who wish to substitute equivalent courses taken elsewhere regardless of the grade(s) received, must petition to have the courses accepted, or must pass a written qualifying examination given by the faculty at MLML. The examination will substitute for any equivalent examination given by home campus departments. There is no official time limit, but the exam should be taken as soon as possible; only a limited number of units taken while in "Conditionally Classified" status can be counted toward the degree. The exam may be repeated once, and must be passed before the student can be "Classified." The examination will consist of a choice of five out of six questions designed to test knowledge of the concepts and principles of oceanography, marine ecology, and statistics as covered in the courses listed under (2) above. It will be used to evaluate the student's background in these subject areas and the ability to write well and formulate answers logically. Each answer will be graded “pass” or “fail” by two faculty members (a third faculty member will resolve disagreements) on accuracy, content, and ability to clearly communicate. For a reading list covering the required material and further details concerning the exam, see MLML’s Assistant to the Director.
4. Students must have satisfied the University Writing Skills Requirement according to Cal State East Bay standards. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Advancement to Candidacy

In order to be Advanced to Candidacy, the student must have:

1. Obtained a "B" or better in the coursework required for "Classified Graduate" standing. The coursework required for "Classified Graduate" standing includes the coursework described in (2) above, and the coursework described in (3) above.
2. Passed the written qualifying examination described in (3) above.
3. Completed twelve units of coursework in the marine science program, and have passed all courses with a grade of "B" or better.

4. Students must complete and submit a "Space Reservation" form to MLML (available through the Cal State East Bay Department of Biological Sciences and through MLML). Permission must be given by Cal State East Bay Biological Sciences for East Bay MLML students to register online. Students must also attend the first day of classes at MLML.

5. Fall and spring registration for MLML courses is at the same time as Cal State East Bay's regular fall and spring registration. Fall registration fees are paid at the same time as regular fall registration fees. Spring registration fees must be paid at the beginning of spring semester MLML classes (end of January).

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1. Attained "Classified Graduate" standing;
2. Selected a thesis problem and a thesis advisor committee. The thesis committee will be composed of at least three members, including one faculty member from MLML (who is ordinarily the thesis advisor) and, at the discretion of the home campus, a representative from that campus. The other member or members of the thesis committee may be from MLML, the home campus, or elsewhere, with the approval of the thesis advisor.

Curricular Requirements

A student becomes eligible for the master's degree in Marine Science after the following requirements have been satisfied:

1. The student has been Advanced to Candidacy
2. The student has satisfied MLML's requirements for the degree
3. The student has completed the following curriculum requirements:
   a. A minimum total of 22.5 quarter units of 6000-level courses (a minimum of 45 units), including 3 units of MSC 6285, 6286, or 6287, and 6 units of MSC 6910.
   b. A total of not more than 22.5 units of 3000-, 4000-, and/or 6000-level courses as approved by the thesis committee. Elective courses that may be used to satisfy requirements for the major are listed below by catalog number, title, and quarter units of credit:

   - MSC 4112 Marine Birds and Mammals (6)
   - MSC 4113 Marine Ichthyology (6)
   - MSC 4124 Marine Invertebrate Zoology I (6)
   - MSC 4125 Intertidal Invertebrates of California (4.5)
   - MSC 4131 Marine Botany (6)
   - MSC 4135 Physiological Ecology of Marine Algae (6)
   - MSC 6204 Sampling and Experimental Design (6)
   - MSC 6208 Scientific Methods (6)
   - MSC 6211 Ecology of Marine Birds and Mammals (6)
   - MSC 6233 Advanced Topics in Marine Ecology (1.5-6)
   - MSC 6234 Advanced Biological Oceanography (6)
   - MSC 6242 Plate Tectonics (4.5)
   - MSC 6261 Ocean Circulation and Mixing (6)
   - MSC 6262 Satellite Oceanography (6)
   - MSC 6263 Application of Computers in Oceanography (6)
   - MSC 6271 Population Biology (4.5)
   - MSC 6274 Advanced Topics in Oceanography (1.5-6)
   - MSC 6280 Scientific Writing (3)
   - MSC 6900 Independent Study (1.0-9)

   Other electives, including courses from the home campus departments, may be included after consultation with the advisory committee. The combination of required units (seminar and thesis) and elective units must total at least 45 quarter units.
4. The student must have submitted a University Thesis approved by the thesis advisory committee. The thesis must conform to the rules set forth in the Cal State East Bay "University Writing Guide," available online at: [www.csueastbay.edu/thesiswritingguide](http://www.csueastbay.edu/thesiswritingguide).
5. The student must successfully give an oral thesis defense in the form of a seminar open to the general public. The thesis advisory committee must be present, may require further oral questioning after the seminar, and will evaluate the success of the presentation.

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Graduate Courses

Units are quarter units, class hours are weekly on semester calendar.

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<tr>
<th>Biological Science (Course prefix: MSC)</th>
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<td>Course Number</td>
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<tr>
<td>6202</td>
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| 6221 | Advanced Topics in Marine Invertebrates (6) Advanced considerations of the ecology, physiology, and phylogeny of the various invertebrate phyla emphasizing current literature and research. Topics and emphasis vary from term to term. Prerequisites: MSC 4124 or consent of instructor. May be repeated for }
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<tr>
<th>Course Number</th>
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<tr>
<td>6202</td>
<td>Oceanographic Instrumentation (6) Principles of instruments used in oceanographic research, introduction to electronics, and applications of instrument measurements. Prerequisites: MSC 4141, 4142, and consent of instructor.</td>
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<td>6204</td>
<td>Sampling and Experimental Design (6) Basic design of experiments and field sampling; random sampling, systematic sampling, subsampling, survey techniques, and design of single and multifactorial experiments using randomized and block experimental designs. Prerequisites: MSC 4103 and 4104. Four hrs. lect.</td>
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<tr>
<td>6242</td>
<td>Plate Tectonics (4.5) Historical background, modern theory and geophysical evidence of continental drift, sea floor spreading and plate tectonics. Examinations of the impact of the recent revolution in historical geology. Prerequisites: MSC 4141 or consent of instructor. Three hrs. lect.</td>
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<tr>
<td>6246</td>
<td>Geology of the Monterey Bay Region (6) Geology, tectonic, and active, naturally occurring processes in the Monterey Bay region; geologic and tectonic history of central California, plate tectonic processes and representative stratigraphy and geomorphology of Monterey Bay region. Prerequisites: graduate standing and consent of instructor. Three hrs. lect., 9 hrs. lab.</td>
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<tr>
<td>6248</td>
<td>Marine Benthic Habitat Techniques (6) Collection and interpretation of geophysical data used to characterize marine benthic habitats. Basic geophysical principles will be reviewed. Application of techniques to identify and characterize marine benthic habitats, including echosounders, multibeam bathymetry and backscatter, sidescan sonar, seismic profiling, and GIS. Prerequisites: graduate standing and consent of instructor. Three hrs. lect., 9 hrs. lab.</td>
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<td>Course Number</td>
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| 6251          | Marine Geochemistry (6)  
Geochemical processes in the oceans: thermodynamics of low temperature aqueous reactions, weathering, oxidation-reducing and biologically mediated reaction, processes occurring at the sea floor and air-sea interface. Prerequisites: MSC 4143, quantitative analysis, one year of calculus, or consent of instructor. Two hrs. lect., 6 hrs. lab. |
| 6261          | Ocean Circulation and Mixing (6)  
The mathematical description of the distribution of properties (density, dissolved oxygen, etc.) in the oceans relating to physical and biochemical processes. Theory of distribution of variables, geostrophic method. Prerequisites: MSC 4142 and college physics strongly recommended; one year of calculus, or consent of instructor. Three hrs. lect., 3 hrs. lab. |
| 6262          | Satellite Oceanography (6)  
Physical principles of remote sensing with application to the oceans, including satellite image processing methods. Labs involve use of PC and Unix workstation. Strongly recommended prerequisite: MSC 6263. Prerequisites: MSC 4142 and 4144, or consent of instructor. Two hrs. lect., 5 hrs. lab. |
| 6263          | Application of Computers in Oceanography (6)  
Discussion and technical programming with MATLAB for computation and visualization with applications in marine sciences; use of existing program libraries for data I/O and analysis. Semester project required. Prerequisites: college math and consent of instructor. Two hrs. lect., 6 hrs. lab. |
| 6274          | Advanced Topics in Oceanography (1.5-6)  
The study of a selected area in oceanography. The subjects vary depending on student demand and availability of instructors. Prerequisite: consent of instructor. May be repeated for credit with consent of instructor. |
| 6900          | Independent Study (1.0-9) |
| 6910          | University Thesis (1.5-6)  
Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also “University Thesis Writing Guide,” www.csueastbay.edu/thesiswritingguide.) Prerequisite: graduate standing. Maximum of 6 quarter units per student. |

General (Course prefix: MSC)

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<th>Course Number</th>
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| 6201          | Graduate Studies in Marine Science: Library Research (1.5)  
Fundamental library skills to conduct library research and evaluate sources; extensive introduction to internet search tools; strong emphasis on ability to critically evaluate bibliographic tools and sources; copyright, intellectual property, and scholarly publishing. Prerequisites: graduate standing in MLML’s program, consent of instructor. |
Mathematics

Department Information

Department of Mathematics and Computer Science
College of Science
Office: North Science 335
Phone: (510) 885-3414
E-mail: mathcs@csueastbay.edu
Website: http://www.sci.csueastbay.edu/mathcs/
Student Service Center: North Science 337
Phone: (510) 885-4011

Professor Emeritus
Edward A. Billard, Ph.D. University of California, San Diego

Professors
Kevin A. Brown, Ph.D. University of South Carolina
Kevin E. Callahan (Chair), Ph.D. University of California, San Diego
Leann Christianson, Ph.D. University of South Carolina
James S. Daley, Ph.D. University of California, Berkeley
Julie S. Glass, Ph.D. University of California, Santa Cruz
Lynne L. Grewe, Ph.D. Purdue University
Kathleen Hann, Ph.D. University of California, Davis
Gary E. Lippman, Ph.D. University of California, Riverside
Michael K. Mahoney, Ph.D. University of California, Santa Barbara (FERP)
Massoud Malek, Ph.D. University of Houston
Edna E. Reiter, Ph.D. University of Cincinnati
Istvan Simon, Ph.D. Stanford University
Stuart Smith, Ph.D. University of California, Berkeley
William Thibault, Ph.D. Georgia Institute of Technology
Donald L. Wolitzer, Ph.D. Northeastern University
Ytha Y. Yu, Ph.D. University of California, Berkeley

Associate Professors
Levent Ertaul, Ph.D. University of Sussex (United Kingdom)
Hilary J. Holz, D.Sc. George Washington University
C. Matthew Johnson, Ph.D. College of William and Mary
Dan Jurca, Ph.D. Northwestern University
Chung-Hsing OuYang, Ph.D. University of California, Berkeley
Farzan Roohparvar, Ph.D. Iowa State University
David Yang, Ph.D. Columbia University

Assistant Professors
Roger W. Doering, Ph.D. University of California, Berkeley
Julia Olkin, Ph.D. Rice University
Ellen Veomett, Ph.D. University of Michigan
Shirley Yap, Ph.D. University of Pennsylvania

Graduate Coordinator: Donald L. Wolitzer

Program Description

The Mathematics and Computer Science Department offers graduate study leading to the degree of Master of Science in Mathematics. The goal of the faculty is to provide excellent instruction in advanced mathematics and to maintain a supportive environment for graduate students. Students who complete the program should be equipped for careers in community college teaching or positions in industry that require knowledge of mathematics beyond the undergraduate level. The M.S. degree in Mathematics can also serve as preparation for advanced study toward a Ph.D. degree in mathematics or a related field.

Our program features small classes that allow for close contact between students and faculty. Many graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Mathematics should speak with the Mathematics Graduate Coordinator.

Student Learning Outcomes

Students graduating with an M.S. in Mathematics from Cal State East Bay will have acquired the knowledge and skills listed below:

1. Technical competence including uses of calculus, linear systems, differential equations; understanding of axiomatic systems; ability to read and create proofs; ability to analyze and classify structures in different areas of mathematics;
2. A fundamental understanding of Mathematics theory including: (a) applications of calculus, linear systems; (b) relations of algebraic systems and classical problems; and (c) roles of definitions and proofs in algebra and analysis;
3. A command of the fundamental areas of Applied Mathematics, Theoretical Mathematics, or the teaching of Mathematics; the ability to
read mathematical articles;
4. Ability to work effectively as team members;
5. An understanding of their professional and ethical responsibilities and appreciation of the impact of mathematics in the societal context;
6. Ability to communicate effectively, both in written and oral form.

Career Opportunities
A number of former Cal State East Bay students currently hold positions as community college mathematics teachers. Others have found the M.S. degree in mathematics to be an ideal preparation for further studies at doctorate-granting institutions and have continued by working towards a Ph.D. degree in mathematics or a related field such as operations research, physics, or economics. A number of these alumni are now professors at four-year institutions. Still others are in mathematics-related careers in industry.

Faculty
The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas of specialization and offer courses encompassing a broad range of pure and applied mathematics, including standard graduate mathematics courses as well as courses in new areas. Areas of emphasis include numerical analysis, pure and applied algebra, differential equations, real and complex analysis, topology, geometry, mathematical optimization, computer simulation, probability, statistics, and selected topics in applied mathematics.

Special Features
Each quarter, a limited number of teaching positions are available to qualified graduate students. These positions, which generally involve teaching one lower division mathematics course per quarter, provide valuable experience, especially for those who intend to become community college teachers. The department also employs qualified students as paper graders.

Mathematics students have access to modern computer equipment, including various mathematical software packages.

The CSUEB Mathematics Club is open to all interested students. This club features lectures by students and faculty and offers a variety of social activities.

Scholarships
Each year the department awards a number of scholarships for the subsequent year. Scholarship applications may be obtained from the department office during the winter quarter.

Options
There are three options available. Option I emphasizes coursework drawn from fundamental branches of mathematics: algebra, topology, and real and complex analysis. Option II, Mathematics Teaching, is intended for those who hold secondary teaching credentials and who intend to pursue a career in secondary education. Option III, Applied Mathematics, is designed to expose students to various aspects of applied mathematics, while allowing some coursework in "pure" mathematics as well. Students who intend to become community college teachers or go on to further graduate study should select Option I or Option III.

Option I
Admission
To enter the program with "Classified Graduate" status, a student must have completed at least 36 quarter units of acceptable upper division mathematics with a grade point average of "B" or higher. Included among these units must be courses in:

- Analysis
- Abstract algebra
- Linear algebra theory
- Differential equations

A student may be admitted to the program with "Conditionally Classified Graduate" status while making up course or grade point deficiencies. Units taken to meet any course deficiencies may not be applied toward the master's degree, and no more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree.

A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or higher average in at least 12 quarter units of postbaccalaureate study, and has satisfied the University Writing Skills Requirement, should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status.

Advancement to Candidacy
A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units toward the master's degree with a "B" or higher average, including at least two 6000-level mathematics courses with a "B" or higher average. Before being Advanced to Candidacy, a student's complete course of graduate study must be approved by the Mathematics Graduate Studies Committee.

Degree Requirements
The following departmental requirements must be satisfied:

A. The following four courses (or their equivalents) must be completed, either as an undergraduate or as a graduate student:
   - MATH 4121 Advanced Algebra (4)
   - MATH 4340 Introduction to Complex Variables (4)
   - MATH 4350 Theory of Functions of a Real Variable (4)
   - MATH 4360 Introduction to Topology (4)

B. The 45 quarter units applied to the degree must include:
   1. At least 24 quarter units of 6000-level courses, of which at least 20 quarter units are mathematics courses. Credit will be given for the seven MATH courses (MATH 6015-6065, and 6899), only with the permission of the Mathematics Graduate Committee.
   2. At least two of the following four courses:
      - MATH 6121 Topics in Advanced Algebra I (4)
      - MATH 6201 Topology (4)
      - MATH 6340 Complex Analysis (4)
In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Option II (Mathematics Teaching)

Admission

The M.A.T.H. (Mathematics and Teaching at Hayward) option is available only to holders of teaching credentials, unless special permission is obtained. In order to be admitted to the master's degree program with "Classified Graduate" status, a student must have completed 24 or more quarter units of acceptable upper division mathematics with an average of "B" or higher. A student may be admitted to the program with "Conditionally Classified Graduate" status while making up course or grade point deficiencies. Units taken to meet any course deficiencies may not be applied toward the master's degree, and no more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree. A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or higher average in at least 12 quarter units of post-baccalaureate study, and has satisfied the University Writing Skills requirement, should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status.

Advancement to Candidacy

A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units of work toward the master's degree with a "B" or higher average.

Before being Advanced to Candidacy, a student's complete course of study must be approved by the Mathematics Graduate Studies Committee.

Degree Requirements

The following departmental requirements for the M.S. degree are in addition to the general University requirements:

A. Six M.A.T.H core courses (24 units)
   - MATH 6015 Algebra for Teachers (4)
   - MATH 6025 Geometry for Teachers (4)
   - MATH 6035 Analysis for Teachers (4)
   - MATH 6045 Mathematics in the Sciences (4)
   - MATH 6055 Discrete Mathematics (4)
   - MATH 6065 Connections in Mathematics (4)

B. Two Teacher Education courses selected from the following (8 units):
   - TED 6010 Seminar in Teaching and Learning Mathematics (4)
   - TED 6011 Seminar in Diagnosis and Development of Learning Difficulties in Mathematics (4)
   - TED 6030 Seminar in Problem Solving and Critical Thinking in Mathematics (4)
   - TED 6040 Advanced Curriculum and Instruction in Mathematics (4)

C. An upper division or graduate-level course offered by the Statistics Department and approved by the Math Graduate Coordinator (4 units)

D. One or two upper division or graduate electives approved by the Math Graduate Coordinator (4-8 units)

E. MATH 6899 Project (1-5 units)

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills Requirement.

Option III (Applied Mathematics)

Admission

To enter the program with "Classified Graduate" status, a student must have completed a course in computer science and at least 36 quarter units of acceptable upper division mathematics, statistics, or computer science courses with a grade point average of "B" or higher. Included among these units must be courses in:

- Analysis
- Abstract algebra
- Linear algebra theory
- Differential equations

A student may enter the program with "Conditionally Classified Graduate" status while making up course or grade point deficiencies. Units taken to meet course deficiencies may not be applied toward the master's degree, and no more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree.

A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or higher average in at least 12 quarter units of post baccalaureate study, and has satisfied the University Writing Skills Requirement, should petition the department graduate coordinator for a change to " Classified Graduate" status.

Advancement to Candidacy

A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units towards the master's degree with a "B" or higher average, including at least two 6000-level mathematics courses with a "B" or higher average.

Before being Advanced to Candidacy, a student's complete course of study must be approved by the Mathematics Graduate Studies Committee. In particular, approval must be obtained for any course(s) taken outside the Mathematics and Computer Science Department.

Degree Requirements

The following departmental requirements must be satisfied:
### Graduate Degree Information

At the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

### Upper Division Mathematics, Computer Science, and Statistics Courses Acceptable for M.S. in Mathematics

- Upper division and graduate computer science courses may be used with the approval of the Mathematics Graduate Studies Committee.

#### A. The following four courses (or their equivalents) must be completed, either as an undergraduate or as a graduate student:

- MATH 3301 Analysis II (4)
- MATH 3401 Introduction to Probability Theory I (4)
- MATH 3750 Numerical Analysis I (4)
- MATH 3841 Linear Programming (4)

#### B. The 45 quarter units applied to the degree must include:

1. At least 22 1/2 quarter units of 6000 level courses of which at least 18 are mathematics courses. Credit will be given for the seven MATH courses (MATH 6015-6065, and 6899), only with the permission of the Mathematics Graduate Committee.

2. At least two of the following five courses:

   - MATH 6100 Applied Algebra (4)
   - MATH 6331 Topics in Differential Equations (4)
   - MATH 6401 Advanced Probability I (4)
   - MATH 6750 Topics in Advanced Numerical Analysis (4)
   - MATH 6870 Computer Simulation (4)

#### C. A comprehensive examination must be passed. Details are available in the department office.

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter at the beginning of the graduate section of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

## Graduate Courses

### Course prefix: MATH

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td><strong>6005</strong></td>
<td>Teaching Mathematics at the University Level (1) Theory, methodology, and practical experience in the teaching of mathematics at the university level. Includes discussion of lecturing techniques, analysis of tests and supporting material, preparation and grading of examinations, and related topics. Required of departmental teaching associates. Prerequisites: graduate standing and permission of department. May be repeated for credit, but only two units can be used toward the M.S. degree.</td>
</tr>
<tr>
<td><strong>6100</strong></td>
<td>Applied Algebra (4) A survey course covering significant areas of applied algebra. Topics might include applied matrix theory, game theory, convexity and inequalities, and/or algebraic coding theory. Prerequisite: MATH 3100 or equivalent. May be repeated once for credit with consent of Mathematics Graduate Studies Committee, for a maximum of 8 units.</td>
</tr>
<tr>
<td><strong>6121</strong></td>
<td>Topics in Advanced Algebra I (4) Continuation of MATH 4121. Topics include ideals, commutative rings, modules; field extensions and Galois theory. Prerequisite: MATH 4121.</td>
</tr>
<tr>
<td><strong>6125</strong></td>
<td>Introduction to Lie Algebras (4) An introduction to the theory of semisimple Lie algebras. Theorems of Lie, Engel, and Weyl; Cartan's Criterion; the classification of root systems; and abstract theory of weights. Prerequisite: MATH 3100 or consent of instructor.</td>
</tr>
<tr>
<td><strong>6130</strong></td>
<td>Finite Group Representations and Applications (4) Reducible and irreducible representations, Maschke's theorem, characters, Schur's lemmas, orthogonality theorems, the group algebra, induced representations and Frobenius reciprocity, Young tableaux and representations of the symmetric group, applications in chemistry and physics. Prerequisite: Math 3100 and 3121 or consent of instructor. A-F grading only.</td>
</tr>
<tr>
<td><strong>6151</strong></td>
<td>Advanced Topics in Graph Theory (4) Advanced course in graph theory. Connectivity, planarity, and graph coloring. Advanced topics which may include substructures in graphs and Ramsey Theory, Random Graphs, Spectral Graph Theory. Prerequisites: MATH 3100 and graduate standing. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. A-F grading only.</td>
</tr>
<tr>
<td><strong>6201</strong></td>
<td>Topology (4) Continuation of MATH 4360. Topics may include countability and separation axioms, Tychonoff theorem, metrization theorems, homotopy theory. Prerequisite: MATH 4360.</td>
</tr>
<tr>
<td><strong>6210</strong></td>
<td>Convex Polytopes/Combinatorial Geometry (4) Convex sets including convex hulls, supporting hyperplanes and duality. Convex polytopes, including simple, simplicial, and cyclic polytopes. Combinatorial theory, including Euler's Relations, Dehn-Somerville Relations and Upper Bound Theorem. Prerequisites: MATH 3100 and 3300 or consent of instructor.</td>
</tr>
<tr>
<td><strong>6235</strong></td>
<td>Introduction to Knot Theory (4) Introduction to the theory of knots and links. Reidemeister moves, knot invariants, including 3-colorings, linking number, Alexander polynomial, Kauffman bracket and Jones polynomial. Applications in biology and/or chemistry will be discussed, time permitting. Additional work required for graduate level credit. Prerequisite: MATH 3121.</td>
</tr>
<tr>
<td><strong>6250</strong></td>
<td>Topics in Differential Geometry and Topology (4) Topics in differential geometry and topology such as manifolds, bundles, differential forms, curvature, theorems of Sard-Smale, Poincare-Hopf, Gauss-Bonnet, de Rham, and Hodge. Prerequisites: MATH 3100, 3301, or consent of instructor.</td>
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<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6251</td>
<td>Symplectic Geometry (4)</td>
<td>Introduction to Symplectic Geometry. Symplectic linear algebra, groups, Lie algebras, and manifolds. Darboux-Weinstein theorem, relation to optics and Hamiltonian dynamics, moment maps, and geometric quantization. Prerequisites: MATH 3100 and 3300, or consent of instructor. A-F grading only.</td>
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</tr>
<tr>
<td>6260</td>
<td>Computation and Complexity (4)</td>
<td>(See CS 6260 for course description.)</td>
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<tr>
<td>6331</td>
<td>Topics in Differential Equations (4)</td>
<td>Topics selected from the theory of ordinary and partial differential equations. Prerequisites: MATH 3100, 3331, 3301, or instructor's permission. May be repeated twice for credit with consent of Mathematics Graduate Studies Committee and when content varies, for a maximum of 12 units.</td>
<td></td>
</tr>
<tr>
<td>6340</td>
<td>Complex Analysis (4)</td>
<td>Cauchy integral formula, Mittag-Leffler's theorem, Weierstrass' factorization theorem, normal families, Riemann mapping theorem, and selected topics. Prerequisite: MATH 4340.</td>
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<tr>
<td>6350</td>
<td>Real Analysis (4)</td>
<td>Theory of Lebesgue measure and integration on the real line. Selected topics and applications. Prerequisite: MATH 4350.</td>
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</tr>
<tr>
<td>6401, 6402</td>
<td>Advanced Probability I, II (4, 4)</td>
<td>(See STAT 6401, 6402 for course description.)</td>
<td></td>
</tr>
<tr>
<td>6501, 6502</td>
<td>Mathematical Statistics I, II (4, 4)</td>
<td>(See STAT 6501, 6502 for course description.)</td>
<td></td>
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<tr>
<td>6510</td>
<td>Analysis of Variance (4)</td>
<td>(See STAT 6510 for course description.)</td>
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</tr>
<tr>
<td>6600</td>
<td>Advanced Number Theory (4)</td>
<td>Topics in number theory such as algebraic number fields, continued fractions, geometry of numbers, theory of partitions, distribution of primes, factoring algorithms and quadratic forms. Prerequisites: MATH 3121 and 3600 or consent of instructor. May be repeated once for credit with consent of the Mathematics/Computer Science department chair, for a maximum of 8 units.</td>
<td></td>
</tr>
<tr>
<td>6750</td>
<td>Topics in Advanced Numerical Analysis (4)</td>
<td>Topics selected from approximation theory; spline theory; numerical linear algebra; the algebraic eigenvalue problem; numerical solutions to non-linear systems of equations, partial differential equations, and boundary value problems. Prerequisites: MATH 4750 and 3301 or instructor's permission. May be repeated twice for credit with consent of Mathematics Graduate Studies Committee and when content varies, for a maximum of 12 units. Cross-listed with CS 6750.</td>
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</tr>
<tr>
<td>6840</td>
<td>Advanced Topics in Linear Optimization (4)</td>
<td>Topics selected from network algorithms, integer programming, game theory, and other areas related to linear programming. Prerequisite: MATH 3841. May be repeated once for credit with consent of Mathematics Graduate Studies Committee, for a maximum of 8 units. A-F grading only.</td>
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</tr>
<tr>
<td>6841</td>
<td>Nonlinear Optimization (4)</td>
<td>Optimality conditions and solution procedures for unconstrained and constrained optimization problems. Prerequisite: MATH 3841.</td>
<td></td>
</tr>
<tr>
<td>6842</td>
<td>Advanced Topics in Optimization (4)</td>
<td>Topics selected from quasi-Newton methods for multi-variable unconstrained optimization; nonlinear least squares; quadratic programming; constrained optimization with nonlinear constraints; convex optimization. Prerequisite: Math 3750 and Math 3841, or permission of instructor. May be repeated once for credit with consent of Mathematics Graduate Studies Committee, for a maximum of 8 units.</td>
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</tr>
<tr>
<td>6870</td>
<td>Computer Simulation (4)</td>
<td>(See CS 6870 for course description.)</td>
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</tr>
<tr>
<td>6875</td>
<td>Topics in Mathematical Physics (4)</td>
<td>Advanced mathematics theory and methods with applications to physics. Prerequisite: MATH 1305. Co-requisite: MATH 2304. May be repeated for credit when content varies, for a maximum of 8 units.</td>
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</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
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<tr>
<td>6910</td>
<td>University Thesis (1-6)</td>
<td>Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, &quot;University Thesis Writing Guide,&quot; <a href="http://www.csueastbay.edu/thesiswritingguide">www.csueastbay.edu/thesiswritingguide</a>.) Prerequisite: graduate standing. Maximum of 6 units per student.</td>
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</tbody>
</table>

Mathematics Education (M.A.T.H. Option Courses) (Course prefix: MATH)
<table>
<thead>
<tr>
<th>Course Number</th>
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</table>
| 6015         | Algebra for Teachers (4)  
Polynomials, groups, fields, and rings from an advanced standpoint as they relate to the high school algebra curriculum. Discussion of strategies to help secondary students develop their algebraic thinking skills. **Prerequisite: permission of instructor.** |
| 6025         | Geometry for Teachers (4)  
Rigorous development of a non-Euclidean geometry, such as spherical, projective, or hyperbolic geometry. Models and technology used where appropriate. Discussion of implementation strategies for teaching geometry and proof techniques for high school students. **Prerequisite: permission of instructor.** |
| 6035         | Analysis for Teachers (4)  
A rigorous development of calculus. The real line, functions, limits, continuity, differential and integral calculus. Technology used to develop an intuitive understanding of calculus which can be implemented in the high school classroom. **Prerequisite: permission of instructor.** |
| 6045         | Mathematics in the Sciences (4)  
Mathematics as found throughout the sciences. The mathematics used to model phenomena in biology, chemistry and/or physics. Students discover some of this mathematics through scientific experiments. **Prerequisite: permission of instructor.** |
| 6055         | Discrete Mathematics (4)  
Topics in discrete mathematics relating to the high school curriculum such as combinatorics, number theory, and graph theory. **Prerequisite: permission of instructor.** |
| 6065         | Connections in Mathematics (4)  
Topics which illustrate connections between different fields and applications of mathematics such as neural networks, tomography, coding theory, symmetry groups, optimization theory, and applications found in differential equations or complex analysis. **Prerequisite: permission of instructor.** |
| 6899         | Project (1-5)  
Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required. **Prerequisite: graduate status. Maximum of 5 units per student.** |
| 6900         | Independent Study (1-4)  
|
Multimedia

- Department Information
- M.A. in Multimedia
- Graduate Courses

Department Information

Multimedia Graduate Program
College of Letters, Arts, and Social Sciences

Office: Art and Education 1231 Phone (510) 885-3204
Email: multimedia@csueastbay.edu
Website: http://multimedia.csueastbay.edu

Professor Emeritus James F. Petrillo (Art), M.I.D. Pratt Institute (New York)
Professor Phillip Hofstetter (Art), M.A. California State University, Hayward
Associate Professors Gwyan Rhabyt (Art), M.F.A. California College of Arts and Crafts
Assistant Professors Janet Green (Art), M.A. California State University, Hayward Rafael Hernandez (Music), D.M. Indiana University

Graduate Coordinator: Rafael Hernandez

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M.A. in Multimedia

Program Description

The Multimedia master's degree is a unique interdisciplinary program that focuses on the creative and technical aspects of new technology to create, control, deliver, and present meaningful content in a variety of interactive forms. This degree draws upon elements from a number of fields, including art, computer science, education, business, and telecommunications.

The Multimedia graduate program mirrors real-world conditions by emphasizing teamwork and project-oriented goals. Students learn the skills needed to adapt quickly to new environments, a valuable asset for any profession. Because multimedia is a rapidly developing and rapidly changing field, the program focuses as much on the enduring creative processes as on the transient technology.

The Multimedia master's is a two-year degree program. Most coursework is offered in the evening. During the first year, students develop a theoretical foundation in multimedia technology, enhance their creative skills and learn to work effectively in teams. During the second year, small teams of students with various backgrounds and talents create innovative, professional-quality, interactive multimedia projects. Ideas for group projects can originate from students, faculty, or external sources. Many of our student projects have won national and international awards.

Students in the Multimedia graduate program enjoy a number of benefits including small student-teacher ratios and a dedicated interdisciplinary environment.

Student Learning Outcomes

Students graduating with an M.A. in Multimedia from Cal State East Bay will: (1) be proficient in digital imaging, interactive production, and audio production; (2) be familiar with current trends in multimedia; (3) understand the relationship between Interactive design and learning theories; (4) have an understanding of the effects of media and the evolution of information across a variety of media types; (5) understand how to draft a business plan; (6) have a base knowledge of business practices as they apply to Multimedia; (7) have the ability to produce work in a team-based environment; (8) produce an interactive thesis project that demonstrates a novel and/or creative use of a single or combination of interactive technologies within a team; (9) create written documentation of the Thesis Project that conforms to the guidelines of the department.

Career Opportunities

The Multimedia graduate program prepares students for successful careers in the new and thriving multimedia industry. As the only multimedia master's program in the state, it leads the way in training future multimedia producers and artists. Graduates can seek employment in positions where they work in teams or individually to produce artistic and commercial multimedia materials. Potential places of employment include film and video studios, graphic and exhibition design studios, production and post-production houses, publishers, corporate training and communication groups, support groups for scientific visualization, support groups for educational institutions.

Added career-oriented features of the Multimedia graduate program are its location in the San Francisco Bay Area, home to the hottest interactive digital media industry in the world.

Faculty

This is an interdisciplinary program involving all four colleges in the university. The program is administered by a Multimedia Program Committee comprised of one faculty member from each college. Committee members typically include faculty from the departments of Art, Management and Finance, Mathematics and Computer Science, and Interdisciplinary Studies in Education. The Graduate Dean serves as a member of the Committee.

Admission

Applicants are individually evaluated for admission to the Multimedia graduate program using the following criteria:

- A minimum GPA of 3.0 in the last 90 units of undergraduate work
- A portfolio of work reflecting the applicant's talents and abilities in digital and interactive media
- Evidence of professional experience in related fields

In addition to submitting a university application and application fee to the Admissions Office, applicants must complete a departmental...
application and submit it along with a statement of purpose, resume, work sample, two reference letters, and copies of academic transcripts. Applicants are selected by an admissions panel of the Multimedia Program Committee.

Students are admitted for the Fall quarter only. The application deadline is March 1. No entrance exam is required for admission; however, international students must take the TOEFL exam and pass with a score of 213 or better.

Applicants who have not completed all prerequisite requirements may be placed in "Conditionally Classified Graduate" status if they can demonstrate the ability to complete these requirements.

Requirements for Continuation

Once admitted to the program, students must satisfy further requirements, e.g., they must satisfy the University Writing Skills Requirement. Students who have completed all the prerequisite requirements and the University Writing Skills Requirement are given "Classified Graduate" status. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661. Advancement to Candidacy is a university requirement for graduation. A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 20 quarter units towards the master's degree with a grade of "B" or higher in all classes. Before being Advanced to Candidacy, a student's complete course of study and progress must be approved by the Multimedia Program Committee.

Curricular Requirements (52 units)

I. Required Courses (44 units)
   - MM 6100 Tech I: Principles of Digital Multimedia (4)
   - MM 6101 Multimedia Seminar (4)
   - MM 6102 Application of Learning Theories to Multimedia Design (4)
   - MM 6103 Business Basics in Multimedia (4)
   - MM 6110 Tech II: Multimedia Network and Hardware Development (4)
   - MM 6120 Tech III: Multimedia Software Development (4)
   - MM 6805 Forum (1) (Must be repeated for a total of 4 units)
   - MM 6860 Introduction to Multimedia Project Development (4)
   - MM 6870 Multimedia Development I (4)
   - MM 6880 Multimedia Development II (4)
   - MM 6899 Project (4)

II. Electives (8 units)
   Select eight units of electives under advisement of graduate coordinator.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 39-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Graduate Courses

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<th>Course Number</th>
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<tr>
<td>6100</td>
<td>Tech I: Principles of Digital Multimedia (4)</td>
</tr>
<tr>
<td>6101</td>
<td>Multimedia Seminar (4)</td>
</tr>
<tr>
<td>6102</td>
<td>Application of Learning Theories to Multimedia Design (4)</td>
</tr>
<tr>
<td>6103</td>
<td>Business Basics in Multimedia (4)</td>
</tr>
<tr>
<td>6110</td>
<td>Tech II: Multimedia Network and Hardware Development (4)</td>
</tr>
<tr>
<td>6120</td>
<td>Tech III: Multimedia Software Development (4)</td>
</tr>
<tr>
<td>6350</td>
<td>Audio Production for Multimedia (4)</td>
</tr>
<tr>
<td>6805</td>
<td>Forum (1)</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<td>-------------</td>
<td>--------------------------------------------------------</td>
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<tr>
<td>6860</td>
<td>Introduction to Multimedia Project Development (4)</td>
</tr>
<tr>
<td>6870</td>
<td>Multimedia Development I (4)</td>
</tr>
<tr>
<td>6880</td>
<td>Multimedia Development II (4)</td>
</tr>
<tr>
<td>6898</td>
<td>Cooperative Education (1-8)</td>
</tr>
<tr>
<td>6899</td>
<td>Project (4)</td>
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<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
</tr>
<tr>
<td>6999</td>
<td>Issues in Multimedia (4)</td>
</tr>
</tbody>
</table>
Music

Department Information

Department of Music
College of Letters, Arts, and Social Sciences
Office: Music and Business Bldg. 2571
Phone: (510) 885-3135 FAX: (510) 885-3461
Email: music@csueastbay.edu
Website: music.csueastbay.edu

Professors Emeriti
Frank J. La Rocca, Ph.D. University of California, Berkeley
Ellen Wassermann, M.M. Peabody Conservatory

Associate Professor
Buddy O. James, D.M.A. University of Southern California

Assistant Professors
Wesley J. Broadnax, D.M.A. Michigan State University
John Eros, Ph.D. The University of Michigan, Ann Arbor
Rafael Hernandez (Chair), D.M. Indiana University
Peter K. Marsh, Ph.D. Indiana University
Johannes P. Wallmann, Ph.D. New York University

Graduate Coordinator: Peter K. Marsh

M.A. in Music

Program Description

The Master of Arts degree in Music is designed for those individuals pursuing careers as public or private school teachers for professional performers and composers, for school and college music teachers who wish to increase their professional effectiveness, and for those who plan further music study at the doctoral level. Courses emphasize scholarly performance and include in-depth work and research in the student’s major field of interest. The ultimate goal of the Department of Music is to develop well-informed performers, independent scholars, and inspired teachers.

Student Learning Outcomes

Students graduating with an M.A. in Music from Cal State East Bay should have: (1) skill in the composition of works having substantial technical and artistic merit; (2) skill in the ability to analyze the significant compositional techniques and stylistic elements of musical works representing a broad span of Western music history; (3) skill in the performance of technically and artistically substantial works of Western European classical music; (4) skill in the analysis of instrumental and choral music, relating to theory, structural and stylistic concepts used during rehearsal; and the development of advanced conducting techniques.

Faculty

The Department of Music faculty have achieved an enviable reputation for their high degree of academic, professional, and classroom expertise. Faculty, students, and alumni are proud of the program and its success in graduating well-prepared students who have continued to work in the music field locally, nationally, and internationally. The programs of the Department of Music are fully accredited by the National Association of Schools of Music.

Areas of Emphasis

Within the M.A. degree program, students will concentrate their study in one of four areas of emphasis: (1) Performance, (2) Composition-Theory, (3) Music Education, and (4) Music History and Literature.

Performance

The performance emphasis is designed to prepare the student as a professional performer or teacher through the advancement of instrumental or vocal skills and the study of selected historical, stylistic, and theoretical courses. An audition is required before a student is accepted into this area of emphasis. Performance of a Graduate Recital is a major goal of this program. Graduate performance students will receive a sixty-minute lesson each week of the regular quarter.

Composition-Theory

This area of emphasis is designed for the student who wishes to continue developing toward a professional level as a composer and who wishes to continue further study of music theory. Most students in this program aim toward careers as professional composers and teachers. Some continue into doctoral programs at other universities. Composition students are given a sixty-minute lesson each week. The successful completion of a substantial original composition, accompanied by a written analysis, is required for students in this area.

Music Education

Courses in Music Education are designed to deal with the practical aspects of teaching music in the public and private schools. Emphasis is placed on conducting skills, conceptual teaching, rehearsal techniques, organizational procedures, and appropriate pedagogical approaches for all levels of teaching development. Students who adopt this emphasis usually will have had previous teaching experience, but this program is open to all qualified applicants. A standard thesis or project is a requirement in this area.

Music History and Literature
This area of emphasis is designed to give sufficient academic work and background to those students who wish to continue graduate study at the doctoral level or for students wishing to teach in the areas of history, literature, and music appreciation. Classes offered by the Department of Music cover all the major historical periods and specific historical studies are offered as seminars. A student who pursues this option is expected to be able to do independent research and will complete a standard thesis.

Scholarships

Scholarships, including the Graduate Equity Fellowships, are available for new and continuing graduate students. Contact the Department of Music office at (510) 885-3135 for more information.

Admission Requirements

Upon making application to the program, a candidate may be admitted for graduate study in the Department of Music as a "Conditionally Classified Graduate" student if: (1) the general requirements for graduate standing have been met, and (2) the student holds a baccalaureate degree with a major in music and an upper division grade point average of at least 3.0 ("B") in music.

Students wishing to enroll in the graduate program who do not have a major in music must first complete an equivalency of the Cal State East Bay B.A. degree major in Music. When the equivalency has been completed, the student will then be eligible for entrance into the graduate program, subject to the entrance requirements stated above.

Graduate Music Advisory Examinations

The Graduate Music Advisory Examinations, given by the Department of Music, must be taken prior to the beginning of the student's first quarter in residence. These examinations include dictation, theory, history and literature, and piano proficiency. Contact the department for the date of these examinations.

Graduate Entrance Audition—Performance, Composition

All graduate applicants seeking admission into the Performance or Composition-Theory areas of emphasis must perform an audition or submit original scores prior to being accepted for graduate level applied lessons. These evaluations are held prior to the registration period for the fall, winter and spring quarters. Performance auditions are twenty minutes in length. Composition students should submit tapes and scores of their original scores prior to being accepted for graduate level applied lessons. These evaluations are held prior to the registration period for the fall, winter and spring quarters. Performance auditions are twenty minutes in length. Composition students should submit tapes and scores of their original compositions for evaluation. Contact the department for the date of these auditions.

Classification in the Program

A student may be a "Classified Graduate" student if (s)he:

1. Has completed all undergraduate deficiencies;
2. Has completed at least 12 quarter units in residence at the 6000-level applicable toward the master's degree, including Music 6000, with a minimum grade point average of 3.0;
3. Has passed the Graduate Advisory Examinations in basic piano proficiency, ear training, music history and literature, and music theory. The Graduate Advisory Examinations must be passed by the time the student has completed 20 units applicable to the degree or the student will be dropped from the program;
4. As a graduate student pursuing the history-literature area of emphasis, has demonstrated reading ability in French, German, or Italian; other languages may be substituted by approval of the department;
5. Has fulfilled the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Advancement to Candidacy

A student who holds "Classified Graduate" standing may be considered for Advancement to Candidacy when (s)he:

1. Has filed a study program for the completion of the degree which has been approved by the departmental Graduate Studies Committee;
2. If electing the performance emphasis, has successfully demonstrated a graduate standard of excellence before an auditions committee.

Degree Requirements

To be eligible for the Master of Arts degree a student must:

A. Be Advanced to Candidacy;
B. Complete 45 units of approved courses of which:
   1. 32 must be completed in residence;
   2. 24 must be at the 6000 level;
   3. A minimum of 9 units must be in one of the four possible areas of emphasis: composition-theory, history-literature, music education, or performance;
   4. Not more than 12 units of applied music will be counted in the performance area of emphasis;
   5. Up to, but no more than 3 units of applied music, when approved by an advisor, may be applied toward degree requirements by candidates outside the performance area of emphasis;
   6. At least 3 units in addition to those in the area of emphasis must be completed in each of the following areas: composition-theory, history-literature, and music education;
   7. Up to, but no more than 9 units of study outside of music may be counted toward the degree (these units must be approved by a graduate advisor and must be at the 3000 level or above);
C. Present a thesis or project in one of the following forms:
   1. In the history-literature area, a standard research thesis (University Thesis, MUS 6910);
   2. In the composition-theory area, an original composition;
   3. In the music education area, either a standard research thesis (University Thesis, MUS 6910) or a project (Project, MUS 6899);
   4. In the performance area, a final graduate recital;
D. Pass both written and oral examinations upon completion of all coursework. (Students who do not complete a thesis or project are required to pass a comprehensive examination.)

The candidate must observe the specific departmental requirements stated here and in the Handbook for Graduate Music Majors.

Curricular Requirements (45 units)

I. Core Classes (12-15 units)
**MUS 6000 Seminar in Bibliography and Research Methods (3)**
- Analysis of specialized bibliography and methodology employed in the four main areas of music history/literature, theory and composition, music education, and performance. Individual research on selected topics. Required for Advancement to Candidacy.
- Prerequisite: graduate standing in music or consent of the instructor.

**6085 Interactivity with Sound & Music I (4)**
- Rudiments of hardware and software connectivity between different devices and programs for sound and music. Topics include the use of MIDI, Open Sound Control, and non-musically focused technology to create new sounds and musical experiences.
- Prerequisite: graduate standing or consent of instructor.

**6086 Interactivity with Sound & Music II (4)**
- Continuation of Interactive Sound & Music I. Detailed study of the use of consumer hardware in conjunction with software protocols for controlling sound and music over computer networks. Rudimentary algorithmic music composition.
- Prerequisite: MUS 6085 or consent of instructor.

**6899 Project (1-3)**
- Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required.
- Prerequisite: graduate standing. Maximum of 3 units per student.

**6910 University Thesis (1-6)**
- Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, "University Thesis Writing Guide," [www.csueastbay.edu/thesiswritingguide](http://www.csueastbay.edu/thesiswritingguide).)
- Prerequisite: graduate standing. Maximum of 6 units per student.

**6999 Issues in Music (4)**
- Readings, discussion, and research on contemporary and/or significant issues in music. May be repeated for credit when content varies, for a maximum of 8 units.
### Course Number | Course Information
--- | ---
**6380** | Advanced Conducting (Choral I) (3)
- Analysis, interpretation, score reading, and actual experience in conducting in an advanced rehearsal situation. **Prerequisites:** MUS 3380, 3390, or equivalents. May be repeated once for credit with consent of instructor, for a maximum of 6 units.

**6390** | Advanced Conducting (Instrumental II) (3)
- Analysis, interpretation, score reading, and actual experience in conducting in an advanced rehearsal situation. **Prerequisite:** MUS 3390 or equivalent. May be repeated once for credit with consent of instructor, for a maximum of 6 units.

**6415** | Seminar in Developing Music Concepts Through the Rehearsal (3)
- Analysis of selected instrumental and choral music to discover theory, structural, and stylistic concepts which may be developed during the rehearsal. **Prerequisite:** graduate standing in music or consent of instructor.

#### Music History and Literature (Course prefix: MUS)

### Course Number | Course Information
--- | ---
**6100** | Seminar in History of Western Music (4)
- Advanced review of the history of Western music from the Medieval period to the present. Emphasis on stylistic, formal, and theoretical development. **Prerequisite:** graduate standing or consent of instructor. Not for credit toward M.A. degree in music.

**6105** | History of Music, Medieval to Renaissance (3)
- A comprehensive study of musical forms and styles from 1100 to 1600 with detailed analyses of representative works and theoretical writings. **Prerequisites:** graduate standing in music or consent of instructor, MUS 3155-57, or equivalents.

**6115** | Music in the Baroque Period (3)
- A detailed study of musical styles, forms, and performance practice from 1600 to 1750, with analyses of representative works. **Prerequisites:** graduate standing in music or consent of instructor, MUS 3155-57, or equivalents.

**6125** | Music of the Classical Period (3)
- A detailed study of the development of musical forms and performance media, from the Rococo to the end of the 18th Century. **Prerequisites:** graduate standing in music or consent of instructor, MUS 3155-57, or equivalents.

**6135** | Music of the Romantic Period (3)
- An intensive study of the structure and development of music from Beethoven through the end of the 19th Century. **Prerequisites:** graduate standing in music or consent of instructor, MUS 3155-57, or equivalents.

**6155** | Music and Culture of Asia (3)
- Issues of identity, politics, modernization, and globalization, as encountered through the music of the Asian diaspora of the Bay Area. Music of India, Indonesia, Japan and central Asian countries will be studied from an ethnomusicological perspective. **Prerequisite:** Graduate standing in Music or permission of instructor.

**6180** | Contemporary Music (3)
- Research of developments in music since 1950, including recent 12-tone theory, aleatoric techniques, and electronic music. **Prerequisites:** MUS 3157 and 3034 or consent of instructor.

#### Music Theory (Course prefix: MUS)

### Course Number | Course Information
--- | ---
**6015, 6016** | Analysis of Musical Styles I, II (3,3)
- Analysis of compositional styles from chant to present-day music. Compositional principles are derived from the music with results then generalized according to composer and period. **Prerequisite:** MUS 3034 or consent of instructor.

#### Applied Music (Course prefix: MUS)

### Course Number | Course Information
--- | ---
**6210-6270** | Graduate Applied Music (1-5)
- Individual advanced instruction for graduate music majors. Open to graduate students who have been accepted by audition. May be repeated for credit, for a maximum of 12 units.
  - 6210 Advanced Piano
  - 6211 Advanced Organ
  - 6212 Advanced Harpsichord
  - 6220 Advanced Voice
  - 6230 Advanced Violin
  - 6231 Advanced Viola
  - 6232 Advanced Cello
  - 6233 Advanced String Bass
  - 6234 Advanced Harp
  - 6235 Advanced Guitar
  - 6240 Advanced Flute
  - 6241 Advanced Oboe
  - 6242 Advanced Clarinet
  - 6243 Advanced Bassoon
6244 Advanced Saxophone
6250 Advanced Trumpet
6251 Advanced French Horn
6252 Advanced Trombone
6253 Advanced Baritone
6254 Advanced Tuba
6260 Advanced Percussion
6270 Advanced Composition

6280 Advanced Applied Conducting (2)
Ensemble conducting techniques including stylistic, pedagogical, and physical studies in gesture. Score analysis and ear training through the study of music from all genres and historical periods. Advanced rehearsal techniques and program building, including the development of ensemble. Prerequisite: Consent of instructor. May be repeated five times for credit for a maximum of 12 units.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>
Public Administration

Department Information

Department of Public Affairs and Administration
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4122
Phone: (510) 885-3282
Website: class.csueastbay.edu/publicadmin

Institute for Governmental Research and Training: Toni Fogarty (Director)

Program Description

The Department of Public Affairs and Administration at Cal State East Bay offers a program of coursework leading to a Master of Public Administration (M.P.A.) degree. The department also offers an M.S. in Health Care Administration (see Health Care Administration in the Graduate section of this catalog). The following pages only describe the M.P.A. degree program.

Public Administration is a rich and challenging multi-disciplinary field drawing from sociology, anthropology, philosophy, psychology, economics, and urban and organizational studies. The master's degree program provides students with a grounding in major philosophical and social science thinking about the nature of organizations; it helps students to build the intellectual and practical tools they will need to become effective organizational leaders in the public and non-profit sectors. The M.P.A. program is designed to increase the personal and professional effectiveness of people working in public, voluntary, and private organizations. The purpose of the program is to prepare individuals for leadership positions in various kinds of organizations with a sense of commitment to social purpose, the public interest, and effective public problem-solving.

The program proceeds on several assumptions: (1) many pressing problems of society must be dealt with through public agencies, and these agencies must be staffed by well-prepared public administrators; (2) public agencies should be more oriented toward the public interest and be more client-centered than is generally the case at present; (3) public agencies should be humanistically oriented, encouraging personal contribution, growth, and improvements in the quality of working life; (4) public agencies should nurture and support a critical awareness on the part of public administrators, leading to an ability to challenge and change administrative practice; and (5) public administrators need to find more client-centered than is generally the case at present; (2) public agencies should be more oriented toward the public interest and be

Student Learning Outcomes

Students graduating with an M.P.A. from Cal State East Bay will: (1) demonstrate the ability to understand core concepts and theories in public administration, that is, knowing the basic concepts in public administration and their fundamental theoretical presuppositions; (2) demonstrate an understanding of the role of theory in public administration, and how to apply these theories toward administrative inquiry; (3) demonstrate the ability to articulate a clear sense of purpose as professionals in the public service; (4) demonstrate an understanding of interpretive and quantitative research methodologies.

Career Opportunities

The M.P.A. program prepares students for careers in government organizations at the federal, state, and local levels as well as in community organizations and the non-profit sector. The program also offers an excellent preparation for doctoral level study for those seeking careers in university teaching and research. The curriculum offers students opportunities to specialize in public management and public policy development, health care administration, and human resources and organizational change. Cal State East Bay M.P.A. alumni are well represented in positions of leadership throughout the Bay Area as well as in local, state, and federal agencies in the western states.

Internships

The Department of Public Affairs and Administration sponsors an optional graduate internship program as an integral part of the master's program. The internship program provides students with an opportunity to complement their academic studies with practical administrative experience in a city, county, state, federal, or non-profit agency. The internships vary from three to nine months and average 10 to 30 hours per week.
All applicants must submit an online Graduate Admission application declaring Public Administration as a degree objective, and transcripts, at CSUEB:

The program requires completion of 48 quarter units beyond the foundation courses, at least 35 units of which must be completed in residence. Degree Requirements (48 units)

- Core Courses: 20 units
- Required and Elective Courses in an Option Area: 24 units
- Capstone Course: 4 units

The Master of Public Administration program requires completion of 48 quarter units, distributed among core courses; required and elective courses in an option area; and the graduate synthesis or the departmental or university thesis. Of these, at least 35 units must be completed in residence at CSUEB (transfer units are limited to 13 quarter units); at least 24 units must be in courses in the 6000 series. No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 48-unit graduate degree program.

No more than 8 units of Independent Study (PUAD 6900) may be counted toward the 48 units required for the degree. Thesis or Graduate Synthesis credit may not exceed 4 units.

A grade point average of 3.0 must be maintained in all 48 quarter units taken to satisfy the degree requirements. All graduate degree requirements must be completed within 5 years. Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two consecutive quarters will be academically disqualified from the university.

Students accumulating more than 8 units of work graded "I" (Incomplete) may not register for further courses applicable to the degree until the "I" grades are removed.

A. Core Courses (20 units)

All students must take the following five courses prior to taking the option courses:

- PUAD 6801 Public Policy Formulation (4)
- PUAD 6811 Human Organizations and Social Realities (4)
- PUAD 6812 Changing Human Organizations (4)
- PUAD 6831 Research Methods in Public Administration I (4)
- PUAD 6832 Research Methods in Public Administration II (4)

Notes: PUAD 6811 must be completed prior to taking PUAD 6812. However, PUAD 6831 and PUAD 6832 are not sequential and are not required to be taken in sequence.

B. Option Areas (24 units)
Students choose one of the following options to specialize in the area of their choice in the MPA Program. Options include four courses designated to the option, and 8 units of electives which must be taken inside the department.

1. **Health Care Administration (24 units)**
   - Designed for students who are preparing for a management or policy development career in the health field. The option area focuses on issues of health policy development, and the delivery of health care services and management issues in a variety of health care organizations.
   - **Required courses (16 units):**
     - HCA 6200 US Health Care System (4)
     - HCA 6250 Strategic Management of Health Care Organizations (4)
     - HCA 6270 Health Care Management (4)
     - HCA 6999 Special Topics in Health Care Management (4)
   - **Electives (8 units):**
     - Select two from the following:
       - HCA 6210
       - HCA 6220
       - HCA 6240
       - HCA 6260
       - HCA 6280
       - PUAD 6850
       - PUAD 6851
       - PUAD 6878

2. **Management of Human Resources and Change (24 units)**
   - Designed for those students who want to focus more closely on the human resource aspects of public management.
   - **Required courses (16 units):**
     - PUAD 6850 Human Resource Management in the Public Sector (4)
     - PUAD 6762 Group Procedures and Facilitation (4)
     - PUAD 6765 Organizational Diagnosis and Assessment (4)
     - PUAD 6766 Organizational Intervention and Engagement (4)
   - **Electives (8 units):**
     - Select two from the following:
       - PUAD 6815
       - PUAD 6830
       - PUAD 6851
       - PUAD 6854
       - PUAD 6842
       - PUAD 6866
       - PUAD 6869

3. **Public Management and Policy Analysis (24 units)**
   - Designed for students who are interested in being policy analysts or who wish to be actively involved in the design and implementation of public policy. This option area focuses on the analytical and political skills necessary for successful policy development locally, nationally, and internationally.
   - **Required courses (16 units):**
     - PUAD 6802 Seminar in Public Policy Implementation (4)
     - PUAD 6809 Seminar in Public Program Evaluation (4)
     - PUAD 6842 Governmental Budgeting (4)
     - PUAD 6864 Managing Public Organizations (4)
   - **Electives (8 units):**
     - Select two from the following:
       - PUAD 6803
       - PUAD 6815
       - PUAD 6803
       - PUAD 6830
       - PUAD 6840
       - PUAD 6850
       - PUAD 6851
       - PUAD 6854
       - PUAD 6866
       - PUAD 6869

C. **Capstone Course (4 units)**
   - Students are required to take one of the following:
     - PUAD 6901 Graduate Synthesis (4) and Comprehensive Exam
     - OR-
     - PUAD 6909 Departmental Thesis (4) or PUAD 6910 University Thesis (4)

**Capstone Experience**

Comprehensive Exam, Departmental or University Thesis

Students have a choice of completing the program with a Departmental or University Thesis or Comprehensive Examination. Students must satisfy the University Writing Skills Test requirements before they will be allowed to enroll in PUAD 6901, PUAD 6909, or PUAD 6910. Students
who wish to take the Comprehensive Examination must first enroll in PUAD 6901, Graduate Synthesis (4 units). Upon the successful completion of the course, they become eligible to take the Comprehensive Exam, which is a proctored essay exam. Students who fail the Comprehensive Exam may either retake PUAD 6901 and the Exam one additional time, or they may instead decide at that time to enroll in PUAD 6909, Departmental Thesis, or PUAD 6910, University Thesis.

Students who choose to take PUAD 6909, Departmental Thesis, or PUAD 6910, University Thesis, should be aware of the procedural differences between a departmental and university thesis. While each carries 4 units of graduate credit, the university thesis requires a two-faculty member committee. The University Thesis Committee meets as called by the student or the faculty and includes the submission of the thesis to the University for final approval and binding. Two bound copies are required (one for the department and one for the university library). The university thesis deadline dates are listed at: Academic Calendar. A departmental thesis is directed by one faculty member. Students completing the departmental thesis may either sign up individually with a faculty advisor or meet in a scheduled graduate course. Two copies of the departmental thesis are required for the department.

Grades of "SP" (Satisfactory Progress) may be given for a thesis that is not completed at the end of the quarter. The "SP" grade must be removed within five years or it will become an "F."

**Granting the Degree**

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Degree of Master of Public Administration. Students must file for graduation by the second week of the quarter prior to the quarter in which they expect to graduate.

**Post-baccalaureate Courses**

Their restricted to "Conditionally Classified" and "Classified Graduate" students.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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</thead>
<tbody>
<tr>
<td>5000</td>
<td>Philosophy of Public Administration (4) Critical analysis of emerging domestic and global ideas and issues shaping and being shaped by the public sector. Theoretical perspectives on understanding values, ethics, citizenship, public good, and search for democratic administration. Prerequisites: PUAD 4800, 4630.</td>
</tr>
<tr>
<td>5900</td>
<td>Independent Study (1-4)</td>
</tr>
</tbody>
</table>

**Graduate Courses**

They are restricted to "Conditionally Classified" and "Classified Graduate" students.

<table>
<thead>
<tr>
<th>Course Number</th>
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</thead>
<tbody>
<tr>
<td>6722</td>
<td>Group Procedures and Facilitation (4) Focus on becoming a lifelong learner and change manager by developing self-awareness and critical reflection skills. Explore learning styles, managing oneself, interpersonal skills, systems and integrative thinking, group processes and managing change. Includes discussion, group activities, and case problems. Prerequisite: PUAD 4812 or HCA 4200.</td>
</tr>
<tr>
<td>6765</td>
<td>Organizational Diagnosis and Assessment (4) Intervention strategies (e.g., systems-based, appreciative inquiry, dialogue conferences, action learning), O. D. methods, interview techniques, observation, surveys, and discussion. Course participants carry out an organizational diagnosis and assessment.</td>
</tr>
<tr>
<td>6766</td>
<td>Organizational Intervention and Engagement (4) Models and methods of managing organizational change, data collection and interpretation, and stakeholder engagement; ethical practices. Course participants carry out an organizational diagnosis and intervention. May be repeated once for credit for a maximum of 8 units.</td>
</tr>
<tr>
<td>6801</td>
<td>Public Policy Formulation (4) Critical analysis of public policy-making processes; interrelationships among policy formulation, implementation, evaluation, and revision; alternative models of the policy process. Prerequisite: PUAD 4800.</td>
</tr>
<tr>
<td>6802</td>
<td>Seminar in Public Policy Implementation (4) Developing strategies and tactics for identifying and solving implementation problems. Implementation as a design, evaluative, and learning process. Analysis of implementation case studies. Prerequisite: PUAD 6801.</td>
</tr>
<tr>
<td>6803</td>
<td>Seminar in Interpretive Policy Analysis (4) Analytic approaches developed in response to hermeneutical, phenomenological, and other developments in the philosophy of science and social science; narrative policy analysis, policy design and framing, analysis of local knowledge. Prerequisite: PUAD 6801.</td>
</tr>
<tr>
<td>6806</td>
<td>Policy Design for Sustainable Futures (4) Foundations for futures studies. The future as paradox, learning, democratic process, and interpretation of reality. Forecasting, making policy recommendations, and exploring alternative actions for sustainable futures. Interpreting global transformations and creating the future. Prerequisite: PUAD 6801.</td>
</tr>
<tr>
<td>6808</td>
<td>Topics in Public Policy (4) Different substantive areas of public policy, e.g., immigration policy; race-ethnic policies; science and technology policy, environmental policy; welfare, housing, family, and other social policies; comparative public policy. Prerequisite: PUAD 6801. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>6809</td>
<td>Seminar in Public Program Evaluation (4) Assessment of policy impact and effectiveness; analysis of program objectives; methods of evaluation; developing action-oriented evaluation processes; administration of evaluation systems. Prerequisite: PUAD 6801.</td>
</tr>
</tbody>
</table>
6811 Human Organizations and Social Realities (4)
Post-modernist approaches to the understanding of organizational realities, including phenomenological, critical, feminist, and other interpretive approaches; subjective, intersubjective, contextual, historical influences; organizational socialization and personality growth, personal and organizational value development and human effectiveness. Prerequisites: PUAD 4800 and 4830.

6812 Changing Human Organizations (4)
Application of interpretive, critical, and postmodern theories to changing organizations; use of meaning-centered, experientially grounded theories for understanding organizational cultures; personal praxis in changing organizations. Prerequisite: PUAD 6811.

6815 Ethics and Administrative Responsibility (4)
Ethical dimensions of the public service; value dilemmas, administrative ethics and accountability, responsibility in making public choices, whistle-blowing, the public interest; equality and equity in democracy. Prerequisites: PUAD 6801 and 6811.

6830 Advanced Information Management in Public Organizations (4)
Critical examination of the use of information management; e-government; implications of using analytical techniques for policy analysis, budgeting, decision making, knowledge management, and improvement of client services. Prerequisites: PUAD 4800 and 4830.

6831 Research Methods in Public Administration I (4)
Theory and methods of interpretive research in the public sector. Emphasis on meaning-centered and inductive modes of data-gathering and analysis, including interviews, participant observation, ethnographic methods and the development of grounded theory. Issues in case study presentation and field research narratives. Prerequisites: PUAD 4800, 4830, and 5000.

6832 Research Methods in Public Administration II (4)
Positivistic research methods; uses of quantitative and computer analysis; application of quantitative approaches to organizational improvement, policy research, and decision making; implementation of research design; examination of the logic underlying application of quantitative methods and statistical techniques. Prerequisites: PUAD 4800, 4830, and 5000.

6840 Seminar in Public Finance Administration (4)
Budgetary processes in public policy formation and administrative control; strategic principles of fiscal policy in attaining public goals; public revenues, sources, incident, and effect of principal taxes; intergovernmental aspects of revenue problems; grants in aid. Prerequisite: PUAD 6801.

6842 Governmental Budgeting (4)
Governmental budgeting as political and social process; administrative control at federal, state, local levels; central budget agencies and budget offices in operating agencies, budgets as planning, policymaking and management instruments; executive-legislative relationships. Prerequisite: PUAD 6801.

6850 Human Resource Management in the Public Sector (4)
Development of public service concepts and institutions; assessment of public personnel methods and organizations; interaction with other management functions, and with the executive and legislative processes; influence of social and political values upon public service concepts. Prerequisite: PUAD 6811.

6851 Work and Organizations of the Future (4)

6854 Seminar in Public Labor Relations (4)
History and present legal status of public labor relations; changing concepts and their implications for existing institutions; processes and values in public personnel systems; dispute resolution; cooperative labor/management committees and other current issues. Prerequisite: PUAD 6801.

6864 Managing Public Organizations (4)
The responsibilities of the public sector manager; differences between private and public sector management; short versus long-term management in the public sector. Critical examination of public managers as strategic leaders. Prerequisite: PUAD 6801.

6866 Approaches to Urban and Regional Problem-Solving (4)
Urban and regional environments as a source of public problems, including such issues as employment, education, transportation, and citizen participation. Comparative study of efforts to improve the quality of urban and regional life. Prerequisite: PUAD 6801.

6869 Topics in Public Management (4)
Specialized investigations of public management issues and problems selected by instructor. Prerequisite: PUAD 6801. May be repeated once for credit when content varies, for a maximum of 8 units.

6878 Transforming Health Care (4)
Emerging career plans in health care administration. The implications of decentralized health care and integrated health systems for health care workers. The future of health care delivery systems and the wider impact of these changes on the social order. Prerequisites: PUAD 6801 and 6811.

6893 Internship in Public Administration (1-4)
Academically challenging field placements in half-time or full-time positions with governmental agencies under the supervision of university faculty member. Examination of the relationship of theory to practice in the provisions of public service. Prerequisites: "Classified Graduate" status and the consent of the Internship Coordinator. CR/NC grading only.

6897 Community Health Administration Practicum (4)
Practical experiences through field work with community agencies, emphasis on improving a student's ability to activate community resources and support sustainable wellness communities. Prerequisites: HCA 4200, and either PUAD 4830 or MGMT 3614.

6898 Cooperative Education (1-4)
Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 3.0 GPA, the approval of the Internship Coordinator. May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the Master of Public Administration degree. CR/NC grading only.

6900 Independent Study (1-4)

6901 Graduate Synthesis (4)
A synthesis of public administration theories and concepts through a critique of major readings in the field. Prerequisite for Comprehensive Examination. Prerequisites: Advancement to Candidacy (completion of all core courses, option area requirements, and electives) and consent of instructor.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6909</td>
<td>Departmental Thesis (1-4)</td>
<td>Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a departmental faculty member. Oral defense normally required. (See also &quot;Departmental Thesis Guidelines,&quot; available in department office.)</td>
<td>Prerequisites: Advancement to Candidacy and consent of thesis advisor. Maximum of 4 units per student.</td>
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</tr>
<tr>
<td>6910</td>
<td>University Thesis (1-4)</td>
<td>Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also &quot;University Thesis Writing Guide,&quot; <a href="http://www.csueastbay.edu/thesiswritingguide">www.csueastbay.edu/thesiswritingguide</a>.)</td>
<td>Prerequisites: Advancement to Candidacy and consent of Thesis Committee. Maximum of 4 units per student.</td>
<td></td>
</tr>
<tr>
<td>6999</td>
<td>Issues in Public Administration (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in public administration. May be repeated for credit when content varies, for a maximum of 8 units.</td>
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</tr>
</tbody>
</table>
Recreation and Tourism

- Department Information
- Program Description
- Career Possibilities
- Features
- Admission
- Advancement to Candidacy
- M.S. in Recreation and Tourism
- Other Degree Requirements
- Graduate Courses

Department Information

Department of Hospitality, Recreation and Tourism
College of Education and Allied Studies
Office: Kinesiology and Physical Education Bldg. 130
Phone: (510) 885-3043

Professors
Melany Spielman (Chair), Ph.D. University of Oregon
Doris D. Yates, Ph.D. Michigan State University

Associate Professor
Mary F. Fortune, Ed.D. University of San Francisco
Zaher Hallab, Ph.D. Virginia Polytechnic Institute and State University

Assistant Professors
Christopher Chamberlain, D.M. University of Phoenix
Richard O. B. Makopondo, Ph.D. University of Illinois at Urbana-Champaign
Nancy B. White, Ph.D. University of New Mexico

Program Description

In our very diverse world, managing organizations is increasingly more complex. A Master's of Science in Recreation and Tourism will provide an in-depth understanding of the fast moving, increasingly-complex challenges in the world of recreation. Through exploring the literature and theories, and how to scientifically gather data to make informed decisions, graduates will be better prepared for the world's legal, personal, and ethical dilemmas presented in their work environments. This program is offered fully online. It will make use of interactive, online learning activities designed to challenge and inspire growth. Students "come" to "class" at times when they are ready to learn—not at a specific time in the evening after working all day. It is not a self-paced program. Discussions happen asynchronously. One might log on at 10 p.m. or find a classmate is awake and doing work online at 4 a.m. after he got off the night shift. This way of learning is different. You are not only the receiver of knowledge, but now you are asked to be more actively engaged in your own learning. You will be asked not only to absorb, but also to discover and create knowledge. The role of the instructor is the designer of these learning challenges. This is much more like what happens in the real world of work.

The program is designed to provide a strong intellectual core, but also to allow specialization via projects.

This program is 45 units, 10 courses of 4.5 units each and two courses will be offered each quarter. It is possible to complete this program in 5 quarters, although some students will want more time to accommodate their work schedules. The degree must be completed within 5 years.

The faculty is committed to students' success, both in work and graduate school. The courses will be offered once a year, 2 courses each of all four quarters.

Student Learning Outcomes
Students graduating with an M.S. in Recreation and Tourism from Cal State East Bay will:

1. Be able to identify challenges in personnel, program, and logistics areas and be able to use data gathered to make decisions quickly and accurately;
2. Be able to assess industry trends, and market conditions and know how to lead their employees and organizations to make improvements to service;
3. Be able to thoroughly discuss the theoretical foundations of leisure, hospitality, and tourism and how they work together to increase the quality of life of people;
4. Be exemplary leaders concerned about social justice and dignity for customers, staff, and stakeholders.

Career Possibilities

- Recreation Program Manager
- Youth Sports Manager
- Event Manager
- Meetings and Conference Manager
- Aquatics Manager
- Senior Center Manager
- Resort Manager
- Retirement Community Program Director
- Camp Director
- Preschool Director
Our student-centered department has designed this master's degree for working adults. All of our courses are offered totally online. We are dedicated to helping you realize your dreams. Our friendly, accessible faculty will advise you about meeting all requirements in the most efficient manner. We have excellent industry contacts and can help you plan your future advancement in our profession. All our faculty have been Leisure and Hospitality industry professionals.

Admission

Prerequisites and Criteria for admission:

- Baccalaureate degree from an accredited university. It is expected that most students applying for this program will have a BS in Recreation.
- If your undergraduate degree is not in Recreation or Hospitality, you may need some foundational courses. This will be determined when your transcript and work experience are evaluated by a graduate advisor or the department chair.
- GPA of 2.75 in last 60 hours of course work is required.
- Must have 2 years of work experience in the field
- Acceptable TOEFL minimum score of 550 (International Students) or above (237 on the Computer-Based TOEFL), or by posting an official transcript showing graduation with a bachelor's degree from a U.S. college or university where English is the principal language of instruction, or by an official letter from the college or university certifying that English is the language of instruction.
- Three letters of recommendation
- Official transcripts from all institutions of higher learning attended
- Current resume

In addition to the University Graduate and Post-Baccalaureate Application, all applicants should submit to the department

1. personal statement explaining their reasons for wanting to pursue the M.S. in Recreation and Tourism degree,
2. an up-to-date resume detailing professional and academic achievements, and
3. three letters of recommendation from those who know them best in a professional light. At least one should be from a superior (immediate supervisor) and one should come from someone who knows their academic abilities.

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Degree of Master of Recreation and Tourism. Students must file for graduation by the second week of the quarter prior to the quarter in which they expect to graduate.

M.S. in Recreation and Tourism

The Masters of Science in Recreation and Tourism consists of 45 units.

Required Courses (45 units)

- REC 6000 Research Methods in Leisure Studies (4.5)
- REC 6100 Philosophical Foundations and Theories of Leisure (4.5)
- REC 6200 Strategies in Staff Supervision (4.5)
- REC 6300 Organizational Development in Leisure (4.5)
- REC 6400 Current Management Topics in Leisure (4.5)
- REC 6500 Critical Analysis of Leisure Research (4.5)
- REC 6600 Trends and Forecasts in Leisure (4.5)
- REC 6700 Advanced Social Justice and Professional Ethics (4.5)
- REC 6800 Strategic Leadership in Leisure (4.5)
- REC 6901 Graduate Synthesis (4.5) OR REC 6909 Departmental Thesis (4.5)

Students completing the departmental thesis may either sign up individually or with a faculty advisor. Departmental thesis is directed by one faculty member. Two copies of the departmental thesis are required for the department.
Graduate Courses (Course prefix: REC)

<table>
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<th>Course Number</th>
<th>Course Information</th>
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</table>
| 6000          | Research Methods in Leisure Studies (4.5)  
Theory of qualitative and quantitative research and their design methodologies. Essential elements of applied research in the field of leisure, including statistical analyses. **Prerequisite:** Graduate standing or consent of instructor. |
| 6100          | Philosophical Foundations and Theories of Leisure (4.5)  
Examination of leisure theories through time, history of the profession. Organizational and community contexts of leisure, roles and socialization, natural and constructed environments. The relationship of leisure to family, work, subcultures, and resources. **Prerequisite:** Graduate standing or consent of instructor. |
| 6200          | Strategies in Staff Supervision (4.5)  
Examination of basic motivation, individual differences (including culture, race, ability, sexual orientation), employee growth, and social interaction. Implications for developmental intervention and human services. **Prerequisite:** Graduate standing or consent of instructor. |
| 6300          | Organizational Development in Leisure (4.5)  
Exploration of the strategic role of systems theory in organizational development and the wider scope of creating strong communities through systems in recreation and leisure services. **Prerequisite:** Graduate standing or consent of instructor. |
| 6400          | Current Management Topics in Leisure (4.5)  
Examination of post-industrial management practices and emerging fields of study that influence the management of recreation and leisure organizations. **Prerequisite:** Graduate standing or consent of instructor. |
| 6500          | Critical Analysis of Leisure Research (4.5)  
An analysis of leisure research and its application in the work of leisure professionals. Examination of recent research in leisure and its appropriate application into the best practices in the field. **Prerequisite:** REC 6000, Graduate standing, or consent of instructor. |
| 6600          | Trends and Forecasts in Leisure (4.5)  
Examination of societal trends and their impact on the leisure profession, including demographics, economics, policy, and politics. **Prerequisite:** Graduate standing or consent of instructor. |
| 6700          | Advanced Social Justice and Professional Ethics (4.5)  
Exploration of theories of social justice and equity underlying societal, political, and economic conditions which affect the leisure field. Strategies to identify and rectify injustices. Investigation of professional ethics. **Prerequisite:** Graduate standing or consent of instructor. |
| 6800          | Strategic Leadership in Leisure (4.5)  
Study of leadership of large, multifaceted organizations, including establishment of organizational structure, allocation of resources, and communication of strategic vision. Leisure's potential positive impact on current societal problems. **Prerequisites:** REC 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700; Graduate standing or consent of instructor. |
| 6901          | Graduate Synthesis (4.5)  
Problem definition, review of literature, data collection and analysis, and findings for developing a field-based project in leisure management. **Prerequisites:** REC 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700; and must be advanced to candidacy. |
| 6909          | Departmental Thesis (4.5)  
Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a department committee, at least one of whom must be a member of the graduate faculty. Oral defense is required. **Prerequisites:** REC 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700; and must be advanced to candidacy. |
| 6999          | Issues in Recreation and Tourism (4)  
Readings, discussion, research, and applications on contemporary and/or significant issues in Recreation and Tourism. May be repeated for credit when content varies, for a maximum of 8 units. |
Social Work

Department Information

Department of Social Work
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4064
Phone: (510) 885-4916
Website: [http://csueastbay.edu/socialwork/](http://csueastbay.edu/socialwork/)

Professor Emeritus
Terry Jones, Ph.D. University of California, Berkeley

Professor
Evaon Wong-Kim (Chair), Ph.D. University of California, Berkeley

Associate Professor
Phu Phan, Ph.D. University of Minnesota
Dianne Rush Woods, Ph.D. University of California, Berkeley

Master of Social Work

Program Description

The Department of Social Work offers graduate study leading to the degree Master of Social Work (M.S.W.). This degree program is designed to train social workers for leadership and direct practice positions in social work, and is accredited by the Council on Social Work Education. The program has a multicultural focus which prepares social work students to work in both non-profit and public agencies and to be proficient in working with diverse multicultural populations in urban and suburban communities.

The M.S.W. program is a full-time two year program for students who have recently completed a baccalaureate program, as well as for those who have been working in social work agencies and want to upgrade their skills and professional preparation.

The objective of the M.S.W. program is to address the growing need for social workers to work with individuals, families, groups, and organizations charged with responding to societal problems such as poverty, family instability, mental illness, child welfare, aging, and urban renewal. An additional focus is to work with underserved populations in ways that enable and empower them to participate in the social work change process. The program will also prepare individuals to be agents for change and to work effectively in an increasingly complex, culturally and racially diverse society and to understand and respond to racism, sexism, homophobia, and other forms of oppression that create and maintain barriers to an individual's well-being and effective participation in American society.

Students in the M.S.W. program will develop the analytical skills needed to explore new models of social work service delivery and organizational design. In addition, they will have an extensive field experience in which they will work with skilled professional social workers and apply the analytical and social work skills learned in the classroom.

Student Learning Outcomes

Students graduating with an M.S.W. from Cal State East Bay will:

1. develop a knowledge and understanding of inequality, racism, sexism, and other forms of oppression, and develop intervention skills and strategies to intervene;
2. develop a knowledge and understanding of social work intervention theories and knowledge of how to apply them in the practice setting; and
3. be able to apply research skills and strategies in a variety of social work settings, including the micro, mezzo, and macro levels in urban and suburban settings.

Career Opportunities

Graduates of the M.S.W. program are prepared to work with individuals, families, groups, and organizations in both public and non-profit practice. The State of California is experiencing an acute shortage of individuals prepared for leadership roles in social work practice. The State also has a critical shortage of social workers trained at the master's level and the demand for Master level social workers is expected to increase. In child welfare alone, it is estimated that the ten largest county welfare agencies have an immediate need for social workers. Other areas that need social workers include mental health services, agencies dealing with the aged, and in the juvenile justice system dealing with dual diagnosis.

Admission

The M.S.W. degree program is open to students planning a career in social work who have a baccalaureate degree from an accredited institution and who have earned an overall grade point average of 2.8 (on a 4.0 scale) in their last 90 quarter units (60 semester units) of undergraduate work. Students with a GPA below 2.8 may be admitted based on an evaluation of their student profile, including work experience, resume, letters of recommendation, and personal statement (see below).

In addition to the "University Graduate and Post-baccalaureate Application," all applicants should submit:

1. a completed departmental application form;
2. a personal statement (2-3 pages) with their application stating their reasons for pursuing the M.S.W. degree, describing their relevant work experience, and explaining their past academic performance;
3. three letters of recommendation (letters from prior instructors preferred); and
4. a resume. Successful experience in social work or social work-related positions will be considered in evaluating applications.
Admission to the university and admission to the M.S.W. degree program are separate steps. It is suggested that application for admission to the university (Part A of the application) be filed together with the form for entry into the degree program (Part B of the application).

Advising

Students who are accepted into the department will normally be admitted in "Conditionally Classified Graduate" status until satisfaction of all prerequisites and the University Writing Skills Requirement is documented for the Social Work office, at which time a change to "Classified Graduate" status will be requested by the department. The student is assigned an official advisor from the faculty of the department and must consult his or her advisor prior to registration for each quarter. The student should maintain close contact at all times with the advisor for advice and information.

Student Standing and Progress toward the Degree

1. There are three categories of student status that reflect your progress toward the degree. You are in "Conditionally Classified Graduate" status when you have been admitted to the M.S.W. degree program, but have not yet completed the prerequisites for the "Classified Graduate" status in the M.S.W. degree program.
2. You achieve "Classified Graduate" status when you have satisfactorily completed all the prerequisites for the M.S.W. degree program and satisfied the University Writing Skills Requirement. (See "Prerequisites for "Classified Graduate" Status" below.)
3. You are "Advanced to Candidacy" when you have completed the core courses with a 3.0 GPA or better.

Note: If you fail to maintain progress by falling below a 3.0 GPA in your graduate courses for two or more consecutive quarters, you will be academically disqualified from the university.

Prerequisites for "Classified Graduate" Status

As prerequisites to "Classified Graduate" status, you must satisfy the University Writing Skills Requirement and have satisfactorily completed Statistics 1000 or equivalent, and a course in human biology or anatomy and physiology with a grade of "C" or better. These courses must be taken before you attempt the core graduate courses. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Advancement to Candidacy

Formal Advancement to Candidacy for the master's degree requires prior completion of the following steps:

1. Successful completion of the HBSE, Generalist Practice Sequence, and Field Practicum sequences, as well as the Social Policy and Introduction to Social Work Research courses.
2. Successful completion of all required departmental prerequisites.
3. Maintenance of a 3.0 or better GPA in all departmental coursework and overall coursework.
4. Recommendation by the student's advisor who has reviewed the student's record and affirmed that the student has met academic and professional conduct standards.

Cause for Dismissal from Program

Students may be dismissed from the program at any time "for cause." "For cause" includes, but is not limited to, poor academic or fieldwork performance, as well as behavior which is destructive to students or faculty, and/or interferes with the educational environment, and/or represents a threat to potential clients. "For cause" also includes student behaviors which are inconsistent with the legal, ethical, and/or personal responsibilities of professional social workers.

Degree Requirements

The M.S.W. degree program requires completion of 88-89 quarter units, distributed among core courses, concentration courses, elective courses, and the integrative seminar or graduate thesis. Of these, at least 75 units must be completed in residence after being admitted to the program (transfer units are limited to 13 quarter units). No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 89-unit graduate degree program.

A grade point average of 3.0 must be maintained in the courses taken to satisfy the degree requirements. All graduate degree requirements must be completed within the five (5) years prior to graduation.

Curricular Requirements

A. Core Requirements (44 units)

Prerequisite courses (STAT 1000 or equivalent, human biology or anatomy and physiology) must be completed before taking the required courses.

- SW 6000, 6001 Human Behavior and Social Environment I, II (4, 4)
- SW 6010 Race, Gender, and Inequality in Social Work Practice (4)
- SW 6011, 6012, 6013 Generalist Practice I, II, III (4, 4, 4)
- SW 6020, 6021, 6022 Field Instruction I, II, III (4, 4, 4)
- SW 6030 Social Welfare Policy: History and Philosophy (4)
- SW 6032 Social Welfare Policy: Research (4)

B. Concentrations (32-33 units)

Select one of the following concentrations:

1. Children, Youth, and Families
   - SW 6400 Title IV-E Seminar (1)
   - SW 6500 Advanced Micro Practice: Children, Youth, and Families (4)
   - SW 6510 Advanced Mezzo Practice: Children, Youth, and Families (4)
   - SW 6520 Advanced Policy Practice: Children, Youth, and Families (4)
   - SW 6530, 6531, 6532 Field Instruction IV, V, VI (4, 4, 4)
   - SW 6932 Quantitative and Qualitative Analysis: Children, Youth, and Families (4)
   - SW 6935 Program Evaluation: Children, Youth, and Families (4)

2. Community Mental Health
   - SW 6405 Community Mental Health Seminar (1)
SW 6505 Advanced Micro Practice: Community Mental Health (4)  
SW 6515 Advanced Mezzo Practice: Community Mental Health (4)  
SW 6525 Advanced Policy Practice: Community Mental Health (4)  
SW 6530, 6531, 6532 Field Instruction IV, V, VI (4, 4, 4)  
SW 6933 Quantitative and Qualitative Analysis: Community Mental Health (4)  
SW 6936 Program Evaluation: Community Mental Health (4)  

C. Electives (8 units)  
Select 8 units from the following courses:  
- EPSY 6029 Seminar in Chemical Dependency (2)  
- EPSY 6403 Psychotherapy for Children (4)  
- EPSY 6406 Seminar in Human Sexuality (2)  
- EPSY 6500 Cognitive Behavior Therapy (4)  
- EPSY 6784 Pharmacology and Counseling (3)  
- SW 6550 Social Work Psychosocial Rehabilitation (4)  
- SW 6552 Legal Issues in Social Work Practice (4)  
- SW 6553 Assessment and Treatment of Substance Abuse (4)  
- SW 6554 Occupational Social Work (4)  
- SW 6555 School Social Work (4)  
- SW 6556 Human Sexuality and Social Work (4)  
- SW 6557 Sex Roles and Gender Discrimination: Women's Issues in Social Work (4)  
- SW 6558 Supervision and Staff Development (4)  
- SW 6559 Youth and the Justice System (4)  
- SW 6560 Family Violence Across the Lifespan (4)  
- SW 6561 Advanced Psychosocial Assessment and Diagnosis (4)  
- SW 6562 Crisis Intervention and Brief Treatment Models (4)  

D. Capstone Experience (4 units)  
- SW 6909 Departmental Thesis (4), or  
- SW 6959 Integrative Seminar: Children, Youth and Families (4), or  
- SW 6960 Integrative Seminar: Community Mental Health (4)  

Credit by Examination  
If you have special expertise that is covered in a required course, you may ask to receive credit for the course through examination. To receive credit in the course, you must pass the examination with a grade of "B-" or better. Please note that units taken credit-by-examination are considered non-resident units and only a maximum of 13 non-resident units are allowed in a graduate degree. Other examples of non-resident units are those earned while at other schools, while an undergraduate with permission to take graduate courses, while pursuing an additional baccalaureate degree in "Unclassified Post-baccalaureate" status, while enrolled in another graduate degree program, or while enrolled in Extension courses (including Open University courses).  

Students with M.S.W.-level coursework in other CSWE-accredited programs are advised to contact the Social Work Department Chair concerning the possibility of transfer of credit.  

Incompletes  
If you accumulate more than 8 units of work graded "I" (Incomplete Authorized), you may not register for courses applicable to the degree until the coursework is completed and the "I" grades are changed to passing grades.  

Capstone Experience  
Students have two options in a culminating experience in the MSW program. The first is the capstone experience, SW 6909. This integrative seminar provides students with the opportunity to demonstrate mastery of the core objectives of the MSW program. Students, in cooperation with faculty and agency supervisors, complete an agency-focused project or research on a topic focused on social work practice and advocacy.  

Students may also complete the program with a Departmental Thesis (SW 6909). You may either sign up individually with a faculty advisor or meet with your advisor in a scheduled graduate course. A faculty member serves as director of your departmental thesis. Two copies of the departmental thesis are required for the department.  

A grade of "RP" (Report in Progress) may be given for a thesis that is not completed at the end of the quarter. The "RP" grade must be changed to a passing grade within five (5) years of your initial enrollment in a thesis course or it will become an "F."  

Granting the Degree  
Upon satisfactory completion of all requirements for the degree, the department will recommend that eligible students be granted the Master of Social Work degree. You must file for graduation with the Department of Social Work by the end of the second week of the quarter prior to the quarter in which you expect to graduate.  

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Graduate Courses  

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| 5900          | Independent Study (1-4)  
May be repeated for credit with consent of instructor, for a maximum of 8 units. CR/NC grading only. |
| 6000          | Human Behavior and Social Environment I (4)  
Theoretical perspectives examining human development and behavior across the life span including the analysis of the influence of social, political, historical, and cultural variables. Processes associated with physiological, psychological, cognitive, and social |
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<th>Course Code</th>
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<th>Description</th>
<th>Prerequisites</th>
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<tr>
<td>6001</td>
<td>Human Behavior and Social Environment II (4)</td>
<td>Builds upon knowledge regarding theoretical perspectives explaining human development and behavior across the life span, including influences of social, political, historical, and cultural variables. Includes normative physiological, psychological, cognitive, and social development from young adulthood to death.</td>
<td>SW 6010; Co-requisite: SW 6011.</td>
</tr>
<tr>
<td>610</td>
<td>Race, Gender and Inequality in Social Work Practice (4)</td>
<td>The impact of race, racism, gender, sexism, and inequality in social work practice on diverse ethnic/racial populations. Effective problem-solving when confronted with institutional barriers and interpersonal conflicts in agency and community-based social work practice with minority populations.</td>
<td>SW 6010; Co-requisite: SW 6011.</td>
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<tr>
<td>6011</td>
<td>Generalist Practice I (4)</td>
<td>Theoretical and practice foundations for advanced social work. Prevention, crisis, and short-term intervention approaches focusing on translating theoretical understanding into multicultural service delivery and interventions with poor, vulnerable, and oppressed populations.</td>
<td>SW 6010; Co-requisite: SW 6021.</td>
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<tr>
<td>6012</td>
<td>Generalist Practice II (4)</td>
<td>Assumptions, concepts, principles, and values of generalist practice examined from a cross-cultural perspective regarding professional relationships, social work roles, treatment processes, and service delivery models with individuals, families, groups, organizations, and communities.</td>
<td>SW 6011; Co-requisite: SW 6022.</td>
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<tr>
<td>6013</td>
<td>Generalist Practice III (4)</td>
<td>Focus on macro-level practice in social work organizations and communities. Examination of administrative practice roles from the perspectives of strength, empowerment, and evidence. Assessment of community and agency capacities and needs.</td>
<td>SW 6011 and 6012</td>
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<tr>
<td>6020</td>
<td>Field Instruction I (4)</td>
<td>Supervised practice experience in a community social agency based on students' learning needs, interests, and option. Development of the foundation of generic interventional modalities in individuals, families, groups, and communities with emphasis on multicultural practice.</td>
<td>SW 6010. Two hrs. seminar, 16 hrs. agency placement.</td>
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<tr>
<td>6021</td>
<td>Field Instruction II (4)</td>
<td>Continuation of supervised practice in a community social agency on an advanced level with individuals, families, groups, and communities with emphasis on multicultural practice.</td>
<td>SW 6020; Co-requisite: SW 6011. Two hrs. seminar, 16 hrs. agency placement.</td>
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<tr>
<td>6022</td>
<td>Field Instruction III (4)</td>
<td>Continuation of supervised practice in community social agency on an advanced level of practice with individuals, families, groups, and communities with emphasis on multicultural practice.</td>
<td>SW 6012. Two hrs. seminar, 16 hrs. agency placement.</td>
</tr>
<tr>
<td>6030</td>
<td>Social Welfare Policy : History and Philosophy (4)</td>
<td>Theoretical and practice foundations for advanced social work with children, youth, women, and families. Prevention strategies, crisis and short-term approaches, specifically as they apply to key problems and issues faced by children, youth, women, and families.</td>
<td>SW 6010; Co-requisite: SW 6020.</td>
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<tr>
<td>6032</td>
<td>Social Welfare Policy: Research (4)</td>
<td>The role of research in social work, the logic of research, the stages of underlying research process, various types of research designs, techniques of data collection and analysis, and strategies for evaluating service delivery in all areas of practice.</td>
<td>SW 6010; Co-requisite: SW 6022.</td>
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<tr>
<td>6400</td>
<td>Title IV-E Seminar (1)</td>
<td>Culminating experience integrating policy, practice, and research relating to child protective services. Open to Title IV-E Program students only.</td>
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<tr>
<td>6405</td>
<td>Community Mental Health Seminar (1)</td>
<td>Culminating experience integrating policy, practice, and research relating to mental health services. Open to CalSWEC II Program students only. Only to Title IV-E Program students only.</td>
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<tr>
<td>6500</td>
<td>Advanced Micro Practice: Children, Youth, and Families (4)</td>
<td>Strategies of casework management with children, youth, and families. Principles of small and large group management, time management, coordination of services, and interagency cooperation. Issues of controlling, coordinating, directing, and planning services for clients in urban and suburban settings.</td>
<td>SW 6010; Co-requisite: SW 6530.</td>
</tr>
<tr>
<td>6505</td>
<td>Advanced Micro Practice: Community Mental Health (4)</td>
<td>Strategies of casework management in a mental health context. Principles of small and large group management, time management, coordination of services, and interagency cooperation. Additional issues include controlling, coordinating, directing, and planning service delivery in urban and suburban communities.</td>
<td>SW 6010; Co-requisite: SW 6530.</td>
</tr>
<tr>
<td>6510</td>
<td>Advanced Mezzo Practice: Children, Youth, and Families (4)</td>
<td>Theory and practice with ethnically, racially, and religiously diverse populations utilizing a multi-dimensional multi-cultural framework and case materials to analyze treatment issues and empowerment strategies for children, youth, and families.</td>
<td>SW 6010; Co-requisite: SW 6531.</td>
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<tr>
<td>6515</td>
<td>Advanced Mezzo Practice: Community Mental Health (4)</td>
<td>Theory and practice with ethnically, racially, and religiously diverse populations utilizing a multidimensional, multicultural framework and case materials to analyze treatment issues and empowerment strategies in community mental health.</td>
<td>SW 6010; Co-requisite: SW 6531.</td>
</tr>
<tr>
<td>6520</td>
<td>Advanced Policy Practice: Children, Youth, and Families (4)</td>
<td>Discussion of child, youth, and family policy in the United States and California. Focus on development of advanced skills in policy analysis and advocacy.</td>
<td>SW 6030.</td>
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<tr>
<td>6525</td>
<td>Advanced Policy Practice: Community Mental Health (4)</td>
<td>Discussion of mental health policy in the United States and California. Focus on development of advanced skills in policy analysis and advocacy.</td>
<td>SW 6030.</td>
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<tr>
<td>6530</td>
<td>Field Instruction IV (4)</td>
<td>Supervised social work practice in a community agency with focus on advanced direct practice skills and administrative program.</td>
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<tr>
<td>6531</td>
<td>Field Instruction V (4)</td>
<td>Continued supervised social work practice in a community agency at an advanced level in direct practice and administration within student's area of concentration. Preparation for professional employment with emphasis on multicultural practice. Prerequisite: SW 6530; Co-requisite: SW 6909. Two hrs. seminar, 16 hrs. agency placement.</td>
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<tr>
<td>6532</td>
<td>Field Instruction VI (4)</td>
<td>Continued supervised social work practice in a community agency at an advanced level in direct and indirect practice and administration within student's area of concentration. Preparation for professional employment emphasizing multicultural practice. Prerequisite: SW 6531; Co-requisite: SW 6540. Two hrs. seminar, 16 hrs. agency placement.</td>
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<tr>
<td>6550</td>
<td>Social Work Psychosocial Rehabilitation (4)</td>
<td>Concepts of philosophy of psychosocial rehabilitation as the dominant modality in contemporary community mental health programs. Principles of crisis intervention, particularly in relation to the prevention of suicide and family violence. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.</td>
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<tr>
<td>6552</td>
<td>Legal Issues in Social Work Practice (4)</td>
<td>Legal aspects concerning children, family, and the aged, considering issues such as abortion, illegitimacy, right to treatment, mental health commitment procedures, rights of the elderly, children's rights, marriage, and divorce. Familiarity with legal assistance programs. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.</td>
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<tr>
<td>6553</td>
<td>Assessment and Treatment of Substance Abuse (4)</td>
<td>Social work practice with individual alcoholics and substance abusers, their family systems, and their community network. Awareness of the prevalence of alcoholism and substance abuse and significance for clinical social work practice. Dynamics and treatment of disease. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.</td>
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<tr>
<td>6554</td>
<td>Occupational Social Work (4)</td>
<td>Significance of work life factors on the biopsychosocial functioning of clients and the interface of person, family, and employment. Concepts of human growth and behavior, issues of engagement, diagnostic assessment, and intervention from the social work perspective. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.</td>
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<tr>
<td>6555</td>
<td>School Social Work (4)</td>
<td>Social work and the public school as a process in school-community-pupil relations. Attention to school as a social institution and its organization. Social work services in schools as a specialized field of social work practice. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.</td>
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<tr>
<td>6556</td>
<td>Human Sexuality and Social Work (4)</td>
<td>Exploration of human sexuality and how social workers relate to sexually-oppressed groups. Surveys a range of sexuality-related issues encountered in therapeutic relationships as part of administrative duties and at the policy level. Prerequisite: SW 6530 or 6532.</td>
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<tr>
<td>6557</td>
<td>Sex Roles and Gender Discrimination: Women's Issues in Social Work (4)</td>
<td>Historical and contemporary causes of gender discrimination against women. Special focus on women at risk for mental health problems, violence, and poverty along with other critical issues affecting women such as substance abuse and eating disorders. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.</td>
<td></td>
</tr>
<tr>
<td>6558</td>
<td>Supervision and Staff Development (4)</td>
<td>Review of philosophy, objectives, principles, and methods of social work supervision, staff development, and consultation. Similarities and differences in the roles, knowledge, and skills required, emphasizing teaching-learning-evaluation components. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.</td>
<td></td>
</tr>
<tr>
<td>6559</td>
<td>Youth and the Justice System (4)</td>
<td>The juvenile justice system at the micro and macro level. Informal and formal intervention strategies, theoretical constructs, and policies impacting children, youth, and families within the juvenile justice system. The impact of poverty, racism and issues of diversity. Prerequisite: SW 6010; Co-requisite: SW 6530 or 6532.</td>
<td></td>
</tr>
<tr>
<td>6560</td>
<td>Family Violence Across the Lifespan (4)</td>
<td>Advanced study of violence against children, partners, and the elderly. Prerequisite: successful completion of first two quarters of M.S.W. program.</td>
<td></td>
</tr>
<tr>
<td>6561</td>
<td>Advanced Psychosocial Assessment and Diagnosis (4)</td>
<td>Advanced study in psychosocial assessment and diagnosis of children, adolescents, and adults. Examination of person-in-environment and DSM IV-TR diagnosis. Prerequisite: successful completion of first two quarters of M.S.W. program.</td>
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<tr>
<td>6562</td>
<td>Crisis Intervention and Brief Treatment Models (4)</td>
<td>Investigation of brief treatment models for providing efficient services to mental health clients. Prerequisite: successful completion of first two quarters of M.S.W. program.</td>
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<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
<td>May be repeated for credit with consent of instructor, for a maximum of 16 units.</td>
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<tr>
<td>6909</td>
<td>Departmental Thesis (4)</td>
<td>Developing and writing a research paper for submission to the department, which specifies its format. Supervision by a departmental faculty member. Oral defense is required. Prerequisites: SW 6935, advancement to Candidacy, and consent of faculty advisor.</td>
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<tr>
<td>6932</td>
<td>Quantitative and Qualitative Analysis: Children, Youth, and Families (4)</td>
<td>Social work practice research paradigms, models, and methods. Emphasis on quantitative and qualitative analyses in evaluation of social work practice. Prerequisite: SW 6032.</td>
<td></td>
</tr>
<tr>
<td>6933</td>
<td>Quantitative and Qualitative Analysis: Community Mental Health (4)</td>
<td>Social work practice research paradigms, models, and methods. Emphasis on quantitative and qualitative analyses in evaluation of social work practice. Prerequisite: SW 6032. A-F grading only.</td>
<td></td>
</tr>
<tr>
<td>6935</td>
<td>Program Evaluation: Children, Youth, and Families (4)</td>
<td>Application of social work knowledge, values, and skills in planning and conducting an independent, substantive evaluation of a human services program. Prerequisite: SW 6932.</td>
<td></td>
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<tr>
<td>6936</td>
<td>Program Evaluation: Community Mental Health (4)</td>
<td>Development areas with emphasis on multi-cultural practice. Prerequisite: SW 6022; Co-requisite: SW 6909. Two hrs. seminar, 16 hrs. agency placement.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td>Prerequisites</td>
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<tr>
<td>6959</td>
<td>Integrative Seminar: Children, Youth, and Families (4)</td>
<td>Application of social work knowledge, values, and skills in planning and conducting an independent, substantive evaluation of a human services program. Prerequisite: SW 6933. A-F grading only.</td>
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</tr>
<tr>
<td>6960</td>
<td>Integrative Seminar: Community Mental Health (4)</td>
<td>Capstone experience integrating knowledge in practice, policy, and research. Written project required. Prerequisites: SW 6936, advancement to Candidacy, and consent of faculty advisor. A-F grading only.</td>
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</tr>
<tr>
<td>6962</td>
<td>Writing for Social Work (2)</td>
<td>Capstone experience integrating knowledge in practice, policy, and research. Written project required. Prerequisites: SW 6936, advancement to Candidacy, and consent of faculty advisor. A-F grading only.</td>
<td></td>
</tr>
<tr>
<td>6964</td>
<td>Practice with Lesbian, Bi-Sexual, Gay, Transgendered and Questioning Populations (4)</td>
<td>Support of student writing by reviewing the basic tenets of APA format and working on the most important tenets of good writing: developing a clear thesis, accessing and citing published research, building content, and writing proficiently. CR/NC grading only.</td>
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</tr>
<tr>
<td>6965</td>
<td>Practice with Latino Populations (4)</td>
<td>Social work practice with individuals and families across spectrum of disability including, genetic conditions, developmental delay, intellectual disability, physical disability, chronic medical conditions. Working with individuals in social service systems, such as regional centers, mental health, and primary medical care. A-F grading only.</td>
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<tr>
<td>6966</td>
<td>Social Work and Public Mental Health Across the Lifespan (4)</td>
<td>Social work practice with individuals and families across spectrum of disability including, genetic conditions, developmental delay, intellectual disability, physical disability, chronic medical conditions. Working with individuals in social service systems, such as regional centers, mental health, and primary medical care. A-F grading only.</td>
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<tr>
<td>6969</td>
<td>Issues in Social Work (1-4)</td>
<td>Social work practice with individuals and families across spectrum of disability including, genetic conditions, developmental delay, intellectual disability, physical disability, chronic medical conditions. Working with individuals in social service systems, such as regional centers, mental health, and primary medical care. A-F grading only.</td>
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<tr>
<td>6999</td>
<td>Issues in Social Work (1-4)</td>
<td>Social work practice with individuals and families across spectrum of disability including, genetic conditions, developmental delay, intellectual disability, physical disability, chronic medical conditions. Working with individuals in social service systems, such as regional centers, mental health, and primary medical care. A-F grading only.</td>
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</tbody>
</table>

**Footnote**

1. These are seminars required for specific grant programs (Title IV-E and CalSWEC II). Students in these programs will take one extra unit, bringing their total to 89 units.
Sociology

- Department Information
- M.A. in Sociology
- Graduate Courses

Department Information

Department of Sociology and Social Services
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 3095
Phone: (510) 885-3173
Website: [http://class.csueastbay.edu/sociology/](http://class.csueastbay.edu/sociology/)

Professors Emeriti
Benjamin P. Bowser, Ph.D. Cornell University
Willem W. Van Groenou, Ph.D. University of Illinois

Professors
Efren N. Padilla, Ph.D. Michigan State University

Associate Professors
Patricia Jennings (Chair), Ph.D. University of Kentucky
Carl Stempel, Ph.D. University of Oregon

Assistant Professors
Will L. Johnson, Ph.D. University of California, Berkeley
Holly Vugia, Ph.D. University of California, Berkeley

Graduate Advisor: Patricia Jennings

M.A. in Sociology

Important Notice:
Beginning Fall 2010, the Department will not be accepting applications for the M.A. in Sociology. Please consult the Department or the online catalog for any changes.

Program Description

The Department of Sociology and Social Sciences offers graduate study leading to the degree of Master of Arts in Sociology with a thesis, examination, or special project. The candidate is responsible for the fulfillment of the general requirements stated in this catalog as well as the specific requirements of the department stated below.

Student Learning Outcomes

Students graduating with an M.A. in Sociology from Cal State East Bay will

1. be able to write an original sociological analysis,
2. understand the role of theory in sociology and how to apply key concepts in social analysis,
3. be able to employ quantitative and qualitative research methods in sociology.

Admission ("Classified Standing")

The student should note that admission to the university as a post-baccalaureate student does not in itself constitute admission to the department's program. In general, the program is open to graduates of accredited institutions who have

1. completed coursework equivalent to that required in the lower and upper division core in Sociology at Cal State East Bay,
2. achieved not less than a 3.0 grade point average in all graduate and undergraduate work,
3. submitted to the department letters of reference from two former instructors who are familiar with the student's academic work, and
4. submitted a writing sample to the department. For "Classified Graduate" status, the student must have fulfilled the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at [www.csueastbay.edu/testing](http://www.csueastbay.edu/testing) or call 510.885.3691.

In exceptional cases, a student who has earned less than a 3.0, but above a 2.5 grade point average, may be admitted to "Conditionally Classified Graduate" standing.

Maintenance of "Classified Graduate Standing"

To maintain "Classified Graduate" standing, a grade point average of at least 3.0 must be achieved in all courses taken in the approved program, whether taken at Cal State East Bay or at some other accredited institution. If a candidate's grade point average falls below 3.0, the candidate shall be placed on probation at the end of that quarter. If while on probation the candidate fails to make progress toward raising his or her grade point average toward a 3.0, the candidate is subject to disqualification at the discretion of appropriate Cal State East Bay authorities. Disqualified students will not normally be considered for readmission to Cal State East Bay for at least one year after disqualification.

Advancement to Candidacy

A student who holds "Classified Graduate" standing may be Advanced to Candidacy for the master's degree when the student has:

1. filed an approved program of study with the department;
2. completed at least 12 quarter units of approved graduate-level work beyond the baccalaureate degree with a grade point average of 3.0 or better;
3. been recommended for Advancement to Candidacy by the department.
Curricular Requirements (45 units)

Forty-five (45) quarter units of approved courses earned in graduate standing of which 32 quarter units must be completed in residence. With departmental approval, up to 12 quarter units of upper-division work required to remove undergraduate deficiencies can be counted toward the 45 quarter units required for the degree.

All Students must complete (A) and (B) and one of four options under (C). (Note: STAT 1000 is a prerequisite for STAT 3010.)

A. Core Requirements (20 units)
   - SOC 6111 Advanced Sociological Research Methods I (4)
   - SOC 6112 Advanced Sociological Research Methods II (4)
   - SOC 6311 Seminar in Sociological Theory I (4)
   - SOC 6312 Seminar in Sociological Theory II (4)
   - STAT 3010 Statistical Methods in the Social Sciences (4)

B. Topics Seminars in Sociology (12 units)
   - SOC 6800 Topics Seminar (4) (May be taken three times for credit)

C. Students Must Choose One of the Four Capstone Experiences (13 units)
   1. University Thesis
      - Note: Total units of 6908 and 6910 combined must equal nine (9) units with advice from your thesis committee chair.
      - a. SOC 6908 Thesis Development (1-4)
         Prerequisites: graduate standing; advanced to candidacy; secured thesis committee chair’s written approval
      - b. SOC 6910 University Thesis (1-8)
         Prerequisites: graduate standing; SOC 6908
      - c. Electives chosen under advisement from upper division courses and graduate seminars in Sociology, Statistics, or closely-related fields (4)

   2. Comprehensive Examination
      - a. Electives chosen under advisement from upper-division courses and graduate seminars in Sociology, Statistics, Foreign Languages and/or closely-related fields (13)
      - b. Area Comprehensive Examination (in four areas)
         1. Theory
         2. Methods
         3. Substantive area (elected by candidate with departmental approval)
         4. Substantive area (elected by candidate with departmental approval)

      Before a student may take the Comprehensive Examination, (s)he must be Advanced to Candidacy. Failure to pass the examination twice results in dismissal from the program.

   3. Project
      - a. Electives chosen under advisement from upper-division courses and graduate seminars in Sociology, Statistics, Foreign Languages, and/or closely-related fields (8 units)
      - b. Project (5 units)

      Before a student may complete a project, (s)he must have the departmental advisor's approval and be Advanced to Candidacy. Contact departmental advisor for additional information.

   4. Departmental Thesis
      - Note: Total units of 6908 and 6909 combined must equal five (5) units with advice from your thesis committee chair.
      - a. SOC 6908 Thesis Development (1-4 units)
         Prerequisites: graduate standing; Advanced to Candidacy; secured thesis committee chair's written approval
      - b. SOC 6909 Departmental Thesis (1-4 units)
         Prerequisites: graduate standing; SOC 6908
      - c. Electives chosen under advisement from upper-division courses and graduate seminars in Sociology, Statistics, Foreign Languages, and/or closely-related fields (8)

Upper Division Courses Acceptable for the Master's Degree

All sociology courses in the 3000-4000 series are acceptable choices in the master's program.

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Graduate Courses

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<tr>
<td>6111</td>
<td>Advanced Sociological Research Methods I (4)</td>
</tr>
<tr>
<td>6112</td>
<td>Advanced Sociological Research Methods II (4)</td>
</tr>
<tr>
<td>6311</td>
<td>Seminar in Sociological Theory I (4)</td>
</tr>
<tr>
<td>6312</td>
<td>Seminar in Sociological Theory II (4)</td>
</tr>
</tbody>
</table>

Graduate Courses (Course prefix: SOC)
Application of issues to development of students' interests and thesis topics. Prerequisites: "Classified Graduate" standing; SOC 6311.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>6800</td>
<td>Topics Seminar (4)</td>
<td>Presentation of selected topics beyond regular courses. Subject will vary from time to time. Prerequisites: &quot;Classified Graduate&quot; standing and consent of instructor. May be taken three times for credit when content varies, for a maximum of 16 units.</td>
</tr>
<tr>
<td>6898</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 3.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the Sociology major. CR/NC grading only.</td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
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<tr>
<td>6908</td>
<td>Thesis Development (1-4)</td>
<td>Development and writing of a research paper in preparation for completing a departmental or university thesis. Supervision by a faculty committee, chaired by a regular member of the department. Prerequisites: graduate standing; must be advanced to candidacy; must have secured thesis committee chair's written approval. May be repeated once for credit, for a maximum of 8 units.</td>
</tr>
<tr>
<td>6909</td>
<td>Departmental Thesis (1-4)</td>
<td>Completion of a research paper for submission to the department, which specifies its format. Supervision by a faculty committee, chaired by a regular member of the department. Oral defense normally required. Prerequisites: graduate standing; SOC 6908.</td>
</tr>
<tr>
<td>6910</td>
<td>University Thesis (1-8)</td>
<td>Completion of a formal research paper for submission to the university in the specified format. Supervision by a faculty committee, chaired by a regular member of the department. Oral defense normally required. Prerequisites: graduate standing; SOC 6908.</td>
</tr>
<tr>
<td>6999</td>
<td>Issues in Sociology (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in sociology. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
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Speech-Language Pathology

Program Description

The Master of Science degree in Speech-Language Pathology is offered in the Department of Communicative Sciences and Disorders. The objective of this program is the professional preparation of each student, academically and clinically, for state licensure, clinical certification by the American Speech-Language-Hearing Association, and the credential as a public school Speech, Language and Hearing Specialist.

Speech-language pathology and audiology are the professions which help adults and children overcome disabilities of speech, language and hearing.

This program has developed a reputation for rigorous and balanced professional training. The master's degree program is accredited by the American Speech-Language-Hearing Association.

Student Learning Outcomes

Students graduating with an M.S. in Speech-Language Pathology from Cal State East Bay will:

1. demonstrate competency in assessing and treating individuals with a variety of communicative disorders, and assist in integrating them in their communities;
2. self-evaluate their clinical skills;
3. recognize the need for additional information and be able to conduct clinical research, especially in the area of clinical outcomes;
4. prepare competently written professional communications (evaluations, therapy notes, summaries, and written correspondence);
5. behave according to ethical professions and standards, recognize and respect the limits of their professional preparation, and work effectively with other professionals.

Careers Opportunities

Students who complete the Master of Science degree in Speech-Language Pathology are eligible for ASHA certification, California state licensure, and in most cases the Speech-Language Pathology Services Credential. Speech-language pathologists work in a variety of settings which include hospitals, schools, rehabilitation centers, community speech and hearing clinics, public schools, and private practice.

Faculty

The Communicative Sciences and Disorders is comprised of five full-time professors and two clinical staff. Each of these professional faculty and staff has clinical and/or research interests that encompass the full range of communicative disorders. Regular guest lecturers supplement the academic offerings. Faculty, professional staff, and part-time supervisors who are active in the community provide clinical supervision.

Special Features

Clinical experiences are a key component in preparing students for licensure. The department operates the Speech, Language and Hearing Clinic, an on-campus facility that provides clinical services to speech, language, and hearing impaired individuals from Bay Area communities. Students who are enrolled in the Speech-Language Pathology master's program are able to observe, receive training, and do research in this fully-equipped facility. Additional clinical training is received in off-site placements and internships in settings that meet each student's interests and training requirements including hospitals, rehabilitation facilities, schools, and clinics. In order to acquire the knowledge and skills requisite to the practice of speech-language pathology, including the ability to function in a broad variety of clinical situations and to render a wide spectrum of client care, students must demonstrate skills and attributes in five skill areas: academic performance, written language, oral communication, hearing, and interpersonal management. Prior to entering clinic, students will pass an essential functions evaluation of skills necessary to be an effective clinician. The evaluation will include a screening of students' speech, oral-written language, and hearing.

Scholarships

The most usual form of financial aid is in the form of guaranteed student loans. However, other types of financial aid are available. The university supports the following programs:

- State University Grant
- Federal Perkins Loan
- Federal Stafford Loan (including unsubsidized)
- Federal Work-Study
The Department of Communicative Sciences and Disorders recommends the award of certain forms of financial aid within the University. They include the following:

- **Betty Lindeman and Robert N. Rosenthal Memorial Fund**, non-interest loans, $500 - $1500 for graduate students in Communicative Sciences and Disorders.
- **Excellence in Aphasia Group Treatment Award**, $3500 scholarship for a graduate student in Communicative Sciences and Disorders.
- **Stephanie Amore Memorial Fund**, endowment earnings benefit students in the department.
- **Stephanie Kalman Foundation Scholarships**, $2,000-$3000 scholarships for undergraduate and graduate students in Communicative Sciences and Disorders.
- The department also maintains information on scholarships and grants from additional university and professional sources.
- Occasionally, funds are available for Graduate Equity Fellowships, Research and Teaching Assistantships, and Student Assistantships (clerical).

**Admission**

A candidate must be admitted to the university, consistent with requirements and procedures explained in this catalog. Interested candidates apply for admission to the department and to the university at the same time. Applications for admission to the department are online at the department website ([http://www.csueastbay.edu/commsci](http://www.csueastbay.edu/commsci)).

There are three categories of student status while pursuing the degree: "Conditionally Classified Graduate", "Classified Graduate", and "Advancement to Candidacy."

**"Conditionally Classified" Status**

Students are in "Conditionally Classified" status when they have been admitted to the M.S. in Speech-Language Pathology degree program, but have not yet completed the requirements for "Classified Graduate" status. Students whose undergraduate degree is not in the field of speech pathology should apply under this status.

**"Classified Graduate" Status**

Students are in "Classified Graduate" status when they:

1. have been admitted to the M.S. in Speech-Language Pathology degree program;
2. possess a baccalaureate degree from an accredited college or university with a major in Speech Pathology and Audiology or the equivalent coursework in Speech Pathology and Audiology with another degree. Preparatory coursework completed at other institutions must correspond in scope and content with required and elective courses offered on this campus;
3. complete SPPA 4852, 4854, 4859, 4961, 4962, 4965, 4966 and 4967 or the equivalent;
4. possess an overall grade point average of 3.0 or better covering the last 90 quarter units of course work;
5. present evidence of having satisfactorily completed a minimum of 60 clock hours of supervised clinical practica in speech, language, and hearing;
6. fulfill the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at [www.csueastbay.edu/testing](http://www.csueastbay.edu/testing) or call 510.885.3661.

**Advancement to Candidacy**

Students reach "Advancement to Candidacy" status if they:

1. are a "Classified Graduate" student in good standing;
2. complete at least 12 units in graduate work in Speech Pathology and Audiology with a GPA of at least 3.0;
3. complete a minimum of 2 units of SPPA 6056 and/or SPPA 6156 with a grade of "B" or better;
4. defend satisfactorily his or her thesis proposal, if a thesis capstone is selected; and
5. show evidence of progress and ability to complete the program by receiving at least a 3.0 GPA in each course taken.

**Degree Requirements**

The program leading to the M.S. degree in Speech-Language Pathology requires completion of at least 76 quarter units of credit with grades of "B" (3.0) or better from the courses listed below. The Speech-Language Pathology Services Credential track prepares a student to apply for the Speech-Language Pathology Services Credential. It is 80 units and requires the completion of the M.S. degree, EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4), and a passing score on the CBEST. The work must be completed within five calendar years after admission to the program. At least 63 units must be completed in residence.

**I. Required Courses (70 units M.S. degree: 74 units M.S. degree plus Speech-Language Pathology Services Credential track)**

- SPPA 6000 Research Methods in Communicative Sciences and Disorders (4)
- SPPA 6010 Advanced Speech and Hearing Science (2)
- SPPA 6020 Vocal Pathology and Rehabilitation (4)
- SPPA 6030 Clinical Organization and Management (2)
- SPPA 6040 Advanced Seminar in Speech, Language, and Communication Disorders (2)
- SPPA 6050 Neurogenic Motor Speech Disorders: Adults and Children (4)
- SPPA 6055 Aphasia and Related Neurogenic Language Disorders (4)
- SPPA 6056 Practicum in Speech-Language Pathology: Treatment (2, 4 times)
- SPPA 6057 Practicum in Speech-Language Pathology: Assessment (2)
- SPPA 6060 Advanced Study of Language Disorders in Children (4)
- SPPA 6064 Fluency Disorders (4)
- SPPA 6066 Clinical Internship in Speech-Language Pathology (6, 2 times)
- SPPA 6070 Augmentative/Alternative Communication-Assistive Technology for Speech-Language Pathologists (4)
- SPPA 6080 Counseling Individuals with Speech, Language and Hearing Disorders (4)
- SPPA 6156 Practicum in Audiologic Assessment (2)
- SPPA 6160 Audiological Rehabilitation (4)
- SPPA 6220 Dysphagia in Adults and Children (4)

**Required for Speech-Language Pathology Services Credential Track**

- EPSY 5021 Introduction to Educating All Students in Diverse Classrooms (4)
Graduate Courses

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Elective Courses (4-6 units minimum)

Students completing a 2-unit University Thesis for their Capstone Experience need only take a minimum of 4 elective units. Students must select a minimum of 4-6 units from the following list of approved SPPA elective courses. Course substitutions may be made only with the approval of a graduate faculty advisor. Students may need to enroll in more than 4 or 6 units of electives to prepare for professional certification, licensure or credential.

- SPPA 6221 Accent Modification for Nonnative Speakers of English (2)
- SPPA 6222 The Speech Pathologist and Cultural Diversity (2)
- SPPA 6223 Early Language Assessment and Intervention (2)
- SPPA 6224 Issues in Ethics (2)
- SPPA 6225 Dementia (2)
- SPPA 6226 Traumatic Brain Injury (2)
- SPPA 6227 Communication Disorders in Right Hemisphere Syndrome (2)
- SPPA 6228 School-based Issues in Speech-Language Pathology (2)
- SPPA 6229 Medical Speech-Language Pathology (2)

Capstone Experiences (0-2 units)

Satisfactory achievement on a written comprehensive examination or a 2-unit University thesis, SPPA 6910, is required for completion of the program. An oral examination is required for the university thesis. The student need not have taken all required and elective courses for the major prior to completing the capstone experience, however information contained in those courses may be included in the capstone experience.

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Speech-Language Pathology Services Credential

The Department of Communicative Sciences and Disorders has developed a program of graduate study designed to fulfill the requirements for the Speech-Language Pathology Services Credential. This credential is required for employment in the public schools.

Individuals wishing to obtain this credential must meet all requirements of the Master of Science degree in Speech-Language Pathology, including an internship in the public schools (SPPA 6066 for 6 units), a 4-unit course in Educational Psychology (EPSY 5021) and a passing score on the CBEST.

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Graduate Courses

Graduate Courses (Course prefix: SPPA)

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<th>Course Number</th>
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| 6000 | Research Methods in Communicative Sciences and Disorders (4)  
Applied research methods in the field of communicative disorders, including literature search techniques, research designs, statistical tests, and scholarly report preparation. Required individual research project and written assignment. Prerequisites: SPPA 4859 and graduate standing: Co-requisite: SPPA 4856 or 6056. |
| 6010 | Advanced Speech and Hearing Science (2)  
Selected topics in acoustic and physiological phonetics, speech perception and psychoacoustics with laboratory application in the analysis of normal and disordered speech and voice patterns. Prerequisites: SPPA 4867; and graduate standing. |
| 6020 | Vocal Pathology and Rehabilitation (4)  
Assessment procedures for differentiating various organic and non-organic laryngeal dysfunctions in adults and children and selection and application of appropriate treatment methods. Prerequisites: SPPA 4867; and graduate standing. |
| 6030 | Clinical Organization and Management (2)  
Course description: Principles and procedures underlying patient enrollment, family counseling, and utilizing allied professions for adults and children in clinic and school settings. Organizing and administering speech and language programs following State and Federal regulations. Prerequisites: graduate standing and consent of instructor. |
| 6040 | Advanced Seminar in Speech, Language and Communication Disorders (2)  
Selected topics in speech, language and hearing. Topics include autism, bilingualism, child language disorders, deafness, fluency, evaluation and management of hearing loss, acquired speech and language disorders. Prerequisite: Graduate standing. May be repeated two times for credit when content changes for a maximum of 6 units. |
| 6050 | Neurogenic Motor Speech Disorders: Adults and Children (4)  
Evaluation and treatment of the dysarthrias, apraxia of speech and speech and voice problems associated with acquired and developmental neuropathologies in children and adults. Evidence-based practice in assessment and treatment. Prerequisites: SPPA 4852 or 6052; SPPA 4866; and graduate standing. |
| 6052 | Clinical Methods and Procedures in Communicative Disorders (3)  
Basic principles of client treatment and management, including structuring the therapy session, designing therapy hierarchies, collecting data, working with families, reinforcing correct behavior, and documenting outcomes. Course includes 10 hours of supervised clinical observation. Prerequisite: Graduate standing. A-F grading only. |
| 6054 | Fluency Rounds (1)  
Review, discussion, and planning of fluency cases currently being evaluated and treated at the CSUEB Speech, Language, and Hearing Clinic. Prerequisites: SPPA 4852 or 6052; and consent of instructor. May be repeated once for credit, for a maximum of 2 units. CR/NC grading only. |
| 6055 | Aphasia and Related Neurogenic Language Disorders (4)  
Analysis of historical and current information relating brain dysfunction and language disorders. Observation; administering and interpreting standardized and nonstandardized assessment procedures, selecting treatment techniques, and collecting data for evidence-based practice treatment decisions. Prerequisites: SPPA 4852 or 6052; and graduate standing. A-F grading only. |
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Grading</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>6056</td>
<td>Practicum in Speech-Language Pathology: Treatment (2)</td>
<td>Development, implementation and evaluation of individualized therapy plans administered in both individual and group settings. Report writing and oral case presentations. Prerequisites: SPPA 4852 or 6052 and 4854 or 6854, both with a &quot;B&quot; (3.0) or better; and graduate standing. May be repeated three times for credit, for a maximum of 8 units.</td>
<td>A-F</td>
<td>2</td>
</tr>
<tr>
<td>6057</td>
<td>Practicum in Speech-Language Pathology: Assessment (2)</td>
<td>Supervised clinical diagnosis of speech-language disorders including history taking, test administration, data analysis, patient counseling, oral and written case presentation. Prerequisites: SPPA 6000; 4852 or 6052; graduate standing. A-F grading only.</td>
<td>A-F</td>
<td>2</td>
</tr>
<tr>
<td>6060</td>
<td>Advanced Study of Language Disorders in Children (4)</td>
<td>Evaluation and treatment procedures applicable to clinic and classroom settings. Emphasis on the evaluation of semantic and pragmatic functions and the establishment of functional language. Prerequisites: SPPA 4852 or 6052; SPPA 4865; and graduate standing.</td>
<td>A-F</td>
<td>4</td>
</tr>
<tr>
<td>6064</td>
<td>Fluency Disorders (4)</td>
<td>Theories of etiology and therapeutic approaches to stuttering and cluttering disorders in adults and children. Prerequisites: SPPA 4852 or 6052; and graduate standing.</td>
<td>A-F</td>
<td>4</td>
</tr>
<tr>
<td>6066</td>
<td>Clinical Internship in Speech-Language Pathology (6)</td>
<td>Field placement in supervised and approved settings such as public schools, hospitals, and community speech-language and hearing clinics. Prerequisites: SPPA 4852, 4863, 4864, 6000, 6020, 6050, 6055, 6056, 6057, 6060; Internship Preference Form filed; and graduate standing. Must be repeated once for credit, for a maximum of 12 units.</td>
<td>A-F</td>
<td>6</td>
</tr>
<tr>
<td>6070</td>
<td>Augmentative/Alternative Communication-Assistive Technology for Speech-Language Pathologists (4)</td>
<td>Principles of augmentative/alternative communication for both children and adults. Hardware, software, and peripheral equipment for assessment, system fittings, and intervention. Open to SPPA graduate students and Speech Pathology professionals. Prerequisites: SPPA 4856 or 6056; SPPA 4865; and graduate standing.</td>
<td>A-F</td>
<td>4</td>
</tr>
<tr>
<td>6080</td>
<td>Counseling Individuals with Speech, Language and Hearing Disorders (4)</td>
<td>Counseling theory, models, processes, and strategies. Application of counseling strategies to individuals who present a variety of communicative disorders, and to the families of these individuals to assist them in living with communication disorders. Prerequisites: SPPA 4852 or 6052; and graduate standing. A-F grading only.</td>
<td>A-F</td>
<td>4</td>
</tr>
<tr>
<td>6156</td>
<td>Practicum in Audiologic Assessment (2)</td>
<td>Supervised clinical diagnosis of hearing disorders including history taking, test administration, data analysis, patient counseling, oral and written case presentation. Prerequisites: SPPA 4852 or 6052; SPPA 4861; and graduate standing.</td>
<td>A-F</td>
<td>2</td>
</tr>
<tr>
<td>6160</td>
<td>Audiological Rehabilitation (4)</td>
<td>Advanced study of the issues facing clinicians when providing audiological rehabilitation services in adult clinical settings. Emphasis on group formation and communication strategies training. Guided practical experience in group audiological rehabilitation. A-F grading only. Two hrs. lect., 4 hrs. lab.</td>
<td>A-F</td>
<td>4</td>
</tr>
<tr>
<td>6220</td>
<td>Dysphagia in Adults and Children (4)</td>
<td>Principles and evidence-Based clinical guidelines for screening, assessment, and treatment of dysphagia in adults and children. Anatomy and physiology of normal swallowing, bedside and instrument-based assessment of swallowing disorders, behavioral and instrument-based treatment techniques, and ethical issues in clinical practice. Prerequisites: SPPA 4867, SPPA 4856 or SPPA 6056; and graduate standing. Grading: A-F only.</td>
<td>A-F</td>
<td>4</td>
</tr>
<tr>
<td>6221</td>
<td>Accent Modification for Nonnative Speakers of English (2)</td>
<td>Principles and techniques to modify pronunciation by non-native English speakers. Speaker attitudes, dialect diversity, phoneme contrasts, American English stress patterns, and syllable and word reduction. Prerequisites: SPPA 4856 or 6056; SPPA 4863; and graduate standing. Open to Speech Pathology professionals.</td>
<td>A-F</td>
<td>2</td>
</tr>
<tr>
<td>6222</td>
<td>The Speech Pathologist and Cultural Diversity (2)</td>
<td>Lecture materials and experimental activities targeted to the speech-language pathologist and audiologist. Focus on the effects of cultural/linguistic differences on the treatment of communicative disorders. Prerequisite: SPPA 4852 or 6052. CR/NC grading only.</td>
<td>CR/NC</td>
<td>2</td>
</tr>
<tr>
<td>6223</td>
<td>Early Language Assessment and Intervention (2)</td>
<td>Provides information and develops skills for working with the birth to 3 population at risk for speech and language delays and/or disorders including: children of substance abuse pregnancies, premature birth, chromosomal disorders, developmental delay, and pervasive developmental disorders. Topics include characteristics of these populations, appropriate assessment procedures, family-centered services, and transdisciplinary approaches. Prerequisites: SPPA 4856 or 6056; SPPA 6060. Only open to SPPA majors. CR/NC grading only.</td>
<td>CR/NC</td>
<td>2</td>
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<tr>
<td>6244</td>
<td>Issues in Ethics (2)</td>
<td>The American Speech-Language-Hearing Association's (ASHA) Code of Ethics with specific discussion on conflict of interest, the effect of managed care, and insurance reimbursement. Prerequisite: SPPA 4852 or 6052. Co-requisite: SPPA 4856 or 6056. CR/NC grading only.</td>
<td>CR/NC</td>
<td>2</td>
</tr>
<tr>
<td>6225</td>
<td>Dementia (2)</td>
<td>Causes and management of dementia. Special consideration of speech-language clinical issues. Prerequisites: SPPA 4856 or 6056; SPPA 4866; and graduate standing. CR/NC grading only.</td>
<td>CR/NC</td>
<td>2</td>
</tr>
<tr>
<td>6226</td>
<td>Traumatic Brain Injury (2)</td>
<td>Seminar in the evaluation and treatment of cognitive-linguistic deficits following traumatic brain injury. Prerequisites: SPPA 4856 or 6056; SPPA 4866, 6060; and graduate standing. A-F grading only.</td>
<td>A-F</td>
<td>2</td>
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<tr>
<td>6227</td>
<td>Communication Disorders in Right Hemisphere Syndrome (2)</td>
<td>Assessment protocols and treatment strategies for individuals with communication deficits and related disorders, such as neglect, secondary to right hemisphere brain injury. Prerequisites: SPPA 4852 or 6052, and graduate standing. A-F grading only.</td>
<td>A-F</td>
<td>2</td>
</tr>
<tr>
<td>6228</td>
<td>School-based Issues in Speech-Language Pathology (2)</td>
<td>Issues pertaining to public school setting: IEPs, fair hearings, reports, school personnel, federal and state regulations, qualification standards, dismissal criteria, bilingualism and second language acquisition, best practices, group treatment, data collection, working with parents and teachers, and behavior management. Prerequisites: SPPA 4852 or 6052, and graduate standing. A-F grading only.</td>
<td>A-F</td>
<td>2</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td>Prerequisites</td>
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<tr>
<td>6229</td>
<td>Medical Speech-Language Pathology (2)</td>
<td>Issues pertaining to medical settings; acute, subacute and chronic care, hospice, tracheostomy tubes and vents, genetic syndromes, unusual medical diagnoses, infection control, IHPs, chart documentation, productivity standards, federal and state regulations, best practices, and working with medical professionals as a team. Prerequisites: SPPA 4852 or 6052, and graduate standing. A-F grading only.</td>
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<tr>
<td>6854</td>
<td>Diagnosis of Speech and Language Disorders (4)</td>
<td>Theory and practice in the assessment of various pathologies of speech and language. Prerequisites: Graduate standing and consent of instructor. Two hrs. lect., 6 hrs. lab.</td>
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<tr>
<td>6898</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off campus paid or volunteer activities. Prerequisites: at least a 3.0 GPA; departmental approval of activity. Not applicable to the M.S. in Speech Pathology. May be repeated once, for a maximum of 8 units. CR/NC grading only.</td>
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<tr>
<td>6900</td>
<td>Independent Study (1-5)</td>
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<tr>
<td>6910</td>
<td>University Thesis (2-8)</td>
<td>Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, &quot;University Thesis Writing Guide,&quot; <a href="http://www.csueastbay.edu/thesiswritingguide">www.csueastbay.edu/thesiswritingguide</a>. Prerequisite: graduate standing. Maximum of 8 units per student.</td>
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<tr>
<td>6999</td>
<td>Issues in Speech Pathology and Audiology (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in speech pathology and audiology. May be repeated for credit when content varies, for a maximum of 8 units.</td>
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</table>
Statistics

- Department Information
- Program Description
- M.S. in Statistics
- Other Degree Requirements
- Certificate Programs
- Post-baccalaureate Courses
- Graduate Courses

Department Information

Department of Statistics and Biostatistics
College of Science
Office: North Science 229
Phone: (510) 885-3435

Professor Emerita
Julia A. Norton Ph.D. Harvard University

Professor
Eric A. Suess (Chair), Ph.D. University of California, Davis

Associate Professors
Lynn Eudey, Ph.D. University of California, Berkeley
Shenghua (Kelly) Fan, Ph.D. University of Minnesota
Mitchell R. Watnik, Ph.D. University of California, Davis

Assistant Professors
Joshua D. Kerr, Ph.D. University of California, Davis
YanYan Zhou, Ph.D. University of Maryland

Graduate Coordinators: Mitchell R. Watnik

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Program Description

The Department of Statistics and Biostatistics offers graduate study leading to the degree Master of Science in Statistics. The program is flexible in order to serve the needs of students with varying backgrounds (including statistics, mathematics, computer science, engineering, business, economics and other quantitative fields) and with different career objectives. The program includes options in Applied Statistics, Computational Statistics, Mathematical Statistics, and Actuarial Science. All students are expected to master a wide variety of applied statistical, computational, and probabilistic techniques and the theoretical foundations upon which these techniques are based. Students are expected to be familiar with recent developments in the field and to be able to use the statistical literature to learn new techniques and theories throughout their professional careers. In addition to the general requirements stated elsewhere in this catalog, students must satisfy the departmental requirements stated in the following paragraphs.

Student Learning Outcomes

Students graduating with an M.S. in Statistics from Cal State East Bay will have achieved the following:

1. Mastery of fundamental statistical methodologies, including:
   a. descriptive statistics and graphical displays
   b. probability models for uncertainty, stochastic processes, and distribution theory
   c. hypothesis testing and confidence intervals
   d. ANOVA and regression models (including linear, multiple linear, and logistic) and analysis of residuals from models and trends.

2. At the level of this degree, mastery includes the ability:
   a. to derive and understand basic theory underlying these methodologies
   b. to formulate and model practical problems for solutions using these methodologies
   c. to produce relevant computer output using standard statistical software and interpret the results appropriately
   d. to communicate statistical concepts and analytical results clearly and appropriately to others; and
   e. to understand theory, concepts, and terminology at a level that supports lifelong learning of related methodologies.

Admission Requirements

1. A baccalaureate degree or equivalent.
2. Differential and Integral Calculus, including multiple integration and infinite series (MATH 1304, 1305, 2304).
3. Departmental approval.
4. For "Classified Graduate" status, fulfillment of the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

In addition to the above minimal requirements for admission, if students have some of the following background they will be at an advantage both as to selection for admission to the program and optimal progress toward the degree if admitted:

- basic statistics and probability at the level of STAT 3401, 3502 (or beyond)
- additional mathematics at the level of MATH 2101 and 3100 or 3300 (or beyond)
- knowledge of a computer programming language
- experience in a setting where studies or experiments are conducted for the collection of data.

Advancement to Candidacy Requirements
M.S. in Statistics
Degree Requirements

Successful completion of the following unit, grade, and course requirements.

A. Unit and Grade Requirements
The M.S. in Statistics program consists of at least 48 quarter units of approved upper division and graduate work. The university requirement for the minimum number of 6000-level units applies. All work applied toward the 48 units must be at an average grade of "B" (3.0) or higher. No graduate-level required course may be at a grade below "B-.

B. Course Requirements (48 units)
Elective courses referred to in section 3 below must be chosen with advanced written approval of an advisor.

1. Required Graduate Level Courses (32 units)
   - STAT 6204 Probability Theory (4)
   - STAT 6205 Statistical Theory (4)
   - STAT 6304 Advanced Statistical Inference (4)
   - STAT 6305 Analysis of Variance Models (4)
   - STAT 6401 Advanced Probability I (4)
   - STAT 6501, 6502 Mathematical Statistics I and II (4, 4)
   - STAT 6509 Theory and Application of Regression (4)

2. Required Upper Division Courses (4 units)
   - MATH 3100 Linear Algebra (4) or MATH 3300 Analysis I (4)

Students entering the program with acceptable credit for either of these courses (or equivalents) will select additional courses from approved graduate-level coursework, section 3 below, or courses from other departments designated as acceptable by a graduate advisor.

3. Elective Courses (12 units)
Select one of the options below or complete 12 units of advanced courses chosen with the advanced written approval of an advisor:

a. Option in Applied Statistics (12 units)
   - Required Courses:
     - Three graduate electives in statistics or biostatistics, approved by a graduate advisor. (12)

b. Option in Computational Statistics (12 Units)
   - Topics include regression modeling, multivariate statistics, factor analysis, Monte Carlo simulations, Markov Chain, Monte Carlo methods, bootstrapping, data mining, and other computationally intensive methods.
   - Required Courses:
     - Choose two courses from:
       - STAT 6310 Advanced Stochastic Processes and Simulation (4)
       - STAT 6515 Advanced Multivariate Analysis (4)
       - STAT 6550 Bayesian Statistics (4)
       - STAT 6555 Statistical Time Series Analysis (4)
       - STAT 6601 Advanced Statistical Computing (4)
     - Choose one additional course from one not taken above, or:
       - One approved course from STAT 6860-6864 Selected
       - Topics in Graduate Probability and Statistics (4)
       - STAT 6835 Statistical Pattern Recognition (4)
       - STAT 6865 Mathematical Modeling (4)
       - One approved upper-division or graduate level course in computer science (4) (graduate level preferred)

c. Option in Mathematical Statistics (12 units)
   - Advanced coursework in mathematics is strongly recommended, particularly MATH 3100 Linear Algebra and MATH 3300 Analysis I (real analysis).
   - Required Courses:
     - Choose one course from:
       - STAT 6310 Advanced Stochastic Processes and Simulation (4)
       - STAT 6402 Advanced Probability II (4)
     - Two approved upper-division or graduate level courses in mathematics. Ordinarily, these would be at the 4000- or 6000-level.

   d. Option in Actuarial Science (12 units)
   - Graduate coursework in the College of Business and Economics relevant to insurance, finance, and operations research is recommended. MATH 3100 Linear Algebra is also recommended. Areas of interest include stochastic modeling, force of mortality, life tables, and other topics from actuarial mathematics.
   - Required Courses:
     - Choose one course from:
STAT 6310 Advanced Stochastic Processes and Simulation (4)
- STAT 6402 Advanced Probability II (4)

One course from STAT 6851-6859 Selected Topics in Actuarial and Decision Science (4)

Choose one course from:
- One approved 6000-level course from the College of Business and Economics (4) (or)
- One additional approved 6000-level course from statistics (4)

**Comprehensive Examination**

Successful completion of a departmental examination is required. This written examination will cover the contents of the courses in the candidate's approved program. Other material may be included, the general nature of which will be specified in advance. The examination is given only in the Fall and Spring quarters, and will cover both applied and theoretical topics.

In each quarter of offering, the department Chair will appoint three or more members of the graduate faculty to administer the examination. Each student will generally take the Comprehensive Examination in the quarter of intended graduation or in the preceding quarter, after consulting with the graduate advisor. Students enrolled in the Actuarial Science Option may substitute a passing grade on an approved national actuarial exam for a designated portion of the comprehensive examination, with the approval of the graduate advisor. The examination committee is the final departmental authority in deciding eligibility to take the examination.

**Other Degree Requirements**

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

**Certificate Programs**

**Applied Statistics**

The Certificate in Applied Statistics combines basic work in statistics, which is required for many majors and graduate degree programs, with additional coursework in applied statistics. The coursework is designed to broaden the abilities of scientists and social scientists who already have degrees, but who need more training in applying statistics to their research and employment activities.

The minimum required GPA for the awarding of the certificate is 2.0. Consult an advisor in the Department of Statistics and Biostatistics for clarification and interpretation of requirements. The certificate consists of 24-25 units, plus 4-5 units of prerequisites. At least 4 units must be at the graduate level.

**Prerequisites:**
- STAT 2010
- STAT 3010 (requires STAT 1000)
- STAT 3031 (requires MATH 1130)
- STAT 3502 (requires MATH 1305)
- STAT 3801 (requires MATH 1305).

**A. Core Courses (12-13 units)**

*Applied Statistical Methodology (8-9 units)*

Choose one of the following five pairs of courses:
- STAT 2010 Elements of Statistics for Business and Economics (5) and STAT 4000 Analysis of Variance in the Behavioral Sciences (4)
- STAT 3010 Statistical Methods in the Social Sciences (4) and either STAT 4000 Analysis of Variance in the Behavioral Sciences (4) or STAT 6010 Applied Analysis of Variance (4)
- STAT 3031 Statistical Methods in Biology (4) and either STAT 4000 Analysis of Variance in the Behavioral Sciences (4) or STAT 6010 Applied Analysis of Variance (4)
- STAT 3502 Statistical Inference I (4) and STAT 3503 Statistical Inference II (4)
- STAT/ENGR 3601 Statistics and Probability for Science and Engineering I (4) or STAT/ENGR 5601 Introductory Statistics and Probability for Science and Engineering (4) and STAT/ENGR 3602 Statistics and Probability for Science and Engineering II (4)

*Data Analysis Using Statistical Packages (4 units)*

- STAT 3900 Data Analysis Using Statistical Packages (4) or STAT 4950 Advanced Statistical Packages for Data Analysis (4). A person skilled in statistical programming may provide evidence of such proficiency and substitute a course for one of these, with the approval of an advisor.

**B. Electives (12 units)**

Choose from the following courses not taken above:
- ENGR/STAT 5300 Quality Engineering (4)
- ENGR/STAT 6300 Applied Quality Assurance (4)
- STAT 3050 Statistics: from Data to Decisions (4)
- STAT 3415 Introduction to Decision Theory (4)
- STAT 3510 Sampling Procedures for Surveys (4)
- STAT 3910 Statistical Software Usage (4) or STAT 4910 Advanced Statistical Package Usage (4)
- STAT 4515 Applied Multivariate Analysis (4) or STAT 6515 Advanced Multivariate Analysis (4)
- STAT 4601 Regression or STAT 6509 Theory and Application of Regression (4)
- STAT 4603 Operations Research II (4)
- STAT 4610 Introduction to Nonparametric Statistical Methods (4)
- STAT 4860-69 Undergraduate Seminar (4)
- STAT 6010 Applied Analysis of Variance (4)
STAT 6011 Statistical Modeling for Management and Economics (4)
- STAT 6020 Statistical Methods in Clinical Trials (4)

Mathematical Statistics

The Certificate in Mathematical Statistics is designed to enhance a student's understanding of theoretical statistics and probability in preparation for employment in the engineering, information science, and technology sectors. The certificate also prepares students for further graduate study.

The minimum required GPA for the awarding of the certificate is 3.0. Consult an advisor in the Department of Statistics and Biostatistics for clarification and interpretation of requirements. The certificate consists of 16 graduate level units, plus any necessary prerequisites. All required courses are cross-listed with Mathematics.

Prerequisites
- STAT 6401 requires MATH 3300 and either STAT 3402 or 4401
- STAT 6501 requires MATH 3300 or MATH 3100, and STAT 6205 or graduate standing in mathematics
- STAT 6510 requires MATH 2101 and STAT 3503

A. Core Courses (12 units)
- STAT 6401 Advanced Probability I (4)
- STAT 6501 Mathematical Statistics I (4)
- STAT 6502 Mathematical Statistics II (4)

B. Electives (4 units)
Choose at least one course from the following (advisor approval required):
- STAT 6402 Advanced Probability II (4)
- STAT 6510 Analysis of Variance (4)
- STAT 6860-69 Selected Topics in Probability and Statistics (4)

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Post-baccalaureate Courses

Post-baccalaureate Courses (Course prefix: STAT)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>5300</td>
<td>Quality Engineering (4)</td>
</tr>
<tr>
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<td>(See ENGR 5300 for course description.)</td>
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<tr>
<td>5601</td>
<td>Introductory Statistics and Probability for Science and Engineering (4)</td>
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<tr>
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<td>Basic probability rules (independence, Bayes' Theorem), distributions (binomial, Poisson, normal, exponential), reliability. Descriptive, inferential statistics (control charts, estimation, hypothesis testing: one, two samples), correlation, regression. Emphasizes: computer analysis, simulation; science, engineering applications. Prerequisite: MATH 1305 or departmental approval. Not open to students with credit for STAT/ENGR/MATH 3502. Cross-listed with ENGR 5601.</td>
</tr>
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Graduate Courses

Graduate Courses (Course prefix: STAT)

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<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>6010</td>
<td>Applied Analysis of Variance (4)</td>
</tr>
<tr>
<td>6011</td>
<td>Statistical Modeling for Management and Economics (4)</td>
</tr>
<tr>
<td>6020</td>
<td>Statistical Methods in Clinical Trials (4)</td>
</tr>
<tr>
<td></td>
<td>Experimental designs, statistical analyses, and clinical-scientific-regulatory issues common to clinical trials research. Includes writing analysis plan, conducting statistical analysis meeting constraints of regulatory agencies, reporting results, and data monitoring. Prerequisites: STAT 3503, 4000, or 6010. Not for credit in Statistics M.S. degree.</td>
</tr>
<tr>
<td>6059</td>
<td>Advanced Statistical Methods Using Computing Packages (4)</td>
</tr>
<tr>
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<td>Using computer packages (e.g., SPSS) and interpreting output applied to social science and education. Data preparation, descriptive statistics, graphs, checks for normality, t-tests, F-tests, ANOVA, cross tabulations, chi-squared tests, and correlation. Report preparation. Prerequisites: STAT 2010, 3010, 3031, or STAT/MATH 3520; postbaccalaureate/graduate standing. Not for credit in Statistics graduate program.</td>
</tr>
<tr>
<td>6204</td>
<td>Probability Theory (4)</td>
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<td>Theory of probability. Random variables; joint, marginal, conditional distributions; important distributions (binomial, Poisson, normal, etc.); moments; moment generating functions. Multivariate distributions. Inequalities; limit theorems. Multidimensional transformations; derivation of random variables. Prerequisite: MATH 2304 or admission to the graduate program.</td>
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<tr>
<td>6205</td>
<td>Statistical Theory (4)</td>
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<td>Maximum likelihood and least squares estimation, applications to one-sample, two-sample and regression problems, hypothesis testing, distribution of random variables. Prerequisite: MATH 3300 or admission to the graduate program.</td>
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</tbody>
</table>
**6250 SAS Programming (4)**

**6300 Applied Quality Assurance (4)**
(See ENGR 6300 for course description.)

**6304 Advanced Statistical Inference (4)**

**6305 Analysis of Variance Models (4)**

**6310 Advanced Stochastic Processes and Simulation (4)**

**6401 Advanced Probability I, II (4 units each)**
Advanced treatment of probability theory and its applications. May include: conditioning, generating/characteristic functions, modes of convergence, limit theorems, renewal theory, Markov processes, combinatorial techniques, measure and integration. Prerequisites: MATH 3300 and either STAT 3402 or 4401. Cross-listed with MATH 6401, 6402.

**6501 Mathematical Statistics I, II (4 units each)**
Theory of point and interval estimation and hypothesis testing, from the Neyman-Pearson point of view. May include: decision theory, non-parametric inference, sequential analysis, multivariate analysis, robustness, Bayesian methods, computer intensive methods. Prerequisites: MATH 3300 or MATH 3100, and STAT 6205 or graduate standing in mathematics. Cross-listed with MATH 6501, 6502.

**6509 Theory and Application of Regression (4)**

**6510 Analysis of Variance (4)**
The theory and application of the general linear model, the analysis of variance and covariance, application of generalized inverses and decomposition theorems from linear algebra. Prerequisites: MATH 2101, and either STAT 3503 or STAT 6305. Cross-listed with MATH 6510.

**6511 Advanced Applied Econometrics (4)**
(See ECON 6511 for course description.)

**6515 Advanced Multivariate Econometrics (4)**
Advanced, computer-intensive applications of multivariate analysis. Applications of linear algebra. Topics may include ANOVA, canonical correlation, discriminant functions, factor/cluster/spatial analysis. Emphasis on actual data, report writing. Prerequisites: STAT 6305, and STAT 4950 or 6250, and MATH 2101.

**6550 Bayesian Statistics (4)**
Bayes Theorem, subjective probability, conjugate priors, non-informative priors, posterior estimation, credible intervals, prediction, sensitivity analysis, comparison to classical procedures, MCMC, Gibbs sampling, hierarchical Bayesian analysis. Use of statistical software. Report writing. Prerequisites: a graduate level course in Statistics or probability and an upper division course in computational statistics or computer science or consent of instructor. Co-requisite: one of prerequisites allowed as co-requisite.

**6555 Statistical Time Series Analysis (4)**
Analysis of correlated data in time, trends, seasonal patterns, periodicity, autocorrelation, spectral analysis, filtering, time domain versus spectral domain. Decomposition, autoregression, ARIMA, state-space models, forecasting. Applications to data in economics, engineering, seismology. Use of statistical software. Report writing. Prerequisites: one course in upper division statistics or probability and statistical computing or consent of instructor.

**6601 Advanced Statistical Computing (4)**
Implementation of computationally-advanced statistical methods. Topics may include: bootstrap, EM algorithm, Bayesian methods, Markov Chain, Monte Carlo, neural networks, recent methodological advances. Prerequisites: senior or graduate standing, previous programming experience and either STAT 4950 or STAT 6250.

**6651 Analysis of Categorical Data in Biostatistics (4)**
(See BSTA 6651 for course description.)

**6801 Statistical Consulting (4)**
Professional statistical consulting skills. Technical methods such as design of experiments and analysis of complex data. Professional data management and software practices will be covered. Interpersonal consulting skills will be emphasized. Real-life applications will be explored. Prerequisites: STAT 6250, STAT 6305, STAT 6509 and completion of the University Writing Skills Requirement. A-F grading only.

**6835 Statistical Pattern Recognition (4)**
(See CS 6835 for course description.)

**6843 - 6849 Selected Topics in Biostatistics (4)**
(See BSTA 6843-6849 for course description.)

**6851 - 6859 Selected Topics in Actuarial and Decision Science (4)**
Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering. Prerequisite: STAT 3402 or 4401. May be repeated for credit when content varies, for a maximum of 8 units.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6860</td>
<td>Selected Topics in Graduate Probability and Statistics (4)</td>
<td>Probability and/or Statistics extending beyond regular courses. Variable content to be specified at time of offering. Prerequisites: graduate standing and consent of instructor. May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>6864</td>
<td>Mathematical Modeling (4)</td>
<td>(See MATH 6865 for course description.)</td>
</tr>
<tr>
<td>6865</td>
<td>Seminar in Probability and Statistics (4)</td>
<td>An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. Prerequisites: graduate standing and consent of instructor. May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.</td>
</tr>
<tr>
<td>6870</td>
<td>Practicum in Statistics (1-4)</td>
<td>Supervised experience tutoring, grading, or consulting through the Statistics Department Consulting Laboratory. Students complete academic assignments integrated with on- or off-campus paid or volunteer activities. Prerequisites: advancement to candidacy, approval of the graduate advisor. May be repeated for credit, for a maximum of 4 units. Five to twenty hrs. act.</td>
</tr>
<tr>
<td>6895</td>
<td>Cooperative Education (1-4)</td>
<td>Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 3.0 GPA and departmental approval of activity. May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the M.S. degree in Statistics.</td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
<td></td>
</tr>
<tr>
<td>6950</td>
<td>Graduate Statistics Capstone (1)</td>
<td>Retrospective view of courses required for M.S. degree. Strategies for lifelong learning and contributions to the statistics profession. Preparation for, and completion of, M.S. Comprehensive Examination. Prerequisites: STAT 6401, 6501; Advancement to Candidacy. Co-requisite: STAT 6502.</td>
</tr>
<tr>
<td>6995</td>
<td>Issues in Statistics (4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in statistics. May be repeated for credit when content varies, for a maximum of 8 units.</td>
</tr>
</tbody>
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Teacher Education

Department Information

Department of Teacher Education
College of Education and Allied Studies
Office: Art and Education Bldg. 242
Phone: (510) 885-3027, FAX: (510) 885-4632
Website: www20.csueastbay.edu/ceas/departments/ted/index.html

Professor Emeritus
David R. Stronck, Ph.D. Oregon State University

Professors
Joan D. Davenport, Ph.D. University of Pittsburgh
Phillip E. Duren, Ph.D. Ohio State University
Bijan B. Gillani, Ed.D. University of Southern California
Lettie Ramirez, Ph.D. University of Texas at Austin
James J. Zarrillo, Ph.D. Claremont Graduate School

Associate Professors
Jeanette M. Bicais (Chair), Ph.D. University of California, Berkeley
Li-Ling Chen, Ph.D. University of Texas at Austin
Denise M. Fleming, Ph.D. University of California, Berkeley
Valerie A. Helgren-Lempesis, Ed.D. University of Miami
Shira Lubliner, Ed.D. University of San Francisco
James M. Mitchell, Ph.D. University of Minnesota, Minneapolis
Catherine F. Reed, Ph.D. University of Virginia (FERP)

Assistant Professors
Malika Chambers, Ed.D. Mills College
Eric Engdahl, Ph.D. University of California, Los Angeles
Michele Korb, Ph.D. Marquette University
Felipe H. Razo, Ph.D. Claremont Graduate School/San Diego State University
Craig B. Wilson, Ph.D. University of California, Berkeley (FERP)

General Information

The Department of Teacher Education offers post-baccalaureate and graduate programs to prepare teachers who are committed to improving school practices for California's diverse student populations and who can model such practices in their own classrooms.

Faculty

The Department of Teacher Education faculty is comprised of professors committed to preparing teachers and other educational professionals to be effective in California's diverse schools. The faculty have recognized expertise and are active in the professional discipline of Teacher Education. They are supplemented by a select group of lecturers drawn from respected universities and public schools in the Bay Area.

Programs Offered

Credentials:
- Multiple Subject*
- Single Subject*
- K-12 Reading Language Arts Specialist*

Degrees: Master of Science in Education

Options under M.S. in Education:
- Curriculum
- Early Childhood Education
- Educational Technology Leadership
- Reading Instruction

Certificates:
- Children's Literature
- Cross-Cultural, Language, and Academic Development (CLAD)
- Educational Technology Leadership

Authorization:
*Note: The Multiple and Single Subject programs, and the programs in reading instruction are accredited by the California Commission on Teacher Credentialing (CCTC) and the National Council for the Accreditation of Teacher Education (NCATE).

Special Features

Credential Program Teams: All credential candidates become part of designated teams, each consisting of approximately 35 members. The team stays together for the full credential program, providing support and identity.

Field-Centered Credential Programs

Much of the program is conducted in public school settings. Student teaching/paid teaching occurs for three quarters, thereby integrating credential classes with real-life teaching experiences. Student teachers will be assigned to teaching experiences with children/young adults of racial, ethnic, or cultural backgrounds different from themselves.

The College of Education Credentials Student Service Center

The College of Education Credentials Student Service Center (CSSC) is provided as a service to all students and faculty involved in the credential programs. The CSSC provides the evaluations of coursework upon which the faculty make decisions as to the admission of an applicant to a program, as well as the recommendation for a credential upon a candidate's completion of a program.

Basic Teaching Credential Programs

Credential requirements specified in this catalog are subject to changes made by the State of California. Contact the Department of Teacher Education for current regulations.

Admission

Note: Department application deadlines differ from those listed by the university. Please contact the department for appropriate program application periods.

Multiple or Single Subject Credential Programs

Before applying to the Multiple Subject or Single Subject Credential Programs, all applicants must attend an "Admission Advisement Session." Two to three sessions are held every month, except July and August. For a schedule of sessions, call (510) 885-2272.

Multiple Subject applicants (except for the undergraduate blended program; see the Liberal Studies chapter) must file with the Department of Teacher Education:

1. a completed University "Graduate and Post-Baccalaureate Application"
2. a graduate application fee
3. a statement of residency, if new to Cal State East Bay
4. two official copies of each transcript from each college or university attended (and one additional copy or photocopy for the Department of Teacher Education)
5. a Department Application Form for the Multiple Subject Credential Program
6. two letters of recommendation verifying prerequisite field experience.

Single Subject applicants must file with the Department of Teacher Education:

1. a completed University "Graduate and Post-Baccalaureate Application"
2. a graduate application fee
3. a statement of residency if new to Cal State East Bay
4. two official copies of each transcript (and one additional copy or photocopy for the Department of Teacher Education)
5. a Department Application Form for the Single Subject Credential Program
6. two letters of recommendation verifying prerequisite field experience.
7. Applicants to the Bachelors Plus Pathway will have separate application procedures and requirements. Please consult the Department of Teacher Education for details.

Prerequisites

Each candidate must complete the following prerequisites before entering the Multiple Subject and Single Subject Teaching Credential Programs:

- Subject Matter Competency. Multiple Subject applicants must pass the California Subject Examinations for Teachers (CSET) Multiple Subjects examinations. Single Subject applicants must either (a) complete a CCTC-approved subject matter preparation program or (b) pass the relevant CSET examinations.
- U.S. Constitution course or exam
- CBEST. California Basic Educational Skills Test, passing score
- All candidates must have a cumulative GPA of 2.67 with a GPA of 2.75 in the last 60 semester units.
- Two letters of recommendation verifying successful experiences in school/school-like settings. TED 3001, Exploring Education, may be taken as part of this requirement.

Admission Process

Applicants are required to attend an admission interview. Successful applicants are notified by mail shortly after the interview.

Applicants accepted into a credential program must immediately:

- file State Forms 41-CIC (Application for Character and Identification Clearance) and BID-7 (2-82) (two fingerprint cards), and submit a TB clearance dated within the past calendar year. A nonrefundable partial fee (money order or certified check made payable to Commission on Teacher Credentialing) must accompany Form 41-4. Upon completion of the program, applicants must pay the remaining credential application fee. (Contact the Credentials Office, AE 250, 510/885-2272.)
- file a copy of a previous/current California credential and a TB clearance dated within one calendar year of application.

Multiple Subject Credential Program

The Multiple Subject Credential is the basic credential that authorizes the teaching of all subjects in a self-contained, elementary school classroom.
I. Types of Multiple Subject Credential Programs

A. Multiple Subject Credential

Candidates may complete the Multiple Subject Credential Program at four locations in Alameda and Contra Costa Counties. The program is four quarters, with summer and winter quarter entry.

B. Multiple Subject--BCLAD

Important Notice: Beginning Summer 2011, the Department will not be accepting applications for the Multiple Subject Credential with the Bilingual (Spanish/English) Cross-Cultural and Language Development Emphasis. Please consult the Department or the catalog for any changes.

The Multiple Subject Credential with the Bilingual (Spanish/English) Cross-cultural and Language Development Emphasis authorizes teaching in the bilingual, elementary classroom. The BCLAD Credential Program is a four-quarter team program (summer, fall, winter, and spring). It adheres to all the requirements of the Multiple Subject Credential Program. All candidates must speak and write fluently in both Spanish and English and take entry and exit examinations. In addition, TED 5367 and 5371 (6 units) are required.

C. Concurrent Multiple Subject and Education Specialist Credentials (Mild-Moderate and Moderate-Severe, Level I)

In this program, candidates earn both Multiple Subject and Educational Specialist Credentials. This is a two-year program.

D. Blended Multiple Subject Credential/Liberal Studies Major

See Liberal Studies chapter.

II. Curricular Requirements for Multiple Subject Credential (64 units)

- TED 5110 Computer-Based Technology in the Classroom I (3)
- TED 5211 TPA Subject-Specific Pedagogy Task I Assessment (1)
- TED 5212 TPA Designing Instruction Task II Assessment (1)
- TED 5213 TPA Assessing Learning Task III Assessment (1)
- TED 5214 TPA Culminating Teaching Experience Task IV Assessment (1)
- TED 5311 Classroom Environment (2)
- TED 5350 Curriculum and Instruction: Mathematics in the Elementary School (3)
- TED 5351 Psychological Foundations of Education and Planning for Instruction (4)
- TED 5352 Curriculum and Instruction: Reading/Language Arts in the Elementary School-A (3)
- TED 5354 Student Teaching I (5)
- TED 5355 Equity and Diversity/Teaching English Learners A (4)
- TED 5356 Curriculum and Instruction: Reading/Language Arts in the Elementary School-B (3)
- TED 5357 Curriculum and Instruction: Teaching Science, Health and Safety in the Elementary School (3)
- TED 5359 Student Teaching II (6)
- TED 5360 Curriculum and Instruction: Reading/Language Arts and Social Studies in the Elementary School (4)
- TED 5361 Student Teaching III (6)
- TED 5366 Equity and Diversity/Teaching English Learners B (3)
- TED 5372 Team Seminar I: Orientation to TPA Subject-Specific Pedagogy Task I and Reflection on Field Practice (1)
- TED 5373 Team Seminar II: Orientation to TPA Designing Instruction Task II and Reflection on Field Practice (1)
- TED 5374 Team Seminar III: Orientation to TPA Assessing Learning Task III and Reflection on Field Practice (1)
- TED 5375 Team Seminar IV: Orientation to TPA Culminating Teaching Experience Task IV and Reflection on Field Practice (1)
- TED 5376 Curriculum and Instruction: Physical Education Methods (1)
- TED 5377 Curriculum and Instruction: Visual and Performing Arts Methods (2)
- TED 5378 Teaching Special Populations in General Education Settings (4)

Additional requirements for BCLAD:

- Exit-level proficiency in Spanish at FSI-3
- TED 5367 Bilingual Methods (3)
- TED 5371 Classroom Implications of the Culture of the Latino Child (3)

Field experience requirements:

All candidates will complete two supervised field experiences, either as a student teacher or an intern. Field assignments begin in late August with the beginning of the K-12 school year and continue, with breaks at different times, until June.

Teaching Performance Assessment (TPA) Tutorials:

Any candidate who fails a TPA task must enroll in the appropriate TPA Tutorial course(s):

- TED 5061 TPA Subject-Specific Pedagogy Task I Tutorial (2)
- TED 5062 TPA Designing Instruction Task II Tutorial (2)
- TED 5063 TPA Assessing Learning Task III Tutorial (2)
- TED 5064 TPA Culminating Learning Task IV Tutorial (2)

III. Curricular Requirements for Concurrent Education Specialist/Multiple Subject Credentials (105 units)

Candidates take all the courses required for the Multiple Subject Credential listed in the previous section, with the following exceptions:

- EPSY 5021 (4 units) is taken in place of TED 5378.
- Candidates complete a second-year field experience in special education and do not enroll in TED 5361.

Candidates complete the following courses from the Department of Educational Psychology:

- EPSY 5126 (4)
- EPSY 5125 or 5136 (4)
- EPSY 6120 (4)
- EPSY 6127 or 6137 (4)
- EPSY 5128 or 6860 (4)
- EPSY 6131 or 6142 (5)
- EPSY 6133 or 6140 (4)
- EPSY 6670 (3)
- EPSY 6800 or 6801 (8)
- EPSY 6810 or 6820 (2)
Curricular Requirements for Blended Liberal Studies Major/Multiple Subject Credential

Candidates take all the courses required for the Multiple Subject Credential listed in section II above, with the following exceptions:

- Candidates complete a junior-year field experience by enrolling in TED 3005 and 3006, Intermediate Field Experience in the Elementary School A, B (1 unit each)
- Candidates enroll in specially-designated student teaching courses: TED 5347, TED 5348, and TED 5349, Student Teaching in Blended Program A, B, and C (4, 6, and 9 units).
- Candidates complete all the requirements for the undergraduate Liberal Studies degree (see the Liberal Studies chapter in the undergraduate programs section of this catalog).

Single Subject Credential Program

The Single Subject Credential is the basic credential that authorizes teaching in one area of the curriculum. This credential is required for almost all high school and middle school positions, and for a few elementary "specialist" positions. The credential is offered in the following areas: art, English, mathematics, music, physical education, science, and social studies.

Curricular Requirements (64 units)

The Single Subject Credential Program has two "pathways," or sets of course requirements: (1) Bachelors Plus, and (2) Discrete Course. The Discrete Course Pathway is four quarters with summer entry. The Bachelors Plus Pathway is an alternative for students who want to start the Single Subject Credential Program as undergraduates and this pathway takes eight quarters to complete.

The courses required are listed below:

A. Both Pathways (43 units)

- TED 5110 Computer-based Technology in the Classroom I (3)
- TED 5211 TPA Subject-Specific Pedagogy Task I Assessment (1)
- TED 5212 TPA Designing Instruction Task II Assessment (1)
- TED 5213 TPA Assessing Learning Task III Assessment (1)
- TED 5214 TPA Culminating Teaching Experience Task IV Assessment (1)
- TED 5301 Psychological Foundations in Middle and Secondary School Education (4)
- TED 5305 Social/Cultural Context of Education (3)
- TED 5311 Classroom Environment (2)
- TED 5314 Teaching Special Populations in Regular Classrooms (3)
- TED 5318 Professional Responsibilities (3)
- TED 5320 Content Literacy (3)
- TED 5326 Preparation to Teach English Learners in the Single Subject Classroom (3)
- TED 5372 Student Teaching Seminar I: Orientation to TPA Subject-Specific Pedagogy Task I and Reflection on Field Practice (1)
- TED 5373 Student Teaching Seminar II: Orientation to TPA Designing Instruction Task II and Reflection on Field Practice (1)
- TED 5374 Student Teaching Seminar III: Orientation to TPA Assessing Learning Task III and Reflection on Field Practice (1)
- TED 5375 Student Teaching Seminar IV: Orientation to TPA Culminating Teaching Experience Task IV and Reflection on Field Practice (1)
- TED 5380 Health and Safety in the Secondary School (2)
- TED 5390 Instructional Methods for the Single Subject Classroom I (3)
- TED 5391 Instructional Methods for the Single Subject Classroom II: Focus on Differentiated Instruction (2)
- TED 5392 Instructional Methods for the Single Subject Classroom III: Focus on Literacy (2)
- TED 5393 Instructional Methods for the Single Subject Classroom IV: Focus on Equity (2)

B. Bachelors Plus Pathway (21 units)

- TED 3007 Intermediate Field Experience in the Secondary School A (1)
- TED 3008 Intermediate Field Experience in the Secondary School B (1)
- TED 5443 Student Teaching A in Bachelors Plus Program (4)
- TED 5444 Student Teaching B in Bachelors Plus Program (6)
- TED 5445 Student Teaching C in Bachelors Plus Program (9)

C. Discrete Course Pathway (21 units)

- TED 5381 Field Experience in the Single Subject Classroom A (7)
- TED 5382 Field Experience in the Single Subject Classroom B (7)
- TED 5383 Field Experience in the Single Subject Classroom C (7)

Field experience requirements:

All candidates will complete two supervised field experiences, either as a student teacher or an intern. Field assignments begin in September with the beginning of the K-12 school year and continue, with breaks at different times, until June.

Candidates in the Bachelors Plus Pathway have a required junior year field placement and complete their two supervised field experiences as seniors.

Teaching Performance Assessment (TPA) Tutorials: Any candidate who fails a TPA task must enroll in the appropriate TPA Tutorial course(s):

- TED 5061 TPA Subject-Specific Pedagogy Task I Tutorial (2)
- TED 5062 TPA Designing Instruction Task II Tutorial (2)
- TED 5063 TPA Assessing Learning Task III Tutorial (2)
- TED 5064 TPA Culminating Learning Task IV Tutorial (2)

Graduate Programs in Reading Instruction

The Department of Teacher Education at California State University, East Bay offers two levels for graduate study in the area of reading and language arts:

The Reading and Literacy Added Authorization is granted by the California Commission on Teacher Credentialing (CCTC) upon recommendation.
by Cal State East Bay. It authorizes service as a reading specialist at a school site. This program is 20 quarter units.

**The Master of Science Degree, with an Option in Reading Instruction** is granted by Cal State East Bay. Candidates who have earned the Reading and Language Arts Specialist Credential are eligible to continue their graduate studies and earn the M.S. degree. This program is 45 quarter units (the 20 units for the Reading and Literacy Added Authorization, and 25 additional units).

**Student Learning Outcomes**

Students graduating with an M.S. in Education, Option in Reading Instruction from Cal State East Bay will: (1) identify and describe the essential elements of an effective staff development program for P-12 faculty in reading and language arts; (2) utilize a variety of bibliographic tools to write a comprehensive review of the literature for a topic of professional interest; (3) complete an action research project investigating a topic of professional interest.

**I. Admission**

**Admission Requirements:**
1. Baccalaureate degree
2. GPA of 3.0 in upper division undergraduate courses and post-baccalaureate courses
3. A valid Multiple Subject or Single Subject Teaching Credential
4. Satisfaction of the University Writing Skills Requirement. (For information on meeting the University Writing Skills Requirement, see the Testing Office website at [www.csueastbay.edu/testing](http://www.csueastbay.edu/testing) or call 510.885.3661.)
5. Demonstrated potential to become a leader in reading and language arts curriculum and instruction

**Admission Process:**
Submit the following to the Department of Teacher Education:
1. University graduate and post-baccalaureate application
2. Graduate application fee
3. Statement of residency if a first-time Cal State East Bay student
4. One official copy of all transcripts from all colleges and universities attended
5. Department of Teacher Education application
6. Personal Data Summary Form
7. CBEST scores
8. Copy of either a valid Multiple Subject or Single Subject Teaching Credential
9. Three letters of recommendation, two of which address the candidate's ability to teach and work with K-12 students

Candidates who meet admission requirements will be notified by mail and must then successfully complete an admission interview with the Program Coordinator.

**II. Curricular Requirements**

**A. Reading and Literacy Added Authorization (20 units)**
- TED 6220 Reading/Language Arts: Focus on Diversity (4)
- TED 6230 Reading/Language Arts: Literacy Research and Methods I (4)
- TED 6231 Reading/Language Arts: Literacy Assessment and Intervention I (4)
- TED 6232 Reading/Language Arts: Literacy Assessment and Intervention II (4)
- TED 6253 Reading/Language Arts: Literacy Research and Methods II (4)

**B. M.S. in Education with an Option in Reading Instruction (45 units)**
(Also see the "M.S. in Education" section which follows for general information on Advancement to Candidacy, GPA requirements, and master's degree requirements.)

- All courses required for The Reading and Literacy Added Authorization total 20 units. A total of 17 units of electives approved by the advisor.
- Also, 8 units consisting of:
  - TED 6020 Research in Education (4)
  - and one of the following:
    - TED 6699 Project (4)
    - TED 6901 Graduate Synthesis (4)
    - TED 6909 Departmental Thesis (4)

Please note other requirements for the master's degree listed in the subsequent section, "M.S. in Education."

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**M.S. in Education**

The Department of Teacher Education offers four options for the Master of Science in Education degree: Early Childhood Education, Curriculum, Educational Technology Leadership, and Reading Instruction.

**Admission**

Upon admission to the university, a student with a baccalaureate degree usually is in "Unclassified Post-Baccalaureate" standing. An "Unclassified Post-Baccalaureate" student may enroll in those courses for which the prerequisites have been met. The department will not count courses taken to remove deficiencies toward degree requirements. No more than 13 units taken in "Unclassified Post-Baccalaureate" status can be applied toward a master's degree. This includes approved credit-bearing extension courses, transfer courses, and residence courses taken before admission to the master's degree program. Lower division, non-credit Extension, and Credit/No Credit (Pass/Fail) courses are not applicable to the degree except courses offered only for Credit/No Credit (Pass/Fail). Filing for a substitution for this last item is up to the student. Seven units of coursework from a basic credential program (Multiple or Single Subject) may be applied toward a master's degree.

A student with minor deficiencies in the requirements below may be admitted to a program as a "Conditionally Classified Graduate" student.

To be awarded "Classified Graduate" standing, a student must:
1. have a GPA of 3.0 or better in all upper division work in the major and in all post-baccalaureate work;
2. hold a valid teaching credential and/or show evidence of successful classroom teaching experience as determined by the department. (May be waived for a student in the Option in Early Childhood Education);
3. have met the University Writing Skills Requirement. (For information on meeting the University Writing Skills Requirement, see the Testing
Office website at www.csueastbay.edu/testing or call 510.885.3661.)

Advancement to Candidacy

To be Advanced to Candidacy for the degree, a student must:

1. have met the University Writing Skills Requirement. (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
2. be a "Classified Graduate" student in good standing;
3. have completed at least 35 quarter units considered by the Department to be applicable toward the degree requirements with a GPA of 3.0 or better;
4. have an approved program of study for the degree (on a Major Check Form) signed by the advisor;
5. have completed or be currently enrolled in TED 6020, Research in Education;
6. have been approved for Advancement to Candidacy by the department on recommendation of faculty teaching in the student's area of study. This is initiated by filing the form, Petition to Establish Thesis/Project Committee, with a thesis or project abstract attached, or by obtaining permission to register for the Graduate Synthesis course.

GPA Requirement

A student must maintain a GPA of 3.0 or higher in all courses taken in the approved program signed by the advisor, whether the courses are taken at Cal State East Bay or elsewhere. A student whose GPA falls below 3.0 will be placed on probationary status, will be subject to disqualification from the program, and may be recommended for dismissal from the university. (The department also requires that the use of the "CR/NC" grade option in any course applied to a master's and/or certificate program must be approved in advance by the Graduate Coordinator.)

Degree Requirements (45-53 units)

To receive the M.S. degree in Education, a student must have:

1. been Advanced to Candidacy;
2. completed 45-53 quarter units of approved graduate work, subject to the following conditions:
   a. all units must have been earned within the past five (5) years immediately preceding completion of the requirements for the degree;
   b. no fewer than thirty-two (32) quarter units may have been completed in residence (i.e., after admission to the program, as a regularly matriculated student) in the graduate program at Cal State East Bay;
   c. no fewer than three (3) nor more than six (6) quarter units may have been assigned to a University Thesis nor more than five (5) to a Department Thesis or Project, nor fewer than four (4) in the Graduate Synthesis course;
   d. no more than thirteen (13) quarter units of approved courses may be transferred from another institution, taken through approved extension courses (including Open University), or taken as an "Unclassified Post-Baccalaureate" student;
   e. at least twenty-two and one-half (22.5) quarter units must have been in courses in the 6000 series or equivalent graduate level;
3. satisfied the University Writing Skills Requirement. (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
4. earned at least a 3.0 GPA in all post-baccalaureate work and in all graduate work at Cal State East Bay and in all units satisfying the requirements of the degree program;
5. completed a University Thesis acceptable to the university, or a Department Thesis or Project acceptable to the department faculty, or completed the Graduate Synthesis course which includes passing a Comprehensive Examination;
6. met, within five (5) years of admission to the program, the specific requirements of that program.

Graduation

A student must apply to graduate and request a degree check during the first two (2) weeks of the quarter prior to the quarter in which completion of the program is expected. Students must apply online and pay the required fee.

M.S. in Education, Option in Curriculum (45 units)

The Curriculum Option is designed to provide advanced special preparation or competencies for teachers and other educational professionals at all grade levels. The Curriculum Option is based on a core of four courses, "pattern" courses, and electives.

Student Learning Outcomes

Students graduating with an M.S. in Education, Option in Curriculum from Cal State East Bay will: (1) identify, describe, and evaluate the multiple factors that influence K-12 curricula in California public schools (e.g., state standards, federal policies, policies of discipline-specific professional organizations); (2) utilize a variety of bibliographic tools to write a comprehensive review of the literature for a topic of professional interest; (3) complete an action research project investigating a topic of professional interest; (4) develop an in-depth understanding of contemporary issues in curriculum and instruction in one of the following patterns—children's literature, elementary education, environmental education, mathematics education, or science education.

I. Curriculum Option Specialized Patterns

- **Children's Literature.** A pattern designed for teachers who want to explore issues relating to children's literature and the K-8 curriculum.
- **Elementary Education.** A pattern designed for teachers who wish to focus their graduate studies on teaching and learning in elementary classrooms.
- **Environmental Education.** A pattern designed for teachers and other education professionals who wish to infuse environmental concepts into their curriculum or for specializing their teaching assignments.
- **Mathematics Education.** A pattern designed for teachers who are interested in improving or updating their skills in mathematics instruction, as well as those who may wish to assume leadership roles in their districts. A California teaching credential is required.
- **Science/Health Education.** A pattern designed for teachers to develop and strengthen skills and understanding in the teaching of science and/or health and to integrate science/health across the curriculum. A California teaching credential is required.
- **SB 2042 Induction.** A pattern designed for teachers who are completing, or have completed, Level II, SB 2042 Multiple or Single Subject Credential Program

II. Curricular Requirements The Curriculum Option for the M.S. degree in Education requires completion of:

- a core of foundation courses,
- approved elective courses, which may be from a pattern or combination of two patterns.
A. Required Courses (15-18 units)
   - TED 6020 Research in Education (4)
   - TED 6300 Foundations of Curriculum Development (4)
   - TED 6700 Advanced Educational Psychology (4)
   - Select one (1) of the following courses (3-6 units):
     - TED 6899 Project (3-5)
     - TED 6901 Graduate Synthesis (4)
     - TED 6909 Departmental Thesis (3-5)
     - TED 6910 University Thesis (3-6)

B. Elective Courses (27-30 units)
   Select one of the following six patterns with the approval of an advisor:
   1. Children’s Literature
      Select Literature courses from the following list (12-18 units):
      - ENGL 4720 Mythology (4)
      - ENGL 4740 History of Children’s Literature (4)
      - TED 5240 Children’s Literature in Elementary Education (3)
      - TED 5241 Literature for Adolescents (3)
      - TED 5242 TeachingMulticultural Literature to Children (4)
      - TED 6245 Literature for the Young Child (4)
      - TED 6246 Critical Analysis of Children’s Literature (3)
      Other electives selected with an advisor (10-16 units)
   2. Elementary Education
      Complete the following courses (19 units):
      - TED 5242 Teaching Multicultural Literature to Children (4)
      - TED 5413 Environmental Education in the Curriculum (4)
      - TED 6010 Seminar in Teaching and Learning Mathematics (4)
      - TED 6050 Seminar in Science and Health Education Research (4)
      - TED 6253 Reading/Language Arts: Comprehension and Study Strategies (3)
      Select an additional 9 units of electives with an advisor
   3. Environmental Education
      Complete the following courses (20 units):
      - TED 5413 Environmental Education in the Curriculum (4)
      - TED 5414 Field Trips and Community Resources for Environmental Education (4)
      - TED 6416 Development of Environmental Education (4)
      - Select four units of graduate level coursework covering the topic of Field Study in Environmental Education, with consent of department (4)
      - Select four units of graduate level coursework covering the topic of Organization of Resident Outdoor Education, with consent of department (4)
      Other electives selected with an advisor (7-18 units)
   4. Mathematics Education
      Complete the following courses (17-20 units):
      - TED 6010 Seminar in Teaching and Learning Mathematics (4)
      - TED 6021 Seminar in Diagnosis and Treatment of Learning Difficulties in Mathematics (4)
      - TED 6030 Seminar in Problems Solving and Critical Thinking in Mathematics (4)
      - TED 6040 Advanced Curriculum and Instruction in Mathematics (4)
      - TED 6901 Independent Study (1-4)
      Select additional mathematics courses with an advisor (7-13 units)
      Other electives selected with an advisor (0-6 units)
   5. Science/Health Education
      Complete the following courses (8 units)
      - TED 6050 Seminar in Science and Health Education Research (4)
      - TED 6440 Curriculum in Science and Health Education (4)
      Select additional science courses with an advisor (8-20 units)
      Other electives selected with an advisor (0-14 units)
   6. SB 2042 Induction
      In this pattern, candidates will complete (a) the required "core" classes and (b) courses approved by an advisor to total 45 quarter units.

M.S. in Education, Option in Early Childhood Education (45 units)

The Early Childhood Education Option is designed to provide the working professional special competencies for assuming leadership roles in curriculum, staff development, advocacy, and educating families.

Student Learning Outcomes

Students graduating with the M.S. in Education, Option in Early Childhood Education from California State University, East Bay will: (1) develop an in-depth knowledge base of effective preschool models of curriculum, pedagogy and working with families; (2) complete a professional practicum in an Early Childhood setting (including the delivery of professional development, advocacy and mentoring); (3) utilize a variety of bibliographic tools to write a comprehensive review of the literature for a topic of professional interest; (4) complete an action research project investigating a topic as it relates to the field of Early Childhood Education.

I. Prerequisites
   Students must demonstrate an appropriate background when applying for this option. This can be met by successful completion of an
undergraduate degree in Human Development, Psychology, or other relevant degree to the field of Early Childhood. Students possessing a Multiple Subject Credential or degree in Elementary Education are encouraged to apply as well. Students who have a Bachelor's degree, but not in the Social Sciences, and have successfully completed at least 12 units in Early Childhood and/or have worked successfully in the field for at least 5 years are also encouraged to apply.

II. Curricular Requirements (45 units)

A. Core Courses to the Masters of Science Degree (16 units)
- TED 6020 Research in Education (4)
- TED 6300 Foundations of Curriculum Development (4)
- TED 6700 Advanced Educational Psychology (4)
- TED 6901 Graduate Synthesis (4)

B. Core Courses to the Option (25 units)
- TED 4070 Early Childhood Education: Language and Literacy Development (4)
- TED 4071 Early Childhood Education: Integrated Language Arts and Social Studies (4)
- TED 4072 Early Childhood Education: Integrated Mathematics and Science (4)
- TED 4073 Early Childhood Education: Integrated Arts (2)
- TED 4074 Early Childhood Education: Children With Special Needs (4)
- TED 6075 Early Childhood Education: Professional Leadership Seminar (4)
- TED 6076 Early Childhood Education: Professional Practicum (3)

C. Electives to the Option (4 units)
- TED 6015 Using Research to Improve Learning (4)
- TED 6124 Advanced Study in Multicultural Education (4)
- TED 6245 Literature for the Young Child (4)
- TED 6254 Reading/Language Arts: Advanced Study of Early Literacy (4)
- TED 6900 Independent Study (4)
- TED 6999 Special Topics in Teacher Education (1-4)

M.S. in Education, Option in Educational Technology Leadership (45 units)

The Educational Technology Leadership Option provides the participants with additional technological knowledge and skills to create effective school district technology plans, to develop training programs for classroom teachers in the use of technology, to promote organizational change through technology, to manage technology resources and personnel in a school setting, and to apply their technical skills and knowledge to identify and utilize technological resources appropriately for the needs of the schools, school districts, and similar educational organizations. All the option's required courses address these technology needs of schools.

Student Learning Outcomes

Students graduating with an M.S. in Education, Option in Educational Technology Leadership from Cal State East Bay will: (1) identify, describe, and evaluate a variety of factors that influence integration of technology into K-12 curricula in California public schools; (2) utilize a variety of assignments in their courses to write a comprehensive review of e-learning topics that relate to education as well as the industry; (3) propose and complete a research project investigating a topic of professional interest as it relates to education and technology; (4) develop an in-depth understanding of current issues in technology and education in one of the following patterns: e-learning, technology planning and change, Web development, mathematics science and technology, language social studies and technology, or learning theories and the design of e-learning environments.

I. Prerequisites

Students must demonstrate knowledge and application of authoring systems, such as Hypercard, Director, Authorware, ToolBook, or must have experience with Web-based instruction. Basic knowledge of digital technologies and HTML is required. These proficiencies may be demonstrated through the completion of EDUI 6099 (Multimedia/Hypermedia), or equivalent courses, or through other evidence such as projects created, or multimedia development. Advanced proficiency in one platform (e.g. Macintosh, Windows, UNIX) is required. Students will be accepted into the program based on an interview by a committee where they demonstrate their technology competence. Students are also required to maintain their level of competency in technology as long as they are graduate students in the program.

II. Curricular Requirements (45 units)

A. Core Courses (26-29 units)
- EDUI 6110 Web as an Interactive Educational Tool (4)
- EDUI 6200 Learning Theories and the Design of E-learning Environments (4)
- EDUI 6280 Mathematics, Science and Technology in Education (4)
- EDUI 6350 Educational Technology in the Teaching of Language and Social Studies (4)
- EDUI 6500 Research in Educational Technology (4)
- EDUI 6600 Educational Interface Design (4)
- EDUI 6899 Project (2-5) or EDUI 6909 Departmental Thesis (2-5)

B. Electives (16-19 units minimum)
- EDUI 6002 (2)
- EDUI 6005 (4)
- EDUI 6098 (4)
- EDUI 6120 (4)
- EDUI 6150 (4)
- EDUI 6210 (4)
- EDUI 6300 (4)
- EDUI 6315 (2)
- EDUI 6400 (4)
- EDUI 6420 (4)
- ELD 6300 (4)
- ELD 6410 (4)
- MM 6101 (4)
- MM 6102 (4)
Since students come to the program with varying technology backgrounds and interests, they may choose graduate-level courses from other departments with advisor approval.

M.S. in Education, Option in Reading Instruction (53 units)

Please see information in the previous section, "Graduate Programs in Reading Instruction."

Certificate Programs

Children's Literature (17-18 units)

The Certificate Program in Children's Literature is designed to assist teachers in developing their knowledge and skills in children's literature. This program addresses the initiative of the English/Language Arts Framework, published in 1987, by the California State Department of Education and features "a literature-based program that encourages reading and exposes all students, including those whose primary language is not English, to significant literary works."

I. Required Courses (14 units)

Complete the following courses

- ENGL 4740 History of Children's Literature (4)
- TED 5240 Children's Literature in Elementary Education (3)
- TED 5242 Teaching Multicultural Literature to Children (4)
- TED 6246 Critical Analysis of Children's Literature (3)

II. Elective (3-4 units)

Select one from the following courses

- ENGL 4720 Mythology (4)
- TED 5241 Literature for Adolescents (3)
- TED 6245 Literature for the Young Child (4)

Cross-cultural, Language, and Academic Development (18-19 units)

This certificate program is a sequence of courses designed to expand the teaching skills of a trained, credentialed teacher in the English instruction of non-English or limited-English speaking students. The certificate is not a teaching credential; it supplements the teaching credential by adding the CLAD emphasis.

Prerequisites: Foreign Language (minimum of nine college-level quarter units in a single language)

I. Required Courses (15 units)

Complete the following courses:

- TED 5038 Multicultural Education (4)
- TED 5370 Second Language Acquisition (3)
- Select 4 units of graduate-level coursework covering the topic Specially Designed Academic Instruction in English (SDAIE) and Practicum, with consent of department (4)
- Select 4 units of graduate-level coursework covering the topic Methods and Materials for Teaching English as a Second Language and Bilingual Education, with consent of department (4)

II. Elective (3-4 units)

Select one course with consent of an advisor:

- ENGL 3005 Study of Language (4)
- ENGL 3010 Modern English Grammar (4)
- ENGL 3015 Introduction to Phonology (4)
- ENGL 3040 Linguistic History of the English Language (4)
- ENGL 4060 Topics in the Study of the English Language (4)
- ENGL 6220 Reading/Language Arts: Meeting the Needs of Diverse Students (3)

Educational Technology Leadership (16 units)

This program is designed for educators and e-learning developers who serve as technology leaders in educational settings, as well as in industry. The program combines instructional design theories with a knowledge of emerging technologies and trains graduate students to assume leadership roles in the design and development of effective e-learning environments. The program advocates lifelong learning that allows students to nurture their personal and professional growth. The arenas in which Educational Technology Leadership graduates will be active include school districts, county offices of education, community colleges, the high tech industry as an e-learning developer, and the field of instructional design.

I. Prerequisites

Students must demonstrate knowledge and application of authoring systems, such as Hypercard, Director, Authorware, ToolBook, or must have experience with Web-based instruction. Basic knowledge of digital technologies and HTML is required. These proficiencies may be demonstrated through the completion of EDUI 6099 (Multimedia/Hypermedia), or equivalent courses, or through other evidence such as
projects created, or multimedia development. Advanced proficiency in one platform (e.g., Macintosh, Windows, UNIX) is required. Students will be accepted into the program based on an interview by a committee where they demonstrate their technology competence. Students are also required to maintain their level of competency in technology as long as they are graduate students in the program.

II. Curricular Requirements

A. Core Courses (12 units)

- EDUI 6200 Learning Theories and the Design of E-learning Environments (4)
- EDUI 6350 Educational Technology in the Teaching of Language and Social Studies (4)
- EDUI 6280 Mathematics, Science & Technology in Education (4)

B. Electives (4 units minimum)

- EDUI 6002 (2)
- EDUI 6005 (4)
- EDUI 6120 (4)
- EDUI 6150 (4)
- EDUI 6210 (4)
- EDUI 6300 (4)
- EDUI 6315 (2)
- EDUI 6400 (4)
- EDLD 6300 (4)
- EDLD 6410 (4)
- MM 6101 (4)
- MM 6102 (4)
- MM 6805 (1)
- PSYC 4200 (4)
- PSYC 4210 (4)
- PSYC 4220 (4)
- PSYC 4320 (4)
- PSYC 4345 (4)
- PUAD 6765 (4)
- PUAD 6811 (4)
- PUAD 6812 (4)
- STAT 3900 (4)

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Grading Practices and Disqualification

Special Grading Practices

The university has two post-baccalaureate grading patterns: "A," "B," "C," "D," "F" (including + and - except for "A+" and "D-"); and CR/NC (Credit/No credit). In the Department of Teacher Education the CR/NC boundary is based on the graduate standards: a "CR" grade indicates work at the "B-" or higher level and an "NC" indicates work at the "C+" or lower level. Under University policy, a graduate student is graded on the "A-F" system, excepting field supervision courses in the professional preparation programs which are only graded as CR/NC.

Disqualification

If a credential candidate earns a grade of "D" or "F" in a required credential course, the course must be repeated (within the department) and a "C-" grade or higher must be earned. A candidate who failed to maintain a cumulative GPA of 3.0 in any quarter will be notified that (s)he will be disqualified effective at the end of the subsequent quarter if the cumulative GPA then is not above 3.0.

A student who fails to demonstrate a high level of performance in the skills of writing, speaking, and language use is subject to re-evaluation and possible disqualification.

The behavior of teacher candidates is expected to be ethical and professional, both on campus and in the public schools. Unethical or unprofessional behavior constitutes grounds for disqualification.

Academic Dishonesty

The university, like all communities, functions best when its members treat each other with honesty, fairness, respect and trust. Deception for individual gain is an offense against the members of the entire community. It is the student teacher’s responsibility to be informed of university regulations by reading the section on academic dishonesty, “How does Cal State East Bay define and handle academic dishonesty” in the Grading and Academic Standards chapter. Awarding a failing grade in the event of academic dishonesty is at the discretion of the faculty member.

The Department of Teacher Education adheres to all university rules regarding academic dishonesty and feels a particular responsibility to require the utmost professional accountability and academic honesty from students in our teaching programs. Academic dishonesty matters within the Department of Teacher Education will be brought up to the Student Affairs Committee in the presence of the department chair, the professor involved, and the student’s team leader. Decisions regarding a specific course of action will be collectively decided.

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Education Interdisciplinary Courses:

For additional EDUI courses, see Education: Interdisciplinary in the graduate section of this catalog.

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<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>6098</td>
<td>Designing Effective Multimedia Instruction (4)</td>
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<tr>
<td></td>
<td>Effective design and development of multimedia material to promote optional interactivity, performance, and motivation. Evaluation of educational multimedia products, design and development of original software, and examination of research on electronic learning. Prerequisite: T ED 5099 or equivalent.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>6110</td>
<td>Web as an Interactive Educational Tool (4)</td>
</tr>
<tr>
<td>6120</td>
<td>Distance Learning Technologies and Applications (4)</td>
</tr>
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<td>6150</td>
<td>Current Issues in Educational Technology (4)</td>
</tr>
<tr>
<td>6200</td>
<td>Learning Theories and the Design of E-learning Environments (4)</td>
</tr>
<tr>
<td>6210</td>
<td>Principles of Instruction Design (4)</td>
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<td>6240</td>
<td>Curriculum and Instruction in Mathematics, Science, and Technology (4)</td>
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<tr>
<td>6280</td>
<td>Mathematics, Science and Technology in Education (4)</td>
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<tr>
<td>6300</td>
<td>Culture and the Evolution of Educational Technology (4)</td>
</tr>
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<td>6315</td>
<td>Current Technologies in Education (2)</td>
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<td>6350</td>
<td>Educational Technology in the Teaching of Language and Social Studies (4)</td>
</tr>
<tr>
<td>6400</td>
<td>Educational Technology Planning for Innovation and Change (4)</td>
</tr>
<tr>
<td>6420</td>
<td>Technology Internship (4)</td>
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<tr>
<td>6500</td>
<td>Research in Educational Technology (4)</td>
</tr>
<tr>
<td>6600</td>
<td>Educational Interface Design (4)</td>
</tr>
<tr>
<td>6741</td>
<td>Family, School, Community Collaborations (4)</td>
</tr>
<tr>
<td>6755</td>
<td>Cultural Diversity in the Workplace (4)</td>
</tr>
<tr>
<td>6899</td>
<td>Project (2-5)</td>
</tr>
<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
</tr>
<tr>
<td>6909</td>
<td>Departmental Thesis (2-5)</td>
</tr>
</tbody>
</table>
6999 Issues in Education Interdisciplinary Studies (4)
Readings, discussion, and research on contemporary and/or significant issues in education interdisciplinary studies. May be repeated for credit when content varies, for a maximum of 8 units.

Teacher Education Courses

For remedial and undergraduate course descriptions, see Teacher Education in the undergraduate section of this catalog.

Post-Baccalaureate

Teacher Education Courses (Course prefix: TED)

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<thead>
<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>5002</td>
<td>Advanced Study of Health Education (3)</td>
</tr>
<tr>
<td>5061</td>
<td>TPA Subject-Specific Pedagogy Task I Tutorial (2)</td>
</tr>
<tr>
<td>5062</td>
<td>TPA Designing Instruction Task II Tutorial (2)</td>
</tr>
<tr>
<td>5063</td>
<td>TPA Culminating Teaching Experience Task III Tutorial (2)</td>
</tr>
<tr>
<td>5064</td>
<td>TPA Culminating Teaching Experience Task IV Tutorial (2)</td>
</tr>
<tr>
<td>5110</td>
<td>Computer-Based Technology in the Classroom I (3)</td>
</tr>
<tr>
<td>5120</td>
<td>Computer-Based Technology in the Classroom II (4)</td>
</tr>
<tr>
<td>5211</td>
<td>TPA Subject-Specific Pedagogy Task I Assessment (1)</td>
</tr>
<tr>
<td>5212</td>
<td>TPA Designing Instruction Task II Assessment (1)</td>
</tr>
<tr>
<td>5213</td>
<td>TPA Assessing Learning Task III Assessment (1)</td>
</tr>
<tr>
<td>5214</td>
<td>TPA Culminating Teaching Experience Task IV Assessment (1)</td>
</tr>
<tr>
<td>5218</td>
<td>Teaching Tutorial (2)</td>
</tr>
<tr>
<td>5240</td>
<td>Children's Literature in Elementary Education (3)</td>
</tr>
<tr>
<td>5241</td>
<td>Literature for Adolescents (3)</td>
</tr>
<tr>
<td>5242</td>
<td>Teaching Multicultural Literature to Children (4)</td>
</tr>
</tbody>
</table>

5300 Series: Professional Education Program Element

The 5300 courses are elements in the professional preparation program for Multiple Subject and Single Subject Teaching Credentials. Admission into the professional preparation programs of the Department of Teacher Education is required for each course in the series. The elements are taken in a set sequence. The sequence may differ among the variant programs. Each element is based upon the achievement of a specified set of professional teaching competencies.
<table>
<thead>
<tr>
<th>Course Number</th>
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</thead>
<tbody>
<tr>
<td><strong>5301</strong></td>
<td>Psychological Foundations in Middle and Secondary School Education (4) Analysis of teaching and learning using psychological theory and research. Emphasis on social and cognitive development, learning processes, motivation, evaluation, applications to students with varying cultural and linguistic backgrounds, ages, and motivation levels. Introduction to the Teaching Performance Assessment (TPA). Prerequisite: Admission to the Single Subject Teaching Credential Program.</td>
</tr>
<tr>
<td><strong>5305</strong></td>
<td>Social/Cultural Context of Education (3) A study of the philosophy, history, and sociology of American education with emphasis on the issues of ethnicity and gender and the skills necessary to incorporate diversity into curriculum and instruction to make equitable secondary school classrooms. Prerequisite: admission to the Single Subject Credential Program.</td>
</tr>
<tr>
<td><strong>5306</strong></td>
<td>Teaching and Learning in the Single Subject Classroom II (7) Introduction to theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Application in beginning weeks of a teaching assignment. Prerequisite: T ED 5306.</td>
</tr>
<tr>
<td><strong>5308</strong></td>
<td>Teaching and Learning in the Single Subject Classroom III (7) Theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Emphasis on individual differences among students. Prerequisites: T ED 5306, 5307.</td>
</tr>
<tr>
<td><strong>5309</strong></td>
<td>Teaching and Learning in the Single Subject Classroom IV (7) Synthesis of theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Emphasis on individual differences among students. Prerequisites: T ED 5306, 5307, 5308.</td>
</tr>
<tr>
<td><strong>5311</strong></td>
<td>Classroom Environment (2) Strategies for a productive classroom learning environment. Models of classroom management, crisis prevention, and conflict resolution. Introduction to school law. Focus on either elementary or secondary classrooms. Prerequisite: Admission to Multiple Subject or Single Subject Teaching Credential Program.</td>
</tr>
<tr>
<td><strong>5312</strong></td>
<td>Classroom Environment II (1) Second of three courses in creating a productive classroom learning environment. Additional theories and models of classroom management. Introduction to effective interpersonal communication skills for working with adolescent students, families, and colleagues. Prerequisite: admission to the Single Subject Credential Program.</td>
</tr>
<tr>
<td><strong>5313</strong></td>
<td>Classroom Environment III (1) Third of three courses in creating a productive classroom learning environment. Continued application of effective classroom management strategies. Additional knowledge and skills for effective interpersonal communication with adolescent students, families, and colleagues. Prerequisite: admission to the Single Subject Credential Program.</td>
</tr>
<tr>
<td><strong>5314</strong></td>
<td>Teaching Special Populations in Regular Classrooms (3) Development of effective patterns, strategies, materials to assist pre-service teachers to work with the broad range of &quot;identified,&quot; &quot;gifted,&quot; and &quot;at-risk&quot; students in the regular classroom. Overview of basic concepts, issues and effective practices.</td>
</tr>
<tr>
<td><strong>5318</strong></td>
<td>Professional Responsibilities (3) Professional issues, rights and responsibilities of teachers and students. Self-assessment and self-direction for continuing professional growth. Prerequisite: Admission to the Single Subject Credential Program.</td>
</tr>
<tr>
<td><strong>5320</strong></td>
<td>Content Literacy (3) Theory, research, and instructional methodology to teach content-based reading and writing skills to a full range of secondary-school students, including struggling readers, students with special needs, English learners and speakers of non-standard English, and advanced learners. Prerequisite: Admission to the Single Subject Credential Program.</td>
</tr>
<tr>
<td><strong>5326</strong></td>
<td>Preparation to Teach English Learners in the Single Subject Classroom (3) Principles, policies, and practices that address the English language and subject matter learning needs of English learners. Prerequisite: admission to the Single Subject Program.</td>
</tr>
<tr>
<td><strong>5333</strong></td>
<td>Teaching Performance Assessment for Early Completion (4) Preparation assistance, administration and scoring of Teaching Performance Assessment for Multiple and Single Subject intern-candidates under SB-57 Early Completion. Prerequisites: must have passed Teaching Foundations exam and be classified as intern-candidate for Early Completion under SB-57. May be repeated two times for credit, for a maximum of 12 units.</td>
</tr>
<tr>
<td><strong>5347</strong></td>
<td>Student Teaching A in Blended Program (4) First quarter of a supervised student teaching in an elementary school classroom for four mornings and one afternoon a week. Prerequisite: admission to blended Multiple Subject Credential/Liberal Studies program, senior standing. CR/NC grading only.</td>
</tr>
<tr>
<td><strong>5348</strong></td>
<td>Student Teaching B in Blended Program (6) Second quarter of supervised student teaching in an elementary school classroom for four mornings and three afternoons a week. Minimum of one week solo teaching. Prerequisite: T ED 5347. CR/NC grading only.</td>
</tr>
<tr>
<td><strong>5349</strong></td>
<td>Student Teaching C in Blended Program (9) Third quarter of supervised student teaching in an elementary school classroom for five mornings and two afternoons a week. Minimum of two-weeks of all-day, solo teaching. Prerequisite: T ED 5348. CR/NC grading only.</td>
</tr>
<tr>
<td><strong>5350</strong></td>
<td>Curriculum and Instruction: Mathematics in the Elementary School (3) Theory, content and methods of teaching mathematics in the elementary classroom. Emphasis on number systems, operations, problem solving, assessment, computer assisted instruction, resource materials, and sheltered instruction for English Learners. Prerequisite: admission to the Multiple Subject Teaching Credential Program.</td>
</tr>
</tbody>
</table>
| **5351** | Psychological Foundations of Education and Planning for Instruction (4) Research-based theories and principles of human learning and development and their application to elementary school classroom settings. Data-gathering techniques on students' physical, social, and emotional development. Basic principles of instructional
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5352</td>
<td>Curriculum and Instruction: Reading/Language Arts in the Elementary School-A</td>
<td>Development of a balanced, comprehensive program in reading, writing, and related language instruction in K-8 classrooms. Focus on meeting the needs of the full range of learners, planning instruction based on the 2007 Reading/Language Arts Framework, phonological and phonemic awareness, concepts about print, phonics and sight words, spelling instruction and fluency. Prerequisite: Admission to the Multiple Subject Credential Program.</td>
</tr>
<tr>
<td>5353</td>
<td>Planning for Instruction</td>
<td>Introduction to the variety of models for professional instruction in the elementary school classroom. Design of lessons, application of instructional strategies and methods for meeting the needs of different types of learners is emphasized.</td>
</tr>
<tr>
<td>5354</td>
<td>Student Teaching I</td>
<td>Required field experience for Multiple Subject Credential candidates. Prerequisite: approval by department. CR/NC grading only.</td>
</tr>
<tr>
<td>5355</td>
<td>Equity and Diversity/Teaching English Learners A</td>
<td>Principles of equity and diversity and their implementation in curriculum content and school practices in elementary school classrooms. Knowledge, skills, and abilities to deliver comprehensive instruction to English Learners. Prerequisite: Admission to the Multiple Subject Credential Program.</td>
</tr>
<tr>
<td>5356</td>
<td>Curriculum and Instruction: Reading/Language Arts in the Elementary School-B</td>
<td>Development of a balanced, comprehensive program in reading, writing, and related language instruction in K-8 classrooms. Focus on meeting the needs of the full range of learners, planning instruction based on the 2007 Reading/Language Arts Framework, assessment, syllabic and structural analysis, vocabulary, factors affecting reading comprehension, how to facilitate reading comprehension. Prerequisite: Admission to the Multiple Subject Credential Program.</td>
</tr>
<tr>
<td>5357</td>
<td>Curriculum and Instruction: Teaching Science, Health and Safety in the Elementary School</td>
<td>Models, methods, and materials for teaching science, health and safety in elementary schools. Prerequisite: admission to the Multiple Subject Credential Program.</td>
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<tr>
<td>5359</td>
<td>Student Teaching II</td>
<td>Required field experience for Multiple Subject Credential candidates. Prerequisite: approval by department. CR/NC grading only.</td>
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<tr>
<td>5360</td>
<td>Curriculum and Instruction: Reading/Language Arts and Social Studies in the Elementary School</td>
<td>Curriculum and instruction to teach reading/language arts and social studies in K-8 classrooms. Focus on meeting the needs of the full range of learners, writing and oral language development, literary response and analysis, English language conventions, student independent reading, comprehension of expository/informational texts, study and research skills, methodology for teaching social studies, integrated instruction. Prerequisite: Admission to the Multiple Subject Credential Program.</td>
</tr>
<tr>
<td>5361</td>
<td>Student Teaching III</td>
<td>Required field experience for Multiple Subject Credential candidates. Prerequisite: approval by department. CR/NC grading only.</td>
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<tr>
<td>5365</td>
<td>Curriculum and Instruction: Social Studies in the Elementary School</td>
<td>Methodology for teaching social studies in elementary school classrooms. Emphasis on state-adopted content standards in history/social science. Prerequisite: admission to the credential program.</td>
</tr>
<tr>
<td>5366</td>
<td>Equity and Diversity/Teaching English Learners B</td>
<td>Review and synthesis of (1) Principles of equity and diversity and their implementation in curriculum content and school practices in elementary school classrooms; and (2) Knowledge, skills, and abilities to deliver comprehensive instruction to English Learners. Prerequisite: Admission to the Multiple Subject Credential Program.</td>
</tr>
<tr>
<td>5367</td>
<td>Bilingual Methods</td>
<td>Theory, content, materials of dual-language acquisition and development. Strategies for primary language instruction in various areas to provide equal access to the core curriculum.</td>
</tr>
<tr>
<td>5371</td>
<td>Classroom Implications of the Culture of the Latino Child</td>
<td>Focus on major historical experiences of various Latino groups in the United States (pre-Columbian period, the Conquest, colonial period, years of independence, contemporary U.S. life) and their implications for the classroom teacher. Emphasis on cultural commonalities, demographics, immigration, educational patterns, and general relationships among Latinos and the majority culture which influence teaching and learning. Taught in Spanish. Prerequisite: permission of department.</td>
</tr>
<tr>
<td>5372</td>
<td>Team Seminar I: Orientation to TPA Subject-Specific Pedagogy Task I and Reflection on Field Practice</td>
<td>Orientation to the Teaching Performance Assessment (TPA) Subject-Specific Pedagogy Task I. Guided reflection on assigned field experience. Prerequisite: Admission to the Multiple Subject or Single Subject Teaching Credential Program. CR/NC grading only.</td>
</tr>
<tr>
<td>5373</td>
<td>Team Seminar II: Orientation to TPA Designing Instruction Task II and Reflection on Field Practice</td>
<td>Orientation to the Teaching Performance Assessment (TPA) Task Designing Instruction Task II. Guided reflection on assigned field experience. Prerequisite: Admission to the Multiple Subject or Single Subject Teaching Credential Program. CR/NC grading only.</td>
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<tr>
<td>5374</td>
<td>Team Seminar III: Orientation to TPA Assessing Learning Task III and Reflection on Field Practice</td>
<td>Orientation to the Teaching Performance Assessment (TPA) Assessing Learning Task III. Guided reflection on assigned field experience. Prerequisite: Admission to the Multiple Subject or Single Subject Teaching Credential Program. CR/NC grading only.</td>
</tr>
<tr>
<td>5375</td>
<td>Team Seminar IV: Orientation to TPA Culminating Teaching Experience Task IV and Reflection on Field Practice</td>
<td>Orientation to the Teaching Performance Assessment (TPA) Culminating Teaching Experience Task IV. Guided reflection on assigned field experience. Prerequisite: Admission to the Multiple Subject or Single Subject Teaching Credential Program. CR/NC grading only.</td>
</tr>
<tr>
<td>5376</td>
<td>Curriculum and Instruction: Physical Education Methods</td>
<td>Strategies for teaching physical education and recreational activities as well as components of a healthy lifestyle. Prerequisite: admission to the Multiple Subject Credential Program.</td>
</tr>
<tr>
<td>5377</td>
<td>Curriculum and Instruction: Visual and Performing Arts Methods</td>
<td>Specific teaching strategies that are effective in achieving the goals of artistic perception; creative expression; understanding the cultural and historical origins of the arts; pursuing meaning in the arts; and making informed judgments about the arts. Prerequisite: admission to the Multiple Subject Credential Program.</td>
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<td>Course Number</td>
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<tr>
<td>5378</td>
<td>Teaching Special Populations in General Education Settings (4) Development of effective patterns, strategies, materials to assist prospective teachers to work with the broad range of &quot;identified,&quot; &quot;gifted&quot; and &quot;at-risk&quot; students attending schools in grades K-12. Overview of appropriate differentiated, individualized and classroom instructional strategies for general education settings. Prerequisite: admission to the Multiple Subject Credential Program.</td>
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<tr>
<td>5380</td>
<td>Health and Safety in the Secondary School (2) Identification of major laws, concepts, and principles related to student health and safety; site, district, and community resources.</td>
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<tr>
<td>5381</td>
<td>Field Experience in the Single Subject Classroom A (7) First supervised placement as an intern or student teacher in a single subject classroom. Prerequisite: permission of department. CR/NC grading only.</td>
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<tr>
<td>5382</td>
<td>Field Experience in the Single Subject Classroom B (7) Second supervised placement as an intern or student teacher in a single subject classroom. Prerequisite: permission of department. CR/NC grading only.</td>
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<tr>
<td>5383</td>
<td>Field Experience in the Single Subject Classroom C (7) Third supervised placement as an intern or student teacher in a single subject classroom. Prerequisite: permission of department. CR/NC grading only.</td>
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<tr>
<td>5390</td>
<td>Instructional Methods for the Single Subject Classroom I (3) Introduction to theory and practice of instructional methodology in a single subject classroom. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. Prerequisite: admission to the Single Subject Credential Program.</td>
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<tr>
<td>5391</td>
<td>Instructional Methods for the Single Subject Classroom II: Focus on Differentiated Instruction (2) Theory and practice of instructional methodology in a single subject classroom. Application in the beginning weeks of a teaching assignment. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. Prerequisite: TED 5390.</td>
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<tr>
<td>5392</td>
<td>Instructional Methods for the Single Subject Classroom III: Focus on Literacy (2) Theory and practice of instructional methodology in a single subject classroom. Emphasis on individual differences among students. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. Prerequisites: TED 5390, 5391.</td>
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<tr>
<td>5393</td>
<td>Instructional Methods for the Single Subject Classroom IV: Focus on Equity (2) Synthesis of theory and practice of instructional methodology in a single subject classroom. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. Prerequisites: TED 5390, 5391, 5392.</td>
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<tr>
<td>5413</td>
<td>Environmental Education in the Curriculum (4) Integration of environmental concepts into total school curriculum. Methods for outdoor teaching; development of individual and group projects using school grounds, nature areas, and parks as laboratories. Review of available curricula: pre-school, secondary, and adult education.</td>
<td></td>
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<tr>
<td>5414</td>
<td>Field Trips and Community Resources for Environmental Education (4) Organization of environmental educational field trips; identification and application of teaching resources available from agencies, organizations, and industry. May be repeated once for credit, for a maximum of 8 units.</td>
<td></td>
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<tr>
<td>5443</td>
<td>Student Teaching A in Bachelors Plus Program (4) First quarter of supervised student teaching in a secondary school classroom for two hours, five days a week. Minimum of one week of solo teaching. Prerequisite: Senior standing in the Bachelors Plus Single Subject Credential Program. CR/NC grading only.</td>
<td></td>
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<tr>
<td>5444</td>
<td>Student Teaching B in Bachelors Plus Program (4) Second quarter of supervised student teaching in a secondary school classroom for two hours, five days a week. Prerequisite: TED 5443. CR/NC grading only.</td>
<td></td>
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<tr>
<td>5445</td>
<td>Student Teaching C in Bachelors Plus Program (9) Third quarter of supervised student teaching in a secondary school classroom for five mornings a week. Minimum of two weeks of solo teaching. Prerequisite: TED 5444. CR/NC grading only.</td>
<td></td>
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<tr>
<td>5500</td>
<td>Advanced Study in Teaching Special Populations (4) Advanced study of knowledge, skills and strategies for teaching students with disabilities, at-risk students, and gifted and talented students in the general education classroom; IDEA, statutory provisions, local interpretation of the law, and collaboration with parents, teachers, and community caregivers. Field component.</td>
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<tr>
<td>5512</td>
<td>Reading/Language Arts for the Multiple Subject Teacher (4) Examines current research and practice for literacy development for students in grades K-8. Includes, but is not limited to acquisition of literacy, phonemic awareness, word attack strategies, fluency, spelling, writing, comprehension, content area reading, assessment, English Language Learners, managing and organizing for instruction. Satisfies out-of-state Reading class requirement. Prerequisite: out-of-state basic multiple subject teaching credential or approval of instructor.</td>
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<tr>
<td>5513</td>
<td>Reading/Language Arts for the Single Subject Teacher (4) Examines current research and practice for literacy development for students in grades 6-12, including literacy acquisition, phonemic awareness, word attack strategies, fluency, spelling, writing, comprehension, content area reading, assessment, intervention strategies, English Learners, and struggling readers. Satisfies out-of-state Reading requirement. Prerequisite: out-of-state basic single subject teaching credential or approval of instructor.</td>
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</table>
### Graduate Courses (Course prefix: TED)

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<tr>
<th>Course Number</th>
<th>Course Information</th>
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<tbody>
<tr>
<td>5620</td>
<td>Advanced Study in Teaching English Learners (4) Advanced study of instructional programs for English Learners, including organizational structures, English Language Development, academic language, and core academic curriculum. Assessments of English language proficiency. Application of students' background, experiences, and family structures to instructional planning. Field component. Prerequisite: Level I SB 2042 Credential.</td>
</tr>
<tr>
<td>5700</td>
<td>Reflections on Professional Practice: A Supportive Environment for Student Learning (2) Theory, research, and best practice on establishing a productive environment in a K-12 classroom. Focus on creating an equitable classroom for all students. Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.</td>
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<tr>
<td>5702</td>
<td>Reflections on Professional Practice: Assessing Instructional Experiences (2) Theory, research, and best practice on assessing the instructional experiences in a K-12 classroom. Focus on options for gathering, analyzing and sharing data. Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.</td>
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<tr>
<td>5703</td>
<td>Reflections on Professional Practice: Instructional Planning, The Lesson (2) Theory, research, and best practice on instructional planning in a K-12 classroom. Focus on elements of effective lessons. Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.</td>
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<tr>
<td>5704</td>
<td>Reflections on Professional Practice: Standards-Based Instruction (2) Theory, research, and best practice for instruction in a standards-based system. Focus on instructional implications of California's K-12 content standards. Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.</td>
</tr>
<tr>
<td>5705</td>
<td>Reflections on Professional Practice: Instructional Planning (2) Theory, research, and best practices on instructional planning in a K-12 classroom. Focus on units of study. Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.</td>
</tr>
<tr>
<td>5706</td>
<td>Reflections on Professional Practice: Standards-Based Assessment (2) Theoretical foundations, research, and best practices on assessing student achievement of K-12 content standards. Focus on the development of reliable, valid, and pragmatic assessment. Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.</td>
</tr>
<tr>
<td>5707</td>
<td>Electronic Professional Portfolio (3) Design and creation of working, reflective electronic portfolio that demonstrates achievement of credential preparation standards.</td>
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<tr>
<td>5777</td>
<td>Curriculum and Instruction: Visual and Performing Arts Integration in K-12 Classrooms (2) Background information on content standards, specific instructional strategies for integration across the curriculum. Students will modify or write curriculum integrating the arts discipline with other subject matter taught at a specific grade level. Course may be repeated for credit, for a maximum of 8 units. Miscellaneous course fee. See quarterly Class Schedule for current fee.</td>
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<tr>
<td>5900</td>
<td>Independent Study (1-4)</td>
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<tr>
<td>6010 Seminar in Teaching and Learning Mathematics (4) Research and analysis of selected topics pertinent to Mathematics in elementary school. Reports on current research, contemporary and experimental programs, and new materials. Prerequisite: consent of instructor. May be repeated for credit.</td>
</tr>
<tr>
<td>6015 Using Research to Improve Learning (4) Analysis of research findings which focus on issues, problems and interests, related to learning. Development of recommendations for improved learning in specified classes, schools, and/or districts.</td>
</tr>
<tr>
<td>6020 Research in Education (4) Basic methods of educational research. Components of a research proposal. Prerequisite: TED 6250 and consent of instructor.</td>
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<tr>
<td>6021 Seminar in Diagnosis and Treatment of Learning Difficulties in Mathematics (4) Causes and effects of mathematics learning disabilities. Methods and instruments useful in diagnosis and treatment. Evaluation of materials for the correction of mathematical learning problems. Prerequisite: consent of instructor.</td>
</tr>
<tr>
<td>6030 Seminar on Problem Solving and Critical Thinking in Mathematics (4) Psychological and pedagogical aspects of problem solving and critical thinking in mathematics. Curriculum and teaching models with emphasis on classroom instruction.</td>
</tr>
<tr>
<td>6040 Advanced Curriculum and Instruction in Mathematics (4) Historical and philosophical study of curriculum trends, modern curricular developments including use of newer instructional media, individualization of instruction, school computer usage, and evaluation techniques.</td>
</tr>
<tr>
<td>6075 Early Childhood Education: Professional Leadership Seminar (4) Culminating course in ECE. Focus on effective models delivering professional development, advocacy and working with families. Prerequisites: TED 4070, TED 4071, TED 4072, TED 4073, TED 4074 and/or permission of instructor. Must take concurrently with TED 6076. A-F grading only.</td>
</tr>
<tr>
<td>6076 Early Childhood Education: Professional Practicum (4) Supervised field practicum. Includes clinical supervision model, mentoring and reflective practice. Prerequisites: TED 4070, TED 4071, TED 4072, TED 4073, TED 4074, or permission of instructor. Co-requisite: Must take concurrently with TED 6075. A-F grading only.</td>
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Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least 3.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units. No units may be counted toward credential programs. CR/NC grading only.

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Repeatable for Credit</th>
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</thead>
<tbody>
<tr>
<td>6899</td>
<td>Project (2-5)</td>
<td>Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required. Prerequisite: graduate standing. May be repeated for credit, for a maximum of 5 units.</td>
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<td>Yes, up to 8 units</td>
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<tr>
<td>6900</td>
<td>Independent Study (1-4)</td>
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<td>Yes, up to 5 units</td>
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<tr>
<td>6901</td>
<td>Graduate Synthesis (4)</td>
<td>Alternative to thesis/project. Implementation of action research. Creation of professional development plan and reflection on graduate program. Includes comprehensive examination. Prerequisite: consent of instructor.</td>
<td></td>
<td>Yes, up to 5 units</td>
</tr>
<tr>
<td>6909</td>
<td>Departmental Thesis (2-5)</td>
<td>Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. Prerequisite: graduate standing. May be repeated for credit, for a maximum of 5 units.</td>
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<td>Yes, up to 5 units</td>
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<tr>
<td>6910</td>
<td>University Thesis (1-6)</td>
<td>Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, &quot;University Thesis Writing Guide,&quot; <a href="http://www.csueastbay.edu/thesiswritingguide">www.csueastbay.edu/thesiswritingguide</a>.) Prerequisite: graduate standing. May be repeated for credit, for a maximum of 6 units.</td>
<td></td>
<td>Yes, up to 6 units</td>
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<tr>
<td>6999</td>
<td>Issues in Teacher Education (1-4)</td>
<td>Readings, discussion, and research on contemporary and/or significant issues in teacher education. May be repeated for credit when content varies, for a maximum of 8 units.</td>
<td></td>
<td>Yes, up to 8 units</td>
</tr>
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</table>

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- Catalog Policies and Credits
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The California State University

The California State Universities were founded in 1857 as part of the Donahue Higher Education Act, which was a response to the state's population growth and the need for educational opportunities. The system's development has been marked by a commitment to accessibility, affordability, and academic excellence.

The California State University includes 23 campuses, offering a wide range of academic programs from associate degree to doctoral level. The system is known for its commitment to providing high-quality education to a diverse student body.

The California State University is one of the largest systems of higher education in the United States, with over 400,000 students enrolled. The system is governed by the Board of Trustees, which is responsible for the overall direction and policies of the system.

The Academic Senate is the primary body for academic governance, representing the faculty and student interests. The system is divided into academic and administrative units, each with its own leadership and governance structure.

The California State University is committed to providing access to higher education to all who are qualified, regardless of their background or economic status. The system is recognized for its commitment to public service and community engagement, with a goal of preparing students to be active and engaged members of society.

The system is known for its diverse array of academic programs, including arts, sciences, engineering, business, education, and health. The California State University is committed to fostering a diverse and inclusive environment, welcoming students from all backgrounds.

The California State University is a significant economic force, contributing to the state's economy through its students, faculty, and staff. The system's impact is felt through its contributions to the state's workforce, its influence on the local economy, and its role in shaping the state's future.
Dr. Milton A. Gordon, President
(657) 278-2011; www.fullerton.edu
- Humboldt State University
  One Harpst Street
  Arcata, CA 95521-8299
  Dr. Rollin C. Richmond, President
  (707) 826-3011; www.humboldt.edu

Dr. Rollin C. Richmond, President
(707) 826-3011; www.humboldt.edu
- California State University, Long Beach
  1250 Bellflower Boulevard, Long Beach, CA 90840-0115
  Dr. F. King Alexander, President
  (562) 985-4111; www.calstatela.edu

Dr. F. King Alexander, President
(562) 985-4111; www.calstatela.edu
- California State University, Los Angeles
  5151 State University Drive, Los Angeles, CA 90032
  Dr. James M. Rosser, President
  (323) 343-3000; www.calstatela.edu

Dr. James M. Rosser, President
(323) 343-3000; www.calstatela.edu
- California Maritime Academy
  200 Maritime Academy Drive, Vallejo, CA 94590
  Dr. William B. Eisenhardt, President
  (707) 654-1000; www.csum.edu

Dr. William B. Eisenhardt, President
(707) 654-1000; www.csum.edu
- California State University, Monterey Bay
  100 Campus Center, Seaside, CA 93955-8001
  Dr. Dianne Harrison, President
  (831) 582-3330; www.csumb.edu

Dr. Dianne Harrison, President
(831) 582-3330; www.csumb.edu
- California State University, Northridge
  18111 Nordhoff Street, Northridge, CA 91330
  Dr. Jolene Koester, President
  (818) 677-1200; www.csun.edu

Dr. Jolene Koester, President
(818) 677-1200; www.csun.edu
- California State University Polytechnic University, Pomona
  3801 West Temple Avenue, Pomona, CA 91768
  Dr. J. Michael Ortiz, President
  (909) 869-7699; www.csupomona.edu

Dr. J. Michael Ortiz, President
(909) 869-7699; www.csupomona.edu
- California State University, Sacramento
  6000 J Street, Sacramento, CA 95819
  Dr. Alexander Gonzalez, President
  (916) 278-6011; www.csus.edu

Dr. Alexander Gonzalez, President
(916) 278-6011; www.csus.edu
- California State University, San Bernardino
  5500 University Parkway, San Bernardino, CA 92407-2393
  Dr. Albert Karnig, President
  (909) 537-5000; www.csusb.edu

Dr. Albert Karnig, President
(909) 537-5000; www.csusb.edu
- San Diego State University
  5500 Campanile Drive, San Diego, CA 92182
  Dr. Stephen L. Weber, President
  (619) 594-5200; www.sdsu.edu

Dr. Stephen L. Weber, President
(619) 594-5200; www.sdsu.edu
- San Francisco State University
  1600 Holloway Avenue, San Francisco, CA 94132
  Dr. Robert A. Corrigan, President
  (415) 338-1111; www.sfsu.edu

Dr. Robert A. Corrigan, President
(415) 338-1111; www.sfsu.edu
- San José State University
  One Washington Square, San José, CA 95192-0001
  Mr. Don W. Kassing, Interim President
  (408) 924-1000; www.sjtu.edu

Mr. Don W. Kassing, Interim President
(408) 924-1000; www.sjtu.edu
- California Polytechnic State University, San Luis Obispo
  One Grand Avenue
  San Luis Obispo, CA 93407
  Dr. Jeffrey Armstrong, President
  (805) 756-1111; www.calpoly.edu

Dr. Jeffrey Armstrong, President
(805) 756-1111; www.calpoly.edu
- California State University, San Marcos
  333 S. Twin Oaks Valley Rd., San Marcos, CA 92096-0001
  Dr. Karen S. Haynes, President
  (760) 750-4000; www.csusm.edu

Dr. Karen S. Haynes, President
(760) 750-4000; www.csusm.edu
- Sonoma State University
  1801 East Cotati Ave., Rohnert Park, CA 94928-3609
  Dr. Ruben Armirnana, President
  (707) 664-2880; www.sonomaw.edu

Dr. Ruben Armirnana, President
(707) 664-2880; www.sonomaw.edu
- California State University, Stanislaus
  One University Circle, Turlock, CA 95382-0299
  Dr. Hamid Shirvani, President
  (209) 687-3120; www.csustan.edu

Dr. Hamid Shirvani, President
(209) 687-3120; www.csustan.edu

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  State Capitol, Sacramento 95814

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  State Capitol, Sacramento 95814

- The Honorable Tom Torlakson, State Superintendent of Public Instruction
  721 Capitol Mall, Sacramento 95814

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  Chancellor of The California State University
  401 Golden Shore, Long Beach 90802-4210
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- Christine Helwick, Secretary
- Benjamin F. Quillian, Treasurer

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Appointments are for a term of eight years, except student, alumni, and faculty trustees whose terms are for two years. Terms expire in the year in parentheses. Names are listed alphabetically.

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- Russell Statham (2010)
- Glen Toney (2013)

Correspondence with Trustees should be sent to:

c/o Trustees Secretariat
The California State University
401 Golden Shore
Long Beach, CA 90802-4210
University Administration

University Administration and Professional Staff

Office of the President

Interim President, Leroy M. Morishita, Ed.D.
- Presidential Aide: Colleen Heller

Chief of Staff to the President: Donald T. Sawyer, Ed.D.
- Executive Assistant to the Chief of Staff: Audrey Katzman
- Confidential Assistant, Office of the President, Administrative Assistant, Government and Community Relations: Veronica Salvador

Academic Affairs

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- Associate Provost (Interim): Linda S. Dobb
  - Associate Vice President, Research and Professional Development: Rhea Williamson
  - Information Coordinator: Jennifer Cabrejas
  - Office Manager and IRB Coordinator: Anne Wing
  - Director, Faculty Development: Eileen Barrett
  - Director, Sponsored Programs Administration: Vacant
  - Grants Analyst: Yasmeen Imraz
  - Director, McNair Scholars Program: Vacant
  - Academic Coordinator: Takayah Franklin
  - Director, Online and Hybrid Support Center: Vacant
  - Coordinator, Online Campus: Vacant
  - Executive Director, Academic Support and Retention Services: Diana M. Balgas
    - Director (Acting), Academic Advising and Career Education: Diana M. Balgas
      - Counselor Coordinator: Tuyen Nguyen
      - AACE Counselor: Keith Kravitz
      - AACE Counselor: Joanna Cady Aguilar
      - AACE Counselor: Evelia Jimenez
      - AACE Counselor: Susana Moraga
      - AACE Counselor: Terry Peppin
      - AACE Counselor: Sam Tran
      - Employer Relations Coordinator/Counselor (Interim): George Hanna
      - Event Coordinators: Vareece Jordan and Patricia Loche
      - PACE/AACE Coordinator: Mattie Walker
      - Director, EXCEL Program: Teresa Goleblewksa
        - Academic Learning Skills Counselor: Veronica Fong
        - Academic Life Planning Counselor: Valerie Taniguchi
        - Academic Life Planning Counselor: Tara Young
      - Director, Student Academic Services: Alison Richardson
        - EOP Admissions/Summer Bridge Coordinator: Enrique Mendoza
        - EOP Counselor: Denise Delumen-Wong
        - EOP Counselor: Diane Petersen
        - Renaissance Scholars Coordinator: Kevin Bristow
        - Director, Upward Bound Program: Diana Warren
          - Assistant Director: Alejandro Peña
          - Program Advisor: Melissa Padilla

Associate Vice President, Academic Programs and Graduate Studies: Susan B. Opp
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  - Articulation Officer: Michelle La Centra
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  - Coordinator, Testing Office: Roz McCall

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- Osher Lifelong Learning Institute, Director: Kathy Bryant
- Executive Director, International Programs: Raymond P. Wallace
  - Director, American Language Program: Vacant
• Director, Center for International Education: Kelly Moran

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• Associate Director: Robert Phelps
• Acting Facilities Manager: Mike Tadevich
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• Student Affairs Counselor, Accessibility Services: Leslie Duncan
• Career Counselor/Academic Advisor: Vacant
• Assistant Director of Enrollment Development: Annie Chandler
• Event Coordinator: Lisa Zachan

Senior Director, Budget and Resources for Academic Affairs: Carol Reese

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Dean, College of Letters, Arts, and Social Sciences (Interim): Kathleen Rountree

• Special Assistant to the Dean: Doreen Minter
• Associate Dean (Interim): Jiansheng Guo
• Associate Dean: James Okutsu
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• Chair, Department of Art: Phillip Hofstetter
• Chair, Department of Communication: Gale Young
• Chair, Department of Communicative Sciences and Disorders: Patricia Lohman-Hawk
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• Chair, Department of English: Dennis Chester
• Chair, Department of Ethnic Studies: Nicholas Baham, Ill
• Chair, Department of Geography and Environmental Studies: David Larson
• Chair, Department of History: Nancy Thompson
• Chair, Department of Human Development and Women's Studies: Patricia Guthrie
• Chair, Department of Modern Languages and Literatures: Monique Manopoulos
• Chair, Department of Music: Rafael Hernandez
• Chair, Department of Philosophy: Jennifer Eagan
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• Chair, Department of Social Work: Evaon Wong-Kim
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• Chair, Department of Theatre and Dance: Thomas C. Hirid
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• Director, Liberal Studies Program: Dennis M. Chester
• Director, Sikh and Punjabi Studies: Jaideep Singh

Dean, College of Business and Economics: Teresa Swartz

• Human Resources Coordinator: Vacant
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• Director, Undergraduate Programs: Jagdish Agrawal
• Director, Graduate Programs: C. Joanna Lee
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• Assistant to the Dean: June Laherran
• Administrative Analyst: Hilary FitzGerald-Nicholson
• Associate Dean (Interim): James Zarrillo
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• Chair, Department of Educational Psychology: John M. Davis
• Chair, Department of Kinesiology: Penny McCullagh
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Dean, College of Science: Michael K. K. Leung

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• Chair, Department of Chemistry and Biochemistry: Ann McPartland
• Chair, Department of Engineering: Saeid Motavalli
• Chair, Department of Earth and Environmental Sciences: Jeffery Seitz
• Chair, Department of Mathematics and Computer Science: Edna Reiter
• Chair, Department of Nursing and Health Sciences: Carolyn Fong
• Chair, Department of Physics: Jason Singley
• Chair, Department of Psychology: Marvin Lamb
• Chair, Department of Statistics and Biostatistics: Eric Suess
University Librarian: Linda S. Dobb
- Coordinator, Instructional Services: Thomas Bickley
- Coordinator, Research Services: Doug Highsmith
- Coordinator, Information Literacy Services: Diana Wakimoto
- Concord Campus: Liz Grino
- Chair, Library Faculty (Interim): Doug Highsmith
- Director, Student Center for Academic Achievement: John Whitman

Academic Senate
Chair, Academic Senate: Michael K. Mahoney
- Faculty Government Coordinator: Susan Correia

Administration and Finance
Vice President, Administration and Finance, CFO (Interim): Brad Wells
- Executive Assistant: Astrid Davis
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- University Budget Officer: Kris Erway
- Controller: Darrell Haydon
- Student Financial Services Manager: Flo Olney
- General Accounting Manager: Maggie Graney
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- Deputy Vice President, Facilities Management and Enterprise Operations/Executive Director CSUEB Foundation: Christopher Brown
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- Director, Foundation Fiscal Operations: Jayme Truong
- Director, Pioneer Bookstore: Robert Gibson
- Director, Dining Services: Wayne Narine
- Director, Enterprise Operations: Mark Almeida
- Director, Facilities Operations: Robert Andrews
- Director, Facilities Planning Design & Construction: Jim Zavagno
- Director, Student Housing & Residential Life: Martin Castillo
- Associate Vice President, Risk Management and Internal Control: Nyassa Love
- Director, Equity and Diversity: Linda Nolan
- Director, Environmental Health and Safety: Donna Placzek
- Director, Accessibility Services (Interim): Katie Brown
- Payroll Supervisor: Tony Tijero
- Director of Student Health & Counseling Services: Andrea Wilson
- Medical Director: Mark Khoo
- Supervisor, Counseling and Psychological Services: Ulke Agarwal
- Assistant Supervisor, Counseling and Psychological Services: Alan Maeda
- Director, Intercollegiate Athletics: Debby De Angelis
- Associate Athletic Director for Compliance/SWA: Sara Judd
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Chief Information Officer (CIO): Vacant
- Administrator in Charge: Don Sawyer
- Deputy CIO/Information Security Officer (ISO): Lee Thompson, Information Technology Services
- Director, User Support Services: Setareh Sarrafan, Administration & Finance
- Director, Application Systems: Matt Collins, Administration & Finance
- Director, Data Center, Network & Infrastructure Operations: Rich Avila, Information Technology Services
- Media & Academic Technology Services (MATS) Supervisor: Terry Smith, Academic Affairs
- Online & Hybrid Support Center Supervisor: Corey Gin, Academic Affairs

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Vice President, Planning, Enrollment Management, and Student Affairs: Linda Dalton
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- Associate Vice President, Student Affairs: Stan Hebert III
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- Director, Student Enrollment Information Center: Alta Fortenberry
- Executive Director, Financial Aid: Rhonda Johnson
- University Registrar: Angela Schneider
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- Director, Student Development & Judicial Affairs: Carol Nowicki
Director, Student Life & Leadership: Marguerite Hinrichs
Executive Director, Associated Students Incorporated: Vacant

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Catalog Polices and Credits

- Changes in Rules and Policies
- Catalog Production
- Online Catalog

Changes in Rules and Policies

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of the California State University, by the Chancellor or designee of the California State University, or by the President or designee of the campus. It is not possible in a publication of this size to include all of the rules, policies and other information that pertain to students, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, college, or administrative office.

Nothing in this catalog shall be construed, operate as, or have the effect of an abridgement or a limitation of any rights, powers, or privileges of the Board of Trustees of the California State University, the Chancellor of the California State University, or the President of the campus. The Trustees, the Chancellor, and the President are authorized by law to adopt, amend, or repeal rules and policies that apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and the institution or the California State University. The relationship of the student to the institution is one governed by statute, rules, and policy adopted by the Legislature, the Trustees, the Chancellor, the President and their duly authorized designees.

Catalog Production

Acknowledgments

The online 2011-2012 University Catalog was produced under the direction of the Associate Vice President, Academic Programs and Graduate Studies, Susan B. Opp. Department chairs, administrators, and staff also contributed to this team effort.

- Editor and Project Supervisor: Vana Tran, Director of Publications, Academic Programs and Graduate Studies

Online Catalog

The online 2011-2012 University Catalog is based upon the printed 2010-2012 University Catalog and includes all curricular updates effective for Fall 2011-2012.

You may need a viewer, Acrobat Reader 4.0 or higher, from Adobe in order to display PDF documents in the online Catalog.
Revisions of General Information

This includes all revisions of text in the general information chapters of the catalog. It also includes edits made to general program descriptions in the departmental chapters if a curricular document is not required. These changes do not require an approved curricular proposal. As of the 2011-2012 academic year, the general information chapters of the catalog and the faculty lists are revised every year.

- **Fall quarter:** Copies of the general information chapters are sent to the appropriate administrative offices for editing with a specified deadline for returning these copies to the catalog editor, Office of Academic Programs and Graduate Studies.
- **Winter quarter:** Copies of the revised undergraduate and graduate departmental curricular chapters are sent to the appropriate departments for review. Please Note: Only curricular changes approved by the Office of Academic Programs and Graduate Studies, and the Academic Senate (if needed) will appear in this catalog review copy. Departments will review their chapters for accuracy only. Departments, however, may make minor edits to general program descriptions at this time if a curricular document is not required.

Departments will be asked to return the corrected copies of their departmental chapters to the catalog editor, Office of Academic Programs and Graduate Studies by a specified deadline. Given the tight catalog production schedule, this is the only opportunity for departments to review their catalog copy.

Curriculum Proposal Process

There are different approval processes for different types of curriculum proposals. Please refer to the Curricular Procedures Manual and/or consult with your College Curriculum Coordinator.

- **Why can’t we modify courses and revise programs mid-year?**
  Student catalog rights are governed by the catalog in effect at the time they declare their undergraduate major/minor or are admitted to a graduate degree program. To avoid confusion, and to honor our agreement with the student, degree requirements and courses cannot be revised mid-year.

- **Why can’t we update our faculty list in the departmental chapters as changes occur?**
  All faculty changes (including the appointment of departmental Chairs) need to be verified by the Provost's Office as effective beginning the fall quarter that the catalog is effective. Updating the faculty lists each year requires more time than is currently available for the staff in the Provost's Office and the staff in the Office of Academic Programs and Graduate Studies. For an updated and comprehensive list of all university faculty, emeriti faculty, and lecturers with 3-year contracts, visit the Office of Academic Affairs website.

- **Why don’t all our department’s emeriti faculty appear in the departmental chapter’s faculty list?**
  Only the names of emeriti faculty who are currently teaching in the department appear in the departmental chapter. All emeriti faculty, however, appear in the comprehensive faculty list maintained by the Office of Academic Affairs (see above), with the exception of those who are deceased.

- **I have additional questions. Who should I contact?**
  For questions concerning the catalog production process: Contact the Catalog Editor, Office of Academic Programs and Graduate Studies (4th Floor, Student Services and Administration Building; catalog@csueastbay.edu).

  For questions concerning the status of your curriculum proposal: Contact your College Curriculum Coordinator.

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Appendix

- California State University, East Bay Foundation, Inc.
- Cal State East Bay Educational Foundation
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California State University, East Bay Foundation, Inc.

The Foundation is a non-profit corporation established in 1959 to provide services and support to the University community. It is governed by an eleven-member Board of Directors, drawn from faculty, administration, students, and the community. It operates the Pioneer Bookstore, campus dining services, vending services, ATM's and other commercial operations. It also provides accounting and management for a variety of trust, institute, and other self support accounts.

The Foundation also supports research and other sponsored programs at Cal State East Bay through grant funds received from State, Federal, and other agencies. It helps initiate proposals, consults in the preparation of grant applications, gives guidance in the development of project budgets, and is responsible for the post award administration of all grants and contracts.

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Cal State East Bay Educational Foundation

Cal State East Bay recognizes that the margin of excellence in institutions of higher education depends increasingly on external funding from alumni, corporations, foundations, and individual donors. In order to further the university's mission of service to the region, the Cal State East Bay Educational Foundation was formed in 1990 to help forge partnerships with the private sector. The foundation is governed by a board of trustees which includes university leaders and prominent members of the community.

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Career Information

Academic Advising and Career Education (AACE) will furnish, upon request, information about the employment of students who graduate from programs or courses of study preparing students for a particular career field. Any such data provided must be in a form that does not allow the identification of any individual student. This information includes data concerning the average starting salary and the percentage of previously enrolled students who obtained employment. The information may include data collected from either graduates of the campus or graduates of all campuses in the California State University.

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Immigration Requirements for Licensure

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193), also known as the Welfare Reform Act, includes provisions to eliminate eligibility for federal and state public benefits for certain categories of lawful immigrants, as well as benefits for all illegal immigrants.

Students who will require a professional or commercial license provided by a local, state, or federal government agency in order to engage in an occupation for which the CSU may be training them must meet the immigration requirements of the Personal Responsibility and Work Opportunity Reconciliation Act to achieve licensure. (Students in Biological Science, Educational Psychology, Engineering, Kinesiology, Nursing, and Teacher Education, in particular should be aware of these provisions.) Information concerning these requirements is available from Ray Wallace, Executive Director, International Programs, LI 2550, Tel. 510-885-4038.

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Military Selective Service Act

The federal Military Selective Service Act (the "Act") requires most males residing in the United States to present themselves for registration with the Selective Service System within thirty days of their eighteenth birthday. Most males between the ages of 18 and 25 must be registered.

Males born after December 31, 1959 may be required to submit a statement of compliance with the Act and regulations in order to receive any grant, loan, or work assistance under specified provisions of existing federal law. In California, students subject to the Act who fail to register are also ineligible to receive any need-based student grants funded by the state or a public post-secondary institution.

Selective Service registration forms are available at any U.S. Post Office and many high schools have a staff member or teacher appointed as a Selective Service Registrar. Applicants for financial aid can also request that information provided on the Free Application for Federal Student Aid (FAFSA) be used to register them with the Selective Service. Information on the Selective Service System is available and the registration process may be initiated online at http://www.sss.gov.

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Nondiscrimination/Harassment Policies and Procedures

Inquiries concerning compliance with the following policies may be addressed to the Director, Office of Equity and Diversity (Student Services and Administration Building), 510-885-4918; TTY 510-885-7592. The complaint procedures are set forth in detail in the "CSUEB Equal Opportunity Complaint Procedures for Employees Not Covered by CSU Executive Order 928 and for Other Constituencies" booklet which you
Sexual Harassment

The university desires to maintain an academic and work environment which protects the dignity and promotes the mutual respect of all employees and students. Sexual harassment of employees or students is prohibited. In general, verbal comments, gestures, or physical contact of a sexual or gender-based nature that are unsolicited and unwelcomed will be considered harassment (Title VII of the Civil Rights Act of 1964).

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual/gender-based nature when:

- submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, appointment, admission, or academic evaluation;
- submission to such conduct is used as a basis for evaluation in personnel decisions or academic evaluations affecting an individual;
- such conduct has the purpose or effect of unreasonably interfering with an individual's performance or of creating an intimidating, hostile, offensive, or otherwise adverse working or educational environment;
- the conduct has the purpose or effect of interfering with a student's academic performance; creating an intimidating, hostile, offensive, or otherwise adverse learning environment; or adversely affecting any student.

Sexual harassment happens to both men and women. In determining whether conduct constitutes sexual harassment, the circumstances surrounding the conduct should be considered.

Sexual harassment may include one or more of the following: questions about one's sexual behavior; sexually oriented jokes; inappropriate comments about one's body and clothing; conversation filled with innuendoes and double meanings; sexually suggestive pictures or objects displayed to embarrass or humiliate; pinching, fondling, patting or kissing; requests for sexual intercourse; gender-based derogatory statement; unfavorable consequences for refusing to submit.

Nonresident Tuition Exceptions

There are exceptions from nonresident tuition, including:

1. Persons below the age of 19 whose parents were residents of California but who left the state while the student, who remained, was still a minor. When the minor reaches age 18, the exception continues until the student has resided in the state the minimum time necessary to become a resident.
In all aspects of access to programs and services provided or sponsored by the institution, students have a right to be free from discrimination.

Freedoms, Rights, and Responsibilities for Access and Retention

The following standards and regulations on students' freedoms, rights, and responsibilities are authorized by federal and state laws and by CSU conditions conducive to the freedom to teach and learn is shared by all members of the academic community.

opportunities and conditions in the classroom, on the campus and in the larger community. The responsibility to secure and to respect general

in a sustained and independent search for truth.

encouraged and expected to develop the capacity for critical judgment, to accept appropriate responsibilities, and to engage in rational debate,

inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students are

CSUEB exists for the transmission of knowledge, the pursuit of truth, the development of students, and the general well-being of society. Free

in free expression are indispensable to the attainment of these goals. As members of the academic community, students are

2. Minors who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and entirely self-supporting for that period of time. The exception continues until the student has resided in the state the minimum time necessary to become a resident.

3. Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult or adults, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year. The exception continues until the student has resided in the state the minimum time necessary to become a resident.

4. Dependents or spouses of persons in active military service stationed in California on the residence determination date. There is no time limitation on this exception unless the military person transfers out of California or retires from military service. If either of those events happen, the student's eligibility for this exception continues until he or she resides in the state the minimum time necessary to become a resident.

5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. This exception continues until the military personnel has resided in the state the minimum time necessary to become a resident.

6. Military personnel in active service in California for more than one year immediately prior to being discharged from the military. Eligibility for this exception runs from the date the student is discharged from the military until the student has resided in state the minimum time necessary to become a resident.

7. Dependent children of a parent who has been a California resident for the most recent year. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.

8. Graduates of any school located in California that is operated by the United States Bureau of Indian Affairs, including, but not limited to, the Sherman Indian High School. The exception continues so long as continuous attendance is maintained by the student at an institution.

9. Certain credentialed, full-time employees of California school districts.

10. Full-time CSU employees and their children and spouse; State employees assigned to work outside the State and their children and spouse. This exception continues until the student has resided in the state the minimum time necessary to become a California resident.

11. Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties.

12. Certain amateur student athletes in training at the United States Olympic Training Center in Chula Vista, California. This exception continues until the student has resided in the state the minimum time necessary to become a resident.

13. Federal civil service employees and their natural or adopted dependent children if the employee has moved to California as a result of a military mission realignment action that involves the relocation of at least 100 employees. This exception continues until the student has resided in the state the minimum time necessary to become a resident.

14. State government legislative or executive fellowship program enrollees. The student ceases to be eligible for this exception when he or she is no longer enrolled in the qualifying fellowship.

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Reporting Campus Emergencies

When reporting an on-campus emergency, call the following numbers:

On-campus Emergencies
Police, Fire, Medical:
911 from any phone

Other frequently called numbers are:

On-campus Non-Emergencies
Police Business: x5-3791
Escort Service: x5-3791
Crime Prevention Service: x5-3791
Lost and Found Property: x5-3791
Parking Services: x5-3790
Student Health Services: x5-3735
Counseling and Psychological Services: x5-3690
University Information: x5-3000

Note: When using a non-campus phone, you must use the "885" prefix instead of "5" in the above extensions; when using a (white) campus phone, simply use the extensions.

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Research with Human Subjects

The University has approved policies and procedures for the protection of human subjects in research, development, and related activities carried out by faculty, staff and students. An Institutional Review Board has been established to review research protocols in order to determine whether human subjects would be at risk and to protect their rights and welfare. Protocols must be approved before research commences.

Further information and copies of the policy document may be obtained from the Office of Research and Sponsored Programs, LI 2300, 885-4212 or online at: http://www.csueastbay.edu/orsp/IRBMenu.html

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Student Freedoms, Rights, and Responsibilities

CSUEB exists for the transmission of knowledge, the pursuit of truth, the development of students, and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students are encouraged and expected to develop the capacity for critical judgment, to accept appropriate responsibilities, and to engage in rational debate, in a sustained and independent search for truth.

Freedom to teach and freedom to learn are inseparable facts of academic freedom. The freedom to learn depends largely upon appropriate opportunities and conditions in the classroom, on the campus and in the larger community. The responsibility to secure and to respect general conditions conducive to the freedom to teach and learn is shared by all members of the academic community.

The following standards and regulations on students' freedoms, rights, and responsibilities are authorized by federal and state laws and by CSU policies.

 Freedoms, Rights, and Responsibilities for Access and Retention

In all aspects of access to programs and services provided or sponsored by the institution, students have a right to be free from discrimination.
on the basis of individual attributes, including, but not limited to, race, color, gender, age, disability, national origin, or sexual orientation.

Admission to the university is limited by standards which are promulgated by the California legislature and the CSU Board of Trustees. Realities of the campus budget and facilities may impose additional constraints.

Beyond academic, fiscal, and physical limits to admission to the university, prospective and enrolled students have a right to unobstructed access to campus programs and services. In special cases, and with the CSU chancellor's concurrence, selected degree programs may be given "impacted" status, which adds certain stipulations on access to those majors.

Issues regarding freedom of access should be referred to the supervisor(s) of the appropriate program or service first. If the matter is not resolved satisfactorily, the student has the right to refer the issue through administrative channels to the Vice Presidents, PEMSA or Academic Affairs. Students have a right to be informed about the institution's policies for access and retention in order to take responsibility for making appropriate choices and to participate effectively in campus programs and services.

**Fundamental Freedoms, Rights, and Responsibilities**

A basic component of the university mission statement is the value of diversity in background, interests, experiences, beliefs, and cultures. Faculty, staff and students represent a variety of interests. Students come to campus with unique experiences, and while on campus, as a result of their interaction in the formal classroom and co-curricular programs and activities, they continue to develop and expand their knowledge and pursuits.

In the Classroom

The institution maintains minimum standards in order to preserve the following fundamental freedoms for students:

- **Freedom of Expression**
  Students are free to take reasonable exception to the data or views offered in any course of study and to reserve judgment about matters of opinion. Students are responsible for learning the content of any course of study for which they are enrolled.

- **Protection Against Improper Academic Evaluation**
  Orderly procedures protect students from prejudice or capricious academic evaluation. Students are responsible for maintaining standards of academic performance established for each course in which they are enrolled.

- **Protection against improper disclosure of information about students' views, beliefs, and political activities which professors acquire in the course of their work as instructors, advisers, and counselors shall be considered confidential. Judgments of academic ability and character may be provided under appropriate circumstances, normally with the knowledge or consent of the student.**

The Fairness Committee (Instructional Services, Student Services and Administration Building), which operates under the supervision of the Academic Senate, exists to resolve complaints concerning academic unfairness. Reports of discrimination will be handled by the Director, Office of Equity and Diversity (Student Services and Administration Building), 510-885-4518; TTY 510-885-7592. Reports of student misconduct, including those relating to academic dishonesty will be handled by the Office of Student Judicial Affairs. [http://www20.csueastbay.edu/sa/sdja](http://www20.csueastbay.edu/sa/sdja) (Student Services and Administration Building, 2nd Floor).

**Student Publications**

Student publications and the student press are valuable aids in establishing and maintaining an atmosphere of free and responsible discussion and intellectual exploration on the campus.

While student publications and the student press operate with limited external control, the editorial freedom of student editors and managers entails correlative responsibilities to be governed by the concerns of responsible journalism, such as the evidence of libel, indecency, undocumented allegations, attacks on personal integrity, and the techniques of harassment and innuendo. Students and faculty who produce student publications have the responsibility to establish and adhere to standards of responsible journalism.

**Freedom of Association**

Students are free to organize and join associations to promote their common interests and to have these associations be considered for recognition by the university. "Institutional recognition" is understood to refer to the formal relationship between the student organization and the institution. Recognized student organizations are responsible for abiding by all institutional regulations for student organizations. These regulations are available in the office of Student Life Programs (New University Union, 2nd Floor).

**Freedom of Inquiry and Expression**

Students and student organizations are free to examine and discuss all questions of interest to them and to express opinions publicly and privately as long as others' rights are not violated in the process. Students are always free to support causes by orderly means which do not disrupt the regular and essential operation of the institution. However, such public expressions or demonstrations speak only for the student(s) involved, and not for the institution.

**Student Participation in Institutional Government**

Students are free to elect peers to serve and represent them in university government as members of the student body. Students who meet eligibility criteria are appointed to various standing committees by the administration and faculty upon the recommendation of the Associated Students Board of Directors. The role of student government is explicitly defined in the California Education Code and CSU policies. Copies of these regulations can be obtained in the office of the Associate Vice President, Student Affairs (Student Services and Administration Building, 4th Floor).

**Off-Campus Freedom of Students**

The institution has the responsibility to protect students' citizenship rights on campus, and in approved activities which occur off campus. Off-campus activities of students may, upon occasion, result in violation of the law. Students who violate the law may incur penalties prescribed by civil authorities, but institutional authority will not be used merely to duplicate the functions of general laws.

As stated in the University's Policy on Time, Place and Manner of Free Expression, "Universities are venues for creative, thoughtful and respectful discourse where conflicting perspectives are vigorously debated and thoroughly discussed. The University's policy can be found online at [www20.csueastbay.edu/policies/lpm.html](http://www20.csueastbay.edu/policies/lpm.html)^4^.

**Privacy Rights of Students in Education Records**

The Federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g) and regulations adopted thereunder (34 C.F.R. 99), set out requirements designed to protect the privacy of student education records maintained by the campus. The text of the statute can be found online at [www20.csueastbay.edu/students/student-services/student-records/f gravity-policy.html](http://www20.csueastbay.edu/students/student-services/student-records/ferpa-privacy-policy.html). The law provides that the campus must give students access to most records directly related to the student. The campus must also provide an opportunity for a hearing to challenge the records if the student claims they are inaccurate, misleading, or otherwise inappropriate. The right to a hearing under this law does not include any right to challenge the appropriateness of a grade determined by the instructor. The institution has adopted a set of policies and procedures governing implementation of the statutes and regulations. Copies of these policies and procedures may be obtained at Office of the Registrar,
Student Services and Administration Building, 3rd Floor. Among the types of information included in the campus statement of policies and procedures are:

1. the types of student records maintained and the information they contain;
2. the official responsible for maintaining each type of record;
3. the location of access lists indicating persons requesting or receiving information from the record;
4. policies for reviewing and expunging records;
5. student access rights to their records;
6. the procedures for challenging the content of student records;
7. the cost to be charged for reproducing copies of records; and
8. the right of the student to file a complaint with the Department of Education. The Department of Education has established an office and review board to investigate complaints and adjudicate violations. The designated office is: Family Policy Office, U.S. Department of Education, Washington, D.C. 20202-4605.

The campus is authorized under the Act to release "directory information" concerning students. "Directory information" may include the student's name, Net ID, addresses, telephone numbers, e-mail address, photograph, department where employed, student employee's status, (i.e., TAGA, ISAs), full-time or part-time status, graduate or undergraduate status, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, grade level, enrollment status, degrees, honors, and awards received, and the most recent previous educational agency or institution attended by the student. The above designated information is subject to release by the campus at any time unless the campus has received prior written objection from the student specifying what information the student requests not be released. Written objections should be sent to the Office of the Registrar, Student Services and Administration Building, 3rd Floor.

The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons have responsibilities in the campus' academic, administrative or service functions and have reason for accessing student records associated with their campus or other related academic responsibilities. Student records may also be disclosed to other persons or organizations under certain conditions (e.g., as part of the accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid; to other institutions to which the student is transferring.) In cases of emergency, certain student education records or organizations under certain conditions (e.g., as part of the accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid; to other institutions to which the student is transferring.) In cases of emergency, certain student education records may be released to appropriate individuals.

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Student Health and Counseling Services Message on Alcohol, Tobacco and Other Drugs

Alcohol, Tobacco and Other Drugs Prevention Program

The California State University, East Bay Alcohol, Tobacco and Other Drugs (ATOD) Advisory Council was established fall 2001 in response to the Chancellor's directive that CSU campuses provide special attention to the development of alcohol, tobacco and other drugs policies and prevention programs. The ATOD Council includes representation from CSUEB students, staff, faculty and the community and is divided into four subcommittees: Policy, Assessment, Education and Prevention, and Community/Treatment.

The ATOD Education and Prevention subcommittee is responsible for: dissemination and communication of the CSUEB AOD Policy to students, parents, staff and faculty; training CSUEB staff on ATOD issues; providing educational programming; and initiating a social norms campaign on campus. The university also collaborates with local community agencies to further ATOD prevention and enforcement activities.

Cal State East Bay participates in the following campus alcohol education awareness activities: Fall Welcome Week; Homecoming Week; Spring Break; "Soberfest," Alcohol Awareness Day; Alcohol Awareness Evening at the Residence Halls; "Alcohol Jeopardy" at the Residence Halls; Resident Advisor (RA) alcohol training; Date rape programming. Contact the Health Promotions Department in Student Health Services at 510-885-3733 for additional information.

Policies, Standards and Procedures for Use of Alcohol and Other Drugs

- The possession and/or consumption of alcoholic beverages by anyone under 21 years of age is prohibited at all times on campus, and is subject to the penalties imposed by state law and university policies.
- Alcoholic beverages may be served on special occasions with prior approval at functions sponsored by approved student, faculty, staff, or administrative organizations, or by campus-related or off-campus organizations contracting for the use of university facilities. Service will normally be permitted only in conjunction with food service. Service of alcohol on these occasions is not allowed before 4:00 p.m. on weekdays during academic quarters. Exceptions to this rule may be granted for events held in the University Union, or at the discretion of a vice president who is responsible for approval.
- All organizations, departments or individuals planning to serve alcohol at any CSUEB function must have completed the online Responsible Beverage Server Training and received approval to serve alcohol from the Associate Vice President at least five working days prior to the planned event.
- Use of illicit drugs (including performance enhancing substances such as anabolic steroids) is forbidden.

Policy Violation and Sanctions

In the Workplace

Any faculty, staff, administrator or other employee who violates the policy on alcohol and other drugs shall be subject to corrective or disciplinary action up to, and including the possibility of dismissal, in accordance with appropriate collective bargaining agreements, CSU policies and state and federal law. At the discretion of the university, employees found to be in violation of university policy may be required to participate in a substance abuse program, employee assistance program, or other forms of counseling.

Students, Student Organizations and Off-Campus Organizations or Individuals

Any student who violates the policy on alcohol and other drugs shall be subject to corrective action, such as participation in a substance abuse program or other counseling, or disciplinary action up to, and including the possibility of dismissal from the institution. Sanctions will also be imposed for violations of this policy by student organizations, off-campus organizations or individuals as determined by the Vice President, Student Affairs and/or the Vice President, Administration and Business Affairs.

Other Sanctions In addition to the foregoing, the following sanctions may be imposed for violation of the alcohol and drug policy by employees, students or student organizations in accordance with the objectives set forth in the university statement on student rights and responsibilities:

Sanctions for individuals:
1. Restitution for any damages that result from the conduct of the violator;
2. Violators will be required to go through an alcohol or other drugs education program.

Sanctions for student organizations:
1. Social probation for a specified period of time;
2. Restitution for any damages that result from the conduct of the violator;
3. Freezing of funds, if any are available;
4. Report of violations to the national headquarters or offices of the organizations if such exist;
5. Removal of officers from office;
6. Loss of university recognition and access to campus support services. University departments may impose additional sanctions for conduct in violation of policies established by the department, as well as violations of the University Alcohol and Other Drugs Policy.

**Alcohol and Other Drugs Risks and Resources**

There are many documented risks associated with alcohol and other drug abuse affecting individuals, families and friends. Alcohol and other drug abuse can lead to serious health and social problems, including short and long-term effects on the body and mind. Additionally, alcohol and other drug abuse can affect academic, athletic, work performance, and can lead to violent or destructive behaviors. There is also a strong relationship between alcohol and other drug abuse and risk of inappropriate sexual behaviors. For a more complete list of the negative effects of alcohol and other drugs visit the [Student Health and Counseling Services website](https://www.csueastbay.edu/student-health-and-counseling-services).

**CSUEB Campus and Community Resources**

For Students: Counseling and Psychological Services (CaPSS): 510-885-3690; Student Health Services (SHS): 510-885-3735

For Faculty and Staff: Employee Assistance Program (EAP):1-800-234-5465

Assessment and Referral: 1-800-486-1652
National Alcohol and Drug Treatment Referral: 1-800-454-8966
Alcoholics Anonymous Meetings: East Bay Central Office Directory, 510-839-8900 (24 hrs/day)

For additional information, including the complete Alcohol, Tobacco and Other Drugs Policy and list of community resources, see the [Student Health and Counseling Services website](https://www.csueastbay.edu/student-health-and-counseling-services).

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**Title 5 Section 41301 Standards for Student Conduct**

a. **Campus Community Values**

The university is committed to maintaining a safe and healthy living and learning environment for students, faculty, and staff. Each member of the campus community should choose behaviors that contribute toward this end. Students are expected to be good citizens and to engage in responsible behaviors that reflect well upon their university, to be civil to one another and to others in the campus community, and contribute positively to student and university life.

b. **Grounds for Student Discipline**

Student behavior that is not consistent with the Student Conduct Code is addressed through an educational process that is designed to promote safety and good citizenship and, when necessary, impose appropriate consequences.

The following are grounds upon which student discipline can be based:

1. Dishonesty, including:
   A. Cheating, plagiarism, or other forms of academic dishonesty that are intended to gain unfair academic advantage.
   B. Furnishing false information to a university official, faculty member, or campus office.
   C. Forgery, alteration, or misuse of a university document, key, or identification instrument.
   D. Misrepresenting oneself to be an authorized agent of the university or one of its auxiliaries.

2. Unauthorized entry into, presence in, use of, or misuse of university property.

3. Willful, material and substantial disruption or obstruction of a university-related activity, or any on-campus activity.

4. Participating in an activity that substantially and materially disrupts the normal operations of the university, or infringes on the rights of members of the university community.

5. Willful, material and substantial obstruction of the free flow of pedestrian or other traffic, on or leading to campus property or an off-campus university related activity.

6. Disorderly, lewd, indecent, or obscene behavior at a university related activity, or directed toward a member of the university community.

7. Conduct that threatens or endangers the health or safety of any person within or related to the university community, including physical abuse, threats, intimidation, harassment, or sexual misconduct.

8. Hazing, or conspiracy to haze. Hazing is defined as any method of initiation or pre-initiation into a student organization or student body, whether or not the organization or body is officially recognized by an educational institution, which is likely to cause serious bodily injury to any former, current, or prospective student of any school, community college, college, university or other educational institution in this state (Penal Code 245.6), and in addition, any act likely to cause physical harm, personal degradation or disgrace resulting in physical or mental harm, to any former, current, or prospective student of any school, community college, college, university or other educational institution. The term "hazing" does not include customary athletic events or school sanctioned events.

Neither the express or implied consent of a victim of hazing, nor the lack of active participation in a particular hazing incident is a defense. Apathy or acquiescence in the presence of hazing is not a neutral act, and is also a violation of this section.

9. Use, possession, manufacture, or distribution of illegal drugs or drug-related paraphernalia, (except as expressly permitted by law and university regulations) or the misuse of legal pharmaceutical drugs.

10. Use, possession, manufacture, or distribution of alcoholic beverages (except as expressly permitted by law and university regulations), or public intoxication while on campus or at a university related activity.

11. Theft of property or services from the university community, or misappropriation of university resources.

12. Unauthorized destruction, or damage to university property or other property in the university community.

13. Possession or misuse of firearms or guns, replicas, ammunition, explosives, fireworks, knives, other weapons, or dangerous chemicals (without the prior authorization of the campus president) on campus or at a university related activity.

14. Unauthorized recording, dissemination, or publication of academic presentations (including handwritten notes) for a commercial purpose.

15. Misuse of computer facilities or resources, including:
   A. Unauthorized entry into a file, for any purpose.
   B. Unauthorized transfer of a file.
   C. Use of another's identification or password.
   D. Use of computing facilities, campus network, or other resources to interfere with the work of another member of the university community.
   E. Use of computing facilities and resources to send obscene or intimidating and abusive messages.
Sanctions for the conduct listed above can be imposed on applicants, enrolled students, students between academic terms, graduates awaiting degrees, and students who withdraw from school while a disciplinary matter is pending. Conduct that threatens the safety or security of the campus community, or substantially disrupts the functions or operation of the university is within the jurisdiction of this Article regardless of whether it occurs on or off campus. Nothing in this Code may conflict with Education Code section 66301 that prohibits disciplinary action against students based on behavior protected by the First Amendment.

c. Procedures for Enforcing This Code
   The Chancellor shall adopt procedures to ensure students are afforded appropriate notice and an opportunity to be heard before the University imposes any sanction for a violation of the Student Conduct Code.

d. Application of this Code
   Sanctions for the conduct listed above can be imposed on applicants, enrolled students, students between academic terms, graduates awaiting degrees, and students who withdraw from school while a disciplinary matter is pending. Conduct that threatens the safety or security of the campus community, or substantially disrupts the functions or operation of the university is within the jurisdiction of this Article regardless of whether it occurs on or off campus. Nothing in this Code may conflict with Education Code section 66301 that prohibits disciplinary action against students based on behavior protected by the First Amendment.

e. Summary of Civil and Criminal Penalties for Violation of Federal Copyright Laws
   As referenced earlier in Section XXI, Student Conduct (15) (G) the penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or “statutory” damages affixed at not less than $750 and not more than $30,000 per work infringed. For “willful” infringement, a court may award up to $150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys’ fees. For details, see Title 17, United States Code, Sections 504, 505. Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $250,000 per offense.

41302 Disposition of Fees; Campus Emergency; Interim Suspension

The President of the campus may place on probation, suspend, or expel a student for one or more of the causes enumerated in Section 41301b. No fees or tuition paid by or for such student for the quarter in which he or she is suspended or expelled shall be refunded.

During periods of campus emergency, as determined by the President, the President may, after consultation with the Chancellor, place into immediate effect any emergency regulations, procedures, and other measures deemed necessary or appropriate to meet the emergency, safeguard persons and property, and maintain educational activities.

The President may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property and to insure the maintenance of order. A student so placed on interim suspension shall be given prompt notice of charges and the opportunity for a hearing within 10 days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prior written permission of the President or designated representative, enter any campus of The California State University other than to attend the hearing. Violation of any condition of interim suspension shall be grounds for expulsion.

Student Conduct Procedures

Executive Order 1043, Student Conduct Procedures, provides for appropriate notice and an opportunity to be heard before sanctions are imposed for a violation of the Standards for Student Conduct. Practices in disciplinary cases may vary in formality depending on the gravity of the offense and the sanctions which may be applied.

Whistleblower Protection

Under the California Whistleblower Protection act, any employee or applicant for employment may make a protected disclosure of an improper government activity or any condition that may significantly threaten the health or safety of employees or the public to the State Auditor, CSU or CSUEB. The procedure for making such protected disclosures is set forth in the document titled "Reporting Procedures for Protected Disclosure of Improper Governmental Activities and/or Significant Threats to Health or Safety" (Executive Order 929) and can be viewed or downloaded at: http://www.calstate.edu/eo/EO-929.pdf. The CSUEB administrator responsible for receiving and investigating such disclosures is the Associate Vice President, Human Resources. In addition, under the Act, employees and applicants for employment are protected from retaliation from making such protected disclosures. The procedure for making a complaint of retaliation is set forth in the document titled “Revised Complaint Procedure for Allegations of Retaliation for Disclosure under the California Whistleblower Protection Act” (Executive Order 822) and can be viewed or downloaded at: http://www.calstate.edu/eo/EO-822.pdf. As with protected disclosures, the Associate Vice President, Human Resources is responsible for receiving retaliation complaints. It is, however, the CSU Office of the Chancellor that will investigate.
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<td>MLL 3400 and 4455</td>
<td>C2 or C3</td>
<td>8</td>
</tr>
<tr>
<td>Statistics</td>
<td>3 or better</td>
<td>STAT 1000</td>
<td>B4</td>
<td>5</td>
</tr>
<tr>
<td>Studio Art: Drawing</td>
<td>3 or better</td>
<td>ART 1113 and 3141</td>
<td>N/A</td>
<td>8</td>
</tr>
<tr>
<td>US History</td>
<td>3 or better</td>
<td>HIST 1101 and 1102</td>
<td>US-1 + US-2</td>
<td>8</td>
</tr>
<tr>
<td>World History</td>
<td>3 or better</td>
<td>HIST 1014, 1015 and 1016</td>
<td>C2</td>
<td>12</td>
</tr>
</tbody>
</table>

1 The specific equivalence will be determined by portfolio review upon your entrance into the university.
2 U.S. history and U.S. Constitution requirements for graduation, but not to the California state and local government requirement.
Undergraduate/Graduate Special Certificate Proposal

(After cutting and pasting this form to a word processing program, you may want to answer the questions on your computer before printing out the form. Obtain signatures from your advisor and college dean after printing the form.)

The purpose of a Special Certificate Program is to give the student an opportunity to design in advance with University approval a program that will be certified upon completion. To secure an undergraduate Special Certificate, an undergraduate or graduate student must complete a program of at least twenty quarter-units in upper-division courses with a g.p.a. of 2.00. To obtain a graduate Special Certificate, a graduate student must possess a bachelor's degree from an accredited institution and complete at least twenty quarter-units, of which at least half must be at the graduate 6000-level, with a minimum g.p.a. of 3.00. The program must provide a logical and coherent pattern of preparation for a limited objective. The title of the proposed certificate should carry no connotation of meeting a licensing requirement for professional practice. The student's proposed program must be developed with and approved by a faculty member knowledgeable in the field being certified.

Date:

Student Name:

Signature of Student: _______________________________ Date: _________________

Student I.D. #:

Address:

Daytime Telephone #:

E-mail Address:
Undergraduate Major/GPA:

Graduate Major/GPA:

Advisor's Academic Department:

Signature of Faculty Advisor: ________________________________ Date: ________________

Are you requesting an Undergraduate or a Graduate Special Certificate?

Student should complete the following two questions:

1) What is your reason for pursuing this Special Certificate?

2) What do you hope to gain from completing this set of courses?

Student and faculty advisor should complete the following:

The following 2-4 learning outcomes were agreed upon by the student and the faculty adviser
(i.e. with the completion of this Special Certificate, the student should be able to know, do, value . . .):

1)

2)

3)

4)

The following title and list of courses are deemed the most appropriate for achieving these outcomes:
(List proposed title and courses that will make up the Special Certificate.)

Proposed Title:
Proposed Course List (include course prefix, number, title, unit value):

The proposal must be approved by the (Associate) Dean of the College in which the preponderance of courses is taken.

College:

Signature of Dean (Associate): _______________________________ Date: _________________

After the Special Certificate is signed by the appropriate College (Associate) Dean, the faculty advisor must send the proposal directly to Rosanne Harris, the Academic Policies/Curriculum Coordinator in the Office of Academic Programs and Graduate Studies Office, SSA 4500. The form may be dropped off in person (by the faculty advisor) or sent to her by inter-campus mail.

Copies will be sent to all other College (Associate) Deans. (They have 10 working days to approve/object to the program). If there are no objections, and the Associate Vice President, Academic Programs and Graduate Studies, judges the proposal to be sound, the program is approved.

Signature of Associate Vice President, Academic Programs & Graduate Studies: ___________________________________________________________________ Date: _____________________

If any College (Associate) Dean objects within the ten days, that College (Associate) Dean will give any objections to the Associate Vice President in the Academic Programs and Graduate Studies Office. The Associate Vice President will consider the objections while deciding whether or not to approve the program.

Once the proposal has been approved, it is filed with the Registrar's Office. Upon completion, students will apply to the Registrar's Office to receive their certificate of completion. (A small fee is charged for the certificate.)

10/10
**COLLEGE LEVEL EXAMINATION PROGRAM**

The following College Level Examination Program (CLEP) tests are acceptable for the amount of credit indicated, subject to the achievement of the scores indicated and the conditions stated in the "Credit by Examination Policy" section.

<table>
<thead>
<tr>
<th>EXAM</th>
<th>SCORE</th>
<th>COURSE(S)</th>
<th>GE CREDIT</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>American Government</strong></td>
<td>50</td>
<td>POSC 1201</td>
<td>D and US-2</td>
<td>4</td>
</tr>
<tr>
<td>American Literature¹</td>
<td>50</td>
<td>ENGL 3600</td>
<td>C2 or C3 (not C4)</td>
<td>4</td>
</tr>
<tr>
<td>Analyzing and Interpreting</td>
<td>50</td>
<td>ENGL 2030 or 2040 or 2050</td>
<td>C2 or C3</td>
<td>4</td>
</tr>
<tr>
<td>Literature with essay²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
<td>BIOL 1001</td>
<td>B2 or B3</td>
<td>4</td>
</tr>
<tr>
<td>Calculus²</td>
<td>50</td>
<td>MATH 1304</td>
<td>B4</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>50</td>
<td>CHEM 1100</td>
<td>B1 or B5</td>
<td>5</td>
</tr>
<tr>
<td>College Algebra²</td>
<td>50</td>
<td>MATH 1130</td>
<td>B4</td>
<td>4</td>
</tr>
<tr>
<td>College Algebra – Trigonometry²</td>
<td>50</td>
<td>N/A</td>
<td>B4</td>
<td>4</td>
</tr>
<tr>
<td>English Literature¹</td>
<td>50</td>
<td>ENGL 3400</td>
<td>C2 or C3 (not C4)</td>
<td>4</td>
</tr>
<tr>
<td>Financial Accounting</td>
<td>50</td>
<td>ACCT 2251</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>French Level I</td>
<td>50</td>
<td>MLL 1101</td>
<td>C2 or C3</td>
<td>8</td>
</tr>
<tr>
<td>French Level II</td>
<td>59</td>
<td>MLL 1102</td>
<td>C2 or C3</td>
<td>16</td>
</tr>
<tr>
<td>German Level I</td>
<td>50</td>
<td>N/A</td>
<td>C2 or C3</td>
<td>8</td>
</tr>
<tr>
<td>German Level II</td>
<td>60</td>
<td>N/A</td>
<td>C2 or C3</td>
<td>16</td>
</tr>
<tr>
<td>*History of the United States I³</td>
<td>50</td>
<td>HIST 1101</td>
<td>D and US-1</td>
<td>4</td>
</tr>
<tr>
<td>*History of the United States II³</td>
<td>50</td>
<td>HIST 1102</td>
<td>D and US-1</td>
<td>4</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>50</td>
<td>N/A</td>
<td>E</td>
<td>4</td>
</tr>
<tr>
<td>Humanities</td>
<td>50</td>
<td>N/A</td>
<td>C2 or C3</td>
<td>4</td>
</tr>
<tr>
<td>Information Systems and Computer</td>
<td>50</td>
<td>ITM 1270</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>Applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Educational</td>
<td>50</td>
<td>N/A</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introductory Business Law</td>
<td>50</td>
<td>N/A</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>Introductory Psychology</td>
<td>50</td>
<td>PSYC 1000</td>
<td>D</td>
<td>5</td>
</tr>
<tr>
<td>Introductory Sociology</td>
<td>50</td>
<td>SOC 1000</td>
<td>D</td>
<td>4</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>50</td>
<td>N/A</td>
<td>B1 or B2</td>
<td>4</td>
</tr>
<tr>
<td>Pre-Calculus³</td>
<td>50</td>
<td>MATH 1130</td>
<td>B4</td>
<td>4</td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>50</td>
<td>N/A</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>Principles of Macroeconomics⁴</td>
<td>50</td>
<td>ECON 2302</td>
<td>D</td>
<td>4</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>50</td>
<td>N/A</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>50</td>
<td>N/A</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>Principles of Microeconomics⁴</td>
<td>50</td>
<td>ECON 2301</td>
<td>D</td>
<td>4</td>
</tr>
<tr>
<td>Spanish Level I</td>
<td>50</td>
<td>MLL 1401</td>
<td>C2 or C3</td>
<td>8</td>
</tr>
<tr>
<td>Spanish Level II</td>
<td>63</td>
<td>MLL 1402</td>
<td>C2 or C3</td>
<td>16</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>N/A</td>
<td>B4</td>
<td>4</td>
</tr>
<tr>
<td>Western Civilization I³</td>
<td>50</td>
<td>HIST 1014 or 1015</td>
<td>C2 or C3 or D</td>
<td>4</td>
</tr>
<tr>
<td>Western Civilization II³</td>
<td>50</td>
<td>HIST 1016</td>
<td>D</td>
<td>4</td>
</tr>
</tbody>
</table>

*US-1 would be fulfilled by either the History of the U.S. I or the History of the U.S. II exam.
**US-2 would be fulfilled by the American Government exam.

Note: US-3 would be fulfilled by the California State and Local Government exam administered by the Testing Office at CSUEB.

¹Will accept a maximum of 8 units toward the English major.
²Will accept a maximum of 8 units toward the Mathematics major. Students who complete both the College Algebra and Pre-Calculus exams will receive 8 units of credit and completion of GE Area B4.
³Will accept a maximum of 16 units toward the History major.
⁴Will accept a maximum of 8 units toward the Economics major.
A world of information is just a click away.

Check out the website for the entire California State University: www.csumentor.edu. You will find helpful hints, frequently-asked questions, campus tours, and general information about all 23 campuses. The phone number listed for each campus is for the Office of Admissions.

1 California State University, Bakersfield • Q
9001 Stockdale Highway, Bakersfield, CA 93311-1099
(661) 654-3036 • www.csуб.edu

2 California State University Channel Islands • S
One University Drive, Camarillo, CA 93012
(805) 437-8500 • www.csuci.edu

3 California State University, Chico • S
400 W. First Street, Chico, CA 95929-0722
(530) 898-6321 • www.csuchico.edu

4 California State University, Dominguez Hills • S
1000 East Victoria Street, Carson, CA 90747
(310) 243-3645 • www.csudh.edu

5 California State University, East Bay • Q
25800 Carlos Bee Blvd. Hayward, CA 94542-3035
(510) 885-2556 • www.csueastbay.edu

6 California State University, Fresno • S
5150 North Maple Avenue, Fresno, CA 93740-0057
(559) 278-2261 • www.csfresno.edu

7 California State University, Fullerton • S
800 N. State College Blvd., Fullerton, CA 92834-9480
(657) 278-7601 • www.fullerton.edu

8 Humboldt State University • S
1 Harst Street, Arcata, CA 95521-4957
(707) 826-4402 • (866) 850-9556 • www.humboldt.edu

9 California State University, Long Beach • S
1250 Bellflower Blvd., Long Beach, CA 90840-0106
(562) 985-5471 • www.csulb.edu

10 California State University, Los Angeles • Q
5151 State University Drive, Los Angeles, CA 90032-8530
(323) 343-3901 • www.calstatela.edu

11 California Maritime Academy • S
200 Maritime Academy Drive, Vallejo, CA 94590
(707) 654-1330 • www.csum.edu

12 California State University, Monterey Bay • S
100 Campus Center Drive, Seaside, CA 93955-8001
(831) 582-3738 • www.csumb.edu

13 California State University, Northridge • S
18111 Nordhoff Street, Northridge, CA 91302-8207
(818) 677-3700 • www.csun.edu

14 California State Polytechnic University, Pomona • Q
3801 West Temple Avenue, Pomona, CA 91768-4003
(909) 869-5299 • www.cpp.edu

15 California State University, Sacramento • S
6000 J Street, Sacramento, CA 95819-6112
(916) 278-7766 • www.csus.edu

16 California State University, San Bernardino • Q
5500 University Parkway, San Bernardino, CA 92407-2397
(909) 537-5188 • www.csusb.edu

17 San Diego State University • S
5500 Campanile Drive, San Diego, CA 92182-7455
(619) 594-6336 • www.sdsu.edu

18 San Francisco State University • S
1600 Holloway Avenue, San Francisco, CA 94132-4001
(415) 338-1113 • www.sfsu.edu

19 San José State University • S
One Washington Square, San José, CA 95192-0009
(408) 971-5000 • www.sjsu.edu

20 California Polytechnic State University, San Luis Obispo • Q
San Luis Obispo, CA 93407
(805) 756-2311 • www.calpoly.edu

21 California State University, San Marcos • S
333 S. Twin Oaks Valley Road
San Marcos, CA 92096-0001
(760) 750-4848 • www.csusm.edu

22 Sonoma State University • S
1801 East Cotati Avenue, Rohnert Park, CA 94928
(707) 664-2778 • www.sonoma.edu

23 California State University, Stanislaus • S
One University Circle, Turlock, CA 95382
(209) 667-3070 • www.csustan.edu
**GENERAL EDUCATION REQUIREMENTS FOR NATIVE STUDENTS**

(No single course may be applied to more than one Area or Subarea requirement.)

<table>
<thead>
<tr>
<th>Area</th>
<th>Subarea</th>
<th>Minimum Courses</th>
<th>Minimum Units</th>
<th>General Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Communication in English Language</strong></td>
<td></td>
<td></td>
<td></td>
<td>1. Minimum of 12 upper division units taken as upper division student for B6, C4 and D4 electives.</td>
</tr>
<tr>
<td></td>
<td>A1 Oral Communication</td>
<td>1</td>
<td>4</td>
<td>2. One course approved to meet the cultural groups and/or women in the U.S.A. requirement.</td>
</tr>
<tr>
<td></td>
<td>A2 Written Communication</td>
<td>1</td>
<td>4</td>
<td>3. No courses taken at CSUEB and used to satisfy the U.S. history/government requirement can be used for G.E.</td>
</tr>
<tr>
<td></td>
<td>A3 Critical Thinking</td>
<td>1</td>
<td>4</td>
<td>4. No course can be used for G.E. if it has the prefix of the major department, except Areas A, B4; one course in one thematic cluster (B1-3, 5; C1-3; D1-3); and area C for MLL courses in a language other than the student's major.</td>
</tr>
<tr>
<td><strong>B. Natural Sciences and Mathematics</strong></td>
<td></td>
<td></td>
<td></td>
<td>5. Students must select courses from three different disciplines for each of the following lower division areas: B1, 2, 5; C1-3; and D1-3.</td>
</tr>
<tr>
<td></td>
<td>B1 Physical Science</td>
<td>1</td>
<td>4</td>
<td>6. Second course in English composition, ENGL 1002.</td>
</tr>
<tr>
<td></td>
<td>B2 Life Science</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B3 Science Lab *</td>
<td>0-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B4 Quantitative Reasoning</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B5 Science Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B6 UD Science Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>C. Humanities: Fine Arts and Letters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C1 Fine Arts</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C2 Letters</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C3 Humanities Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C4 UD Humanities Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>D. Social Sciences</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D1 Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D2 Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D3 Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D4 UD Social Science Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>F. Performing Arts and Activities</strong></td>
<td></td>
<td>1-4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G1-2-3 Frosh Activities</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G4 Information Literacy</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>G. G.E. Electives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td>21-25</td>
<td>72</td>
<td></td>
</tr>
</tbody>
</table>

** Can be simultaneously met with a course that satisfies Area B1, B2, or B5 if that course includes a lab.
### General Education Requirements for Transfer Students

(No single course may be applied to more than one Area or Subarea requirement.)

<table>
<thead>
<tr>
<th>Area</th>
<th>Subarea</th>
<th>Minimum Courses</th>
<th>Minimum Units</th>
<th>General Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Communication in English Language</td>
<td>A1 Oral Communication</td>
<td>1</td>
<td>4</td>
<td>1. No course can be used for G.E. if it has the prefix of the major department, except</td>
</tr>
<tr>
<td></td>
<td>A2 Written Communication</td>
<td>1</td>
<td>4</td>
<td>Areas A, B4, one course in one thematic cluster (B1-3,5;</td>
</tr>
<tr>
<td></td>
<td>A3 Critical Thinking</td>
<td>1</td>
<td>4</td>
<td>C1-3; D1-3) or Area C for MLL courses in a language other than the student's major.</td>
</tr>
<tr>
<td>B. Natural Sciences and Mathematics</td>
<td>B1 Physical Science</td>
<td>1</td>
<td>4</td>
<td>2. Students must select courses from two different disciplines for Area D1-4.</td>
</tr>
<tr>
<td></td>
<td>B2 Life Science</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B3 Science Lab *</td>
<td>0-1</td>
<td></td>
<td>3. 12 quarter units of G.E. taken in residence at CSUEB.</td>
</tr>
<tr>
<td></td>
<td>B4 Quantitative Reasoning</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective (if needed) **</td>
<td>0-1</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Can be simultaneously met with a course that satisfies Area B1 or B2 if that course includes a lab.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Humanities: Fine Arts and Letters</td>
<td>C1 Fine Arts</td>
<td>1</td>
<td>4</td>
<td>4. No courses used for the U.S. History/Government Requirement taken at CSUEB can be used for G.E.</td>
</tr>
<tr>
<td></td>
<td>C2 Letters</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C3 Humanities Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective (if needed) **</td>
<td>0-1</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>D. Social Sciences</td>
<td>D1 Elective</td>
<td>1</td>
<td>4</td>
<td>5. Minimum of 12 upper division units taken as an upper division student in G.E. Areas B6, C4 and D4 electives.</td>
</tr>
<tr>
<td></td>
<td>D2 Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D3 Elective</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective (if needed) **</td>
<td>0-1</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>E. Lifelong Understanding</td>
<td>Satisfied with a certified G.E. Area E course before transfer. After transfer, this area may be completed with an Area F course. (See #7)</td>
<td>1</td>
<td>4</td>
<td>6. One course approved to meet the Cultural Groups and/or Women in the U.S.A. Requirement.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL: Lower Division</td>
<td>13-17</td>
<td>60**</td>
<td>7. One to four courses (4 quarter units) to fulfill the Performing Arts/Activities Requirement taken from the Area F list or a transfer course(s) that meets the CSUEB criteria.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8. ENGL 1002, College Writing II, or its equivalent. If the course you are using to clear Area A3 (Critical Thinking) is on the CSU/UC IGETC 1B Critical Thinking-English Composition list, this course can simultaneously satisfy your ENGL 1002, second composition requirement.</td>
</tr>
</tbody>
</table>

**Minimum of 60 lower-division units. You may need to take an additional G.E. course(s) for this total to reach 60 quarter units. If you do, choose from areas B, C, or D.**

### Lower Division Courses

<table>
<thead>
<tr>
<th>Natural Sciences</th>
<th>B6 UD Science Elective</th>
<th>1</th>
<th>4</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>C4 UD Humanities Elective</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>D4 UD Social Science Elective</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>3</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>
## Graduation Checklist for Native Students

These are the seven basic requirements you will need to complete in order to receive your B.A. or B.S. degree. We suggest that you use this checklist during your time here at CSUEB to track your progress.

<table>
<thead>
<tr>
<th>Basic Requirements</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complete a 72 quarter-unit program of General Education-Breadth Requirements.</td>
<td></td>
</tr>
<tr>
<td>Area A1-3: 12 units</td>
<td></td>
</tr>
<tr>
<td>Area B1-6: 20 units</td>
<td></td>
</tr>
<tr>
<td>Area C1-4: 16 units</td>
<td></td>
</tr>
<tr>
<td>Area D1-4: 16 units</td>
<td></td>
</tr>
<tr>
<td>Area F1: 4 units</td>
<td></td>
</tr>
<tr>
<td>Area G1-4: 4 units</td>
<td></td>
</tr>
<tr>
<td>A minimum of 12 upper-division units after you attain upper-division status. (Areas B6, C4, D4)</td>
<td></td>
</tr>
</tbody>
</table>

| 2. Complete the U.S. History, U.S. Constitution, and California State and Local Government (Code) Requirement by courses and/or exam(s). | |
| Courses (one from Category I and one from Category II): | |
| Category I: ES 1201; HIST 1101, 3400, 3540; POSC 1201, 3441, 3442 | |
| Category II: ES 1202; HIST 1102, 3500; POSC 1202, 3120, 3150 | |
| Exams: Passing one of three CLEP exams offered each quarter by the CSUEB Testing Office and passing a Category II course. | |
| Advanced Placement (AP) Exams: Students with a score of 3 or better on the U.S. History Exam will receive credit for both HIST 1101 and 1102. However, they will still need to complete another Category II course to fulfill the California State and Local Government portion of the requirement. Likewise, students with a score of 3 or better on the American Government and Politics Exam will receive credit for POSC 1201. These students will also need to complete a Category II course to fulfill the California State and Local Government portion of the requirement. | |

| 3. Complete both the lower-division and the upper-division writing competency requirement. | |
| Lower-Division: | |
| 1) ENGL 1001, College Writing I, and | |
| 2) ENGL 1002, College Writing II, with a grade of C- (CR) or better in ENGL 1001. | |
| Upper-Division: | |
| 1) pass the Writing Skills Test (WST) with a score of 8; or | |
| 2) pass a second-tier writing course (ENGL 3003, MKTG 3495, or SCI 3010) with a C- (CR) or better. Note: the prerequisite for a second-tier course is a first-tier course (ENGL 3000 or 3001) or a score of 7 on the WST; or | |
| 3) a minimum score of 4.5 on the writing portion of the GRE or GMAT; or | |
| 4) a minimum score of 53 on the writing portion of the CBEST. | |

| 4. Cultural Groups/Women | |
| One approved course, must recognize the contributions, made by members of various cultural groups and/or women, to the United States. | |
### Graduation Checklist for Native Students

<table>
<thead>
<tr>
<th>Basic Requirements</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Complete one of the majors described in this catalog.</td>
<td></td>
</tr>
<tr>
<td>Consult an advisor in your major to determine your progress with your major requirements.</td>
<td></td>
</tr>
<tr>
<td>6. Complete a minimum of 45 quarter units in residence.</td>
<td></td>
</tr>
<tr>
<td>Residence units are those units taken at CSUEB after being formally admitted to the university. Up to 36 units taken through Open University and Special Session may be counted for residence. Units you transfer in from other institutions and units taken through Credit-by-Examination are not residence units.* These 45 units must include at least: 1) 36 upper-division units; 2) 18 units in your major; and 3) 12 units of General Education. Note: the above three requirements will overlap. The units do not add up to 45.</td>
<td></td>
</tr>
<tr>
<td>7. Complete at least 180 quarter units for your B.A., B.F.A., or B.S. degree.</td>
<td></td>
</tr>
<tr>
<td>1) Total units come from a combination of G.E., major, minor(s) (if any), and electives. If you are in a high-unit major (e.g. Nursing), and/or add a minor, your total units will be over 180. 2) At least 60 of your total units must be at the upper-division level (courses numbered 3000 or above). 3) No more than 60 units can be graded in the CR/NC or A/B/C/NC pattern.** 4) A maximum of 36 units may be taken through Extension, Open University, or correspondence credit. 5) No more than 45 units can be earned through Credit-by-Examination (excepting Advanced Placement).</td>
<td></td>
</tr>
<tr>
<td>8. Attain a grade point average of at least 2.00.</td>
<td></td>
</tr>
<tr>
<td>1) GPA for all units you attempt at CSUEB (CSUEB GPA) 2) GPA for all units you attempt at CSUEB in addition to any transfer units (Cumulative GPA) 3) GPA for all units you complete for the major, regardless of the department in which they are taught (Major GPA)</td>
<td></td>
</tr>
</tbody>
</table>

* For degree programs offered through Extension, please go to the Student Enrollment Information Center.

**No courses used to complete requirements in the major can be taken CR/NC unless the course is only offered with this grading pattern.
GRADUATION CHECKLIST
FOR TRANSFER STUDENTS

These are the seven basic requirements you will need to complete in order to receive your B.A. or B.S. degree. We suggest that you use this checklist during your time here at CSUEB to track your progress.

<table>
<thead>
<tr>
<th>Basic Requirements</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complete a 72 quarter-unit program of General Education-Breadth Requirements.</td>
<td></td>
</tr>
<tr>
<td>Area A1-3: 12 units</td>
<td></td>
</tr>
<tr>
<td>Area B1-6: 16 units</td>
<td></td>
</tr>
<tr>
<td>Area C1-4: 16 units</td>
<td></td>
</tr>
<tr>
<td>Area D1-4: 16 units</td>
<td></td>
</tr>
<tr>
<td>Area E: 4 units</td>
<td></td>
</tr>
<tr>
<td>Units are minimums required in each area. You must complete at least 72 units in G.E. Areas A-E. You must select courses from a minimum of two different disciplines in Area D. A minimum of 12 upper-division units after you attain upper-division status (Areas B6, C4, D4).</td>
<td></td>
</tr>
</tbody>
</table>

If you transferred in with your Code requirement partially completed, and took the course before Fall 2004, please see either the Political Science or History Department at CSUEB to determine what remains to be completed. If you took the course Fall 2004 or later, you should check ASSIST.org to determine your remaining Code requirement(s).

If you transferred before starting the Code requirement, you may satisfy it with two courses or a combination of courses(s) and exam(s):

**Courses** (You must complete all three areas: ASSIST US-1, ASSIST US-2, and ASSIST US-3):
- Category I = ASSIST US-1 and/or ASSIST US-2: ES 1201; HIST 1101, 3400, 3540; POSC 1201, 3441, 3442
- Category II = ASSIST US-3: ES 1202; HIST 1102, 3500; POSC 1202, 3120, 3150

**Exams:** Passing one of the three CLEP exams offered each quarter by the CSUEB Testing Office and passing a Category II (ASSIST US-3) course.

**Advanced Placement (AP) Exams:** Students with a score of 3 or better on the U.S. History Exam will receive credit for both HIST 1101 and 1102. However, they will still need to complete another Category II (ASSIST US-3) course to fulfill the California State and Local Government portion of the requirement. Likewise, students with a score of 3 or better on the American Government and Politics Exam will receive credit for POSC 1201. These students will also need to complete a Category II course to fulfill the California State and Local Government portion of the requirement.
### Graduation Checklist for Transfer Students

#### Basic Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Lower-Division</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Complete both the lower-division and the upper-division writing competency requirement.</td>
<td><strong>Lower-Division:</strong>&lt;br&gt;1) ENGL 1001, College Writing I, or its equivalent, with a grade of C- (CR) or better; and&lt;br&gt;2) ENGL 1002, College Writing II, or its equivalent.&lt;br&gt;<strong>Upper-Division:</strong>&lt;br&gt;1) pass the Writing Skills Test (WST) with a score of 8; or&lt;br&gt;2) pass a second-tier writing course (ENGL 3003, MKTG 3495, or SCI 3010) with a C- (CR) or better. Note: the prerequisite for a second-tier course is a first-tier course (ENGL 3000 or 3001) or a score of 7 on the WST; or&lt;br&gt;3) a minimum score of 4.5 on the writing portion of the GRE or GMAT; or&lt;br&gt;4) a minimum score of 53 on the writing portion of the CBEST.</td>
<td>-----------</td>
</tr>
<tr>
<td>4. Performing Arts/Activities</td>
<td>A minimum of four quarter units to fulfill the Performing Arts/Activities requirement taken from the Area F list or a transfer course(s) that meets the CSUEB criteria.</td>
<td>-----------</td>
</tr>
<tr>
<td>5. Cultural Groups/Women</td>
<td>One approved course, must recognize the contributions, made by members of various cultural groups and/or women, to the United States.</td>
<td>-----------</td>
</tr>
<tr>
<td>6. Complete one of the majors described in this catalog.</td>
<td>Consult an advisor in your major to determine your progress with your major requirements.</td>
<td>-----------</td>
</tr>
<tr>
<td>7. Complete a minimum of 45 quarter units in residence.</td>
<td>Residence units are those units taken at CSUEB after being formally admitted to the university. Up to 36 units taken through Open University and Special Session may be counted for residence. Units you transfer in from other institutions and units taken through Credit-by-Examination are not residence units.* These 45 units must include at least:&lt;br&gt;1) 36 upper-division units;&lt;br&gt;2) 18 units in your major; and&lt;br&gt;3) 12 units of General Education.&lt;br&gt;Note: the above three requirements will overlap. The units do not add up to 45.</td>
<td>-----------</td>
</tr>
<tr>
<td>8. Complete at least 180 quarter units for your B.A., B.F.A., or B.S. degree.</td>
<td>1) Total units come from a combination of G.E., major, minor(s) (if any), and electives. If you are in a high-unit major (e.g. Nursing), and/or add a minor, your total units will be over 180.&lt;br&gt;2) At least 60 of your total units must be at the upper-division level (courses numbered 3000 or above).&lt;br&gt;3) No more than 60 units can be graded in the CR/NC or A/B/C/NC pattern.**&lt;br&gt;4) A maximum of 36 units may be taken through Extension, Open University, or correspondence credit.&lt;br&gt;5) No more than 45 units can be earned through Credit-by-Examination (excepting Advanced Placement).</td>
<td>-----------</td>
</tr>
<tr>
<td>9. Attain a grade point average of at least 2.00.</td>
<td>1) GPA for all units you attempt at CSUEB (CSUEB GPA)&lt;br&gt;2) GPA for all units you attempt at CSUEB in addition to any transfer units (Cumulative GPA)&lt;br&gt;3) GPA for all units you complete for the major, regardless of the department in which they are taught (Major GPA)</td>
<td>-----------</td>
</tr>
</tbody>
</table>

* For degree programs offered through Extension, please go to the Student Enrollment Information Center.

**No courses used to complete requirements in the major can be taken CR/NC unless the course is only offered with this grading pattern.
<table>
<thead>
<tr>
<th>EXAM</th>
<th>SCORE</th>
<th>COURSE</th>
<th>GE CREDIT</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL (non-major)</td>
<td>5 or better</td>
<td>BIOL 1001 and 1002</td>
<td>(B2 or B5) + B3</td>
<td>9</td>
</tr>
<tr>
<td>Biology HL (major)</td>
<td>5 or better</td>
<td>BIOL 1401, 1402 and 1403</td>
<td>(B2 or B5) + B3</td>
<td>15</td>
</tr>
<tr>
<td>Business and Management</td>
<td>4 or better</td>
<td>MGMT Electives</td>
<td>N/A</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>5 or better</td>
<td>CHEM 1101, 1102</td>
<td>(B2 or B5) + B3</td>
<td>10</td>
</tr>
<tr>
<td>Computer Science HL</td>
<td>4 or better</td>
<td>CS 1160 AND 2360</td>
<td>N/A</td>
<td>8</td>
</tr>
<tr>
<td>Economics HL</td>
<td>5 or better</td>
<td>ECON 2301 AND 2302</td>
<td>D1 or D2 or D3</td>
<td>8</td>
</tr>
<tr>
<td>Environmental Systems</td>
<td>4 or better</td>
<td>ENSC 2800 and ENVT 2000</td>
<td>N/A</td>
<td>8</td>
</tr>
<tr>
<td>Geography HL</td>
<td>5 or better</td>
<td>Elective credit</td>
<td>D1 or D2 or D3</td>
<td>8</td>
</tr>
<tr>
<td>History (American) HL</td>
<td>5 or better</td>
<td>HIST 1101 AND 1102</td>
<td>US-1 + US-2</td>
<td>8</td>
</tr>
<tr>
<td>Language A1 (English)</td>
<td>4 or better</td>
<td>ENGL 1001 AND 1002</td>
<td>A2 + 2nd Comp</td>
<td>8</td>
</tr>
<tr>
<td>Language A1 (Any language except English)</td>
<td>4 or better</td>
<td>See advisor in the MLL Dept for specific course credits</td>
<td>C2 or C3</td>
<td>9</td>
</tr>
<tr>
<td>Language A1 and A2 (English) HL</td>
<td>4 or better</td>
<td>ENGL 1001, 1002 AND 2030</td>
<td>A2 + 2nd Comp + F</td>
<td>12</td>
</tr>
<tr>
<td>Language A2 (Any language except English)</td>
<td>4 or better</td>
<td>See advisor in the MLL Dept for specific course credits</td>
<td>C2 or C3</td>
<td>9</td>
</tr>
<tr>
<td>Language B (Any language including English) HL</td>
<td>4 or better</td>
<td>See advisor in the English or MLL Dept for specific course credits</td>
<td>C2 or C3</td>
<td>12</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>4 or better</td>
<td>MATH 1300 and 1304</td>
<td>B4</td>
<td>8</td>
</tr>
<tr>
<td>Music HL</td>
<td>4 or 5</td>
<td>MUS 1004</td>
<td>C1 or C3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>6 or 7</td>
<td>MUS 1004 and 1008</td>
<td>C1 or C3</td>
<td>8</td>
</tr>
<tr>
<td>Philosophy HL</td>
<td>4 or better</td>
<td>PHIL 2001 and 2002</td>
<td>C2 or C3</td>
<td>8</td>
</tr>
<tr>
<td>Physics</td>
<td>5 or better</td>
<td>PHYS 2701, 2702, 2703</td>
<td>B1 or B5</td>
<td>12</td>
</tr>
<tr>
<td>Psychology</td>
<td>5 or better</td>
<td>PSYC 1000 and Elective credit</td>
<td>D1 or D2 or D3</td>
<td>9</td>
</tr>
<tr>
<td>Social and Cultural Anthropology HL</td>
<td>4 or better</td>
<td>ANTH 1300 OR ANTH 3000 and 4 units of ANTH Elective credit</td>
<td>D1 or D2 or D3</td>
<td>8</td>
</tr>
<tr>
<td>Theater Arts HL</td>
<td>4 or better</td>
<td>THEA 1020, 2 units of lower division Technology and Design. One of: THEA 1010, 1013 or 1016</td>
<td>C1 or C3</td>
<td>9</td>
</tr>
<tr>
<td>Visual Arts HL</td>
<td>4 or better</td>
<td>ART 1020 and ART Elective</td>
<td>F</td>
<td>8</td>
</tr>
</tbody>
</table>

1 U.S. history and U.S. Constitution requirements for graduation, but not to the California state and local government requirement
Errata

Erratum to Admission/Graduate and Post-Baccalaureate chapter of general section:
- July 14, 2011 - Tuition fees, effective Fall 2011, have been updated.
- July 25, 2011 - Academic Excellence fee, effective Winter 2012, has been added. Instructionally Related Activities fee has been split into two, adding a new Athletics fee, effective Fall 2011. Total fees have been recalculated.

Erratum to Advertising chapter of undergraduate section:
- September 20, 2011 - The number of units for ART/COMM 3600 has been corrected to 4 units.

Erratum to Business Administration chapter of graduate section:
- July 12, 2011 - The course title, description and prerequisites for MGMT 6615 have been updated.

Erratum to Communication chapter of undergraduate section:
- September 20, 2011 - The number of units for COMM 3600 has been corrected to 4 units.

Erratum to Construction Management chapter of graduate section:
- July 14, 2011 - Details of the Capstone Experience have been corrected to allow one year for the project.

Erratum to Chemistry chapter of undergraduate section:
- September 20, 2011 - Electives for the B.A. Biochemistry, Option in Chemistry education have been removed.

Erratum to Fees and Expenses chapter of general section:
- July 14, 2011 - Tuition fees, effective Fall 2011, have been updated.
- July 25, 2011 - Academic Excellence fee, effective Winter 2012, has been added. Instructionally Related Activities fee has been split into two, adding a new Athletics fee, effective Fall 2011. Total fees have been recalculated.

Erratum to Kinesiology chapter of undergraduate section:
- September 14, 2011 - The number of units for course KIN 4650 has been corrected.