

Requirement Area	Course	Course Title	Prerequisites	Units
Degree: Biological Sciences, B.S.: Ecology and Evolutionary Biology Concentration 22-23				
First Semester (FALL)				
E	GS 101A	Foundations of Success I		1
A1	COMM 100	Communication		3
B2/LD Major	BIOL 140A	Principles of Cell and Molecular Biology		5
B4/LD Major	MATH 130	Calculus I	One from the following: Satisfactory score of 78 or higher on Mathematics Placement Exam, MATH 120 or MATH 125 (either course with grade C- or better).	4
C1		Arts		3
			Total:	16
Second Semester (SPRING)				
E	GS 101B	Foundations of Success II		1
A2		Written Communication		3
C2		Humanities		3
D1/CODE 1		Social Science/US Code		3
LD Major	BIOL 140B	Principles of Organismal Biology	BIOL 140A with grade C- or better.	5
			Total:	15
Third Semester (FALL)				
E		Lifelong Learning and Self-Development		1
A3	PHIL 100	Workshop in Critical Thinking		3
B1/LD Major	CHEM 111	General Chemistry I		3
B3/LD Major	CHEM 111L	General Chemistry Lab I		2
UD Major	BIOL 310	Genetic Analysis I	BIOL 140B with a grade of C- or better.	4
UD Major	STAT 303	Statistical Methods for Biology	Completion of GE area B4.	3
			Total:	16
Fourth Semester (SPRING)				
Second Composition	ENGL 200 or PHYS 230			3
B3/LD Major	CHEM 112	General Chemistry II	CHEM 111 with grade C- or better.	5
UD Major	BIOL 370	Animal Physiology	STAT 303.	4
UD Major/Elective 1				3
			Total:	15
Fifth Semester (FALL)				
F		Ethnic Studies		3
UD Major	CHEM 230	Survey of Organic Chemistry	CHEM 112 with grade C- or better.	5
LD Major	PHYS 125	Principles of Physics I		4
UD Major	BIOL 350	Ecology	BIOL 140B, MATH 115, STAT 303.	4
			Total:	16
Sixth Semester (SPRING)				
Add'l C1 or C2*		Arts or Humanities		3
UD Major	BIOL 320	Evolutionary Biology	BIOL 310.	3
UD Major	CHEM 340	Survey of Biochemistry	CHEM 230 or CHEM 332, both with grade C- or better.	3
LD Major	PHYS 126	Principles of Physics II	PHYS 125	4
Code 2		US Code		3
			Total:	16
Seventh Semester (FALL)				
D2		Social Science		3
UD-B/Overlay		UD Science	Completion of GE areas A1, A2, A3 and B4.	3
UD Major/Elective 2				3
UD Major/Elective 3				4
			Total:	14
Eighth Semester (SPRING)				
UD-C/Overlay		UD Arts or Humanities	Completion of GE areas A1, A2, A3 and B4.	3
UD-D/Overlay		UD Social Science	Completion of GE areas A1, A2, A3 and B4.	3
UD Major	BIOL 460	Undergrad Sem in Ecology and Evolution	BIOL 320 and BIOL 350.	2
UD Major/Capstone	BIOL 469	Conservation Biology	BIOL 350.	4
			Total:	12
Total Units:				120

Note: No changes to, or from, the credit/no credit pattern are permitted after the Grade Type Change period. There are no exceptions to this rule. Courses in a student's major department, regardless of course prefix, may not be taken "CR/NC," unless that is the only grading pattern in the course.

Area A (9 units): Communication in the English Language & Critical Thinking (Must earn passing grade of C-/CR or better)
CSUEB General Breadth and Graduation Requirement Checklist
<input type="checkbox"/> A1. COMM 100 or 104, MLL 111
<input type="checkbox"/> A2. ENGL 101, 102, or 104
<input type="checkbox"/> A3. PHIL 100
Area B (9 units) : Scientific Inquiry & Quantitative Reasoning
<input type="checkbox"/> B1. Physical Science
<input type="checkbox"/> B2. Life Science
<input type="checkbox"/> B3. Laboratory Activity
<input type="checkbox"/> B4. Quantitative Reasoning (Must earn passing grade of C-/CR or better.)
Area C (9 units): Arts & Humanities - Minimum of three different disciplines as designated by course prefix (e.g., ART, THEA, MUS)
<input type="checkbox"/> C1. Arts
<input type="checkbox"/> C2. Humanities
<input type="checkbox"/> *Additional Lower-division Area C Course in Arts (C1) or Humanities (C2)
Area D (6 units) : Social Sciences - Minimum of three different disciplines as designated by course prefix (e.g., ANTH, ECON, POSC)
<input type="checkbox"/> D1.
<input type="checkbox"/> D2.
Area E (3 units) : Lifelong Learning and Self-Development
<input type="checkbox"/> E.
Area F (3 units): Ethnic Studies
<input type="checkbox"/> F.
Second Composition : Requires completion of GE A2 with a C-/CR or better. Must be completed before attaining junior standing.
<input type="checkbox"/> Second Composition
U.S. Code (American Institutions Requirement) - Two courses (6 units) covering three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. Constitution), and US-3 (California State & Local Government).
<input type="checkbox"/> Code 1.
<input type="checkbox"/> Code 2.
Upper Division GE Requirements (9 units): Should be taken after completion of A1, A2, A3, and B4 with a C- (CR)
<input type="checkbox"/> UD-B. Upper-division Science Inquiry and Quantitative Reasoning
<input type="checkbox"/> UD-C. Upper-division Arts OR Humanities
<input type="checkbox"/> UD-D. Upper-division Social Sciences
Overlay Requirements (9 units): Courses may be upper or lower division, and GE or major
<input type="checkbox"/> Diversity (Div)
<input type="checkbox"/> Social Justice (SJ)
<input type="checkbox"/> Sustainability (S)
Elective Courses
Choose a minimum of 11 units of electives from the following list of courses. Note: BIOL 398 Co-operative Education and/or BIOL 490 Independent Study may be used for a maximum of 3 units elective credit. Enrollment in these courses requires approval by a faculty member and the Department Chair.
BIOL 315 - Marine Biology Units: 4
BIOL 352 - Biogeography Units: 4
BIOL 368 - Fungi of California Units: 3
BIOL 398 - Internship Units: 1-4
BIOL 410 - Genetic Analysis II Units: 3
BIOL 415 - PCR, Sequencing and Fragment Analysis Units: 3
BIOL 424 - Bioinformatics Units: 3
BIOL 444 - Medical Entomology Units: 3
BIOL 454 - Biology of Fungi Units: 4
BIOL 455 - Vertebrate Biology Units: 4
BIOL 458 - Animal Behavior Units: 4
BIOL 466 - Population Biology Units: 4
BIOL 468 - Molecular Ecology Units: 4
BIOL 475 - Global Change Biology Units: 4
BIOL 490 - Independent Study Units: 1-4

*Students are required to take a minimum of 40 semester units as upper division (includes 9 units upper division GE)