

**BIOLOGY ADT TO CSU EAST BAY BIOLOGY B.S. - PHYSIOLOGY CONCENTRAION**

ADT BIOLOGY– 60 Sem. Units	Sem. Units	Community College Courses
<b>CSUGE or IGETC</b>	<b>39</b>	<i>CSU general education certification requires completion of all requirements in Areas A through E, approximately 39 units</i>
<b>AREA D REQUIREMENT:</b> <a href="#">US History, Constitution &amp; American Ideals Code Requirement</a>	3-9	<b>US-1:</b> <b>US-2:</b> <b>US-3:</b>
<a href="#">Diversity/Social Justice/Sustainability</a> <i>Can be fulfilled in area C or D</i>	3-9	<b>DIV:</b> <b>SJ:</b> <b>SUS:</b>
<b>Second Composition (Comp II) Can be fulfilled with A3</b> Any Composition course with ENGL 100 as a prerequisite	3	
<i>The following areas are for the CID TMC/Courses and matching Community College Courses</i>		
<b>Major Core (C-ID)</b>	8	<b>Community College Courses</b>
BIOL 190 - Cell and Molecular Biology (4)	4	
BIOL 140 - Organismal Biology (4)	4	
<b>LIST A</b>	<b>22</b>	
CHEM 120S - General Chemistry for Science Majors (10)	10	
MATH 210 - Single Variable Calculus I – Early Transcendentals (4)	4	
PHYS 105 - Physics: Algebra/Trigonometry-Based Physics A (4)	4	
PHYS 110 - Physics: Algebra/Trigonometry-Based Physics B (4)	4	
<b>LIST B: Choose 1 course</b>	<b>0-4</b>	
Any course articulated as lower division preparation in the Biology major at a CSU.		
<b>Total Units ADT *ADT MAJOR NAME*</b>	<b>60</b>	

**PLEASE NOTE: This page assumes Semester Units.**

**BIOLOGY ADT TO CSU EAST BAY BIOLOGY B.S. - PHYSIOLOGY CONCENTRAION**

CSUEB: BIOLOGICAL SCIENCES B.S. <i>Complete Degree in 60 Semester Units</i>	Semester UNITS	NOTES
<b>GRADUATION REQUIREMENTS</b> <i>These should be fulfilled at the Community College, however if not taken at the Community College, they must be completed at CSU East Bay</i>		
<b>US History, Constitution &amp; American Ideals</b>	<b>0-9</b>	
1) First Category US-1	0-3	
2) Second Category US-2	0-3	
3) Third Category US-3	0-3	
<b>These courses must be taken at CSU East Bay</b>		
<b>Upper Division GE</b> <i>See catalog</i>	<b>9</b>	<b>CSUEB COURSES</b>
Please note: A minimum of three courses in the Upper Division General Education pattern must have a topic/learning outcome oriented toward one of the following topic areas (overlays): <b>Diversity, Social Justice, or Sustainability.</b>		
Area B6 Upper Division Science course	3	<b>Course:</b> <b>OVERLAY:</b>
Area C4 Upper Division Humanities course	3	<b>Course:</b> <b>OVERLAY:</b>
Area D4 Upper Division Social Sciences course	3	<b>Course:</b> <b>OVERLAY:</b>
<b>Upper Division Core</b>	<b>7</b>	
BIOL 310 - Genetic Analysis I Units: 4		
BIOL 320 - Evolutionary Biology Units: 3		
<b>Concentrations: 36 units</b>		
<b>Physiology Concentration</b>		
<b>Upper Division Coursework</b>	<b>18</b>	
BIOL 370 - Animal Physiology Units: 4		
BIOL 488 - Environmental Physiology Units: 3		
CHEM 230 - Survey of Organic Chemistry Units: 5		
CHEM 340 - Survey of Biochemistry Units: 3		
STAT 303 - Statistical Methods in Biology Units: 3		
<b>Electives</b>	<b>18</b>	Choose 18 units of electives from the following courses. <b>Note: BIOL 398 Co-operative Education and/or BIOL 490 Independent Study may be used for a maximum total of 3 units elective credit. Enrollment in these courses requires approval by a faculty member and the Department Chair.</b>
BIOL 330 - General Microbiology Units: 5		
BIOL 350 - Ecology Units: 4		
BIOL 398 - Internship <i>Units: 1-4</i>		
BIOL 430 - Microbial Physiology and Metabolism Units: 3		
BIOL 440 - Molecular Virology Units: 3		
BIOL 441 - Parasitology Units: 3		
BIOL 443 - Hematology Units: 4		
BIOL 445 - Immunology Units: 3		
BIOL 470 - Animal Senses Units: 4		
BIOL 471 - Neurobiology Units: 3		
BIOL 472 - Neurobiology Laboratory Units: 4		
BIOL 473 - Comparative Physiology Units: 3		
BIOL 474 - Biomedical Physiology Units: 3		

**BIOLOGY ADT TO CSU EAST BAY BIOLOGY B.S. - PHYSIOLOGY CONCENTRAION**

BIOL 475 - Global Change Biology Units: 4		
BIOL 476 - General Endocrinology Units: 3		
BIOL 490 - Independent Study Units: 1-4		
<b>ADDITIONAL COURSE to reach 60 Units</b>	<b>8</b>	<i>These courses may be additional Major Courses or prerequisites not taken at the Community College</i>
<i>If needed</i>		
<b>Total Semester Units at CSUEB</b>	<b>60</b>	<b>60</b>

**BIOLOGY ADT TO CSU EAST BAY BIOLOGY B.S. - PHYSIOLOGY CONCENTRAION**

<b>FIRST SEMESTER JUNIOR YEAR</b>			
<b>Register to take the University Writing Skills Requirement</b>			
<b>UDGE B6</b>	<b>COURSE:</b>	<b>OVERLAY:</b>	<b>3</b>
<b>UD MAJOR</b>	<b>BIOL 310</b>	<b>GENETIC ANALYSIS I</b>	<b>4</b>
<b>CONCENTRATION</b>	<b>STAT 303</b>	<b>STATISTICAL METHODS IN BIOL</b>	<b>3</b>
<b>CONCENTATION</b>	<b>CHEM 230</b>	<b>SURVEY OF ORGANIC CHEM</b>	<b>5</b>
		<b>TOTAL:</b>	<b>15</b>
<b>SECOND SEMESTER JUNIOR YEAR</b>			
<b>TAKE THE UNIVERSITY WRITING SKILLS TEST</b>			
<b>UDGE D4</b>	<b>COURSE:</b>	<b>OVERLAY:</b>	<b>3</b>
<b>UD MAJOR</b>	<b>BIOL 320</b>	<b>PRINCIPLES OF EVOLUTIONARY BIOL</b>	<b>3</b>
<b>UD MAJOR</b>	<b>BIOL 370</b>	<b>ANIMAL PHYSIOLOGY</b>	<b>4</b>
ELECTIVE	CHOOSE FROM UD BIOL LIST		3
ELECTIVE	CHOOSE FROM UD BIOL LIST		3
		<b>TOTAL:</b>	<b>16</b>
<b>THIRD SEMESTER SENIOR YEAR</b>			
<b>Verify that you have completed the University Writing Skills Requirement. Check your MyCSUEB "Degree Audit Report" (DAR) and email any discrepancies to The ADT ADVISER.</b>			
<b>UDGE C4</b>	<b>COURSE:</b>	<b>OVERLAY:</b>	<b>3</b>
<b>UD MAJOR</b>	<b>BIOL 488</b>	<b>ENVIRONMENTAL PHYSIOLOGY</b>	<b>3</b>
<b>CONCENTRATION</b>	<b>CHEM 340</b>	<b>SURVEY OF BIOCHEMISTRY</b>	<b>3</b>
ELECTIVE	CHOOSE FROM UD BIOL LIST		3
ELECTIVE	CHOOSE FROM UD BIOL LIST		2
		<b>TOTAL:</b>	<b>14</b>
<b>FOURTH SEMESTER SENIOR YEAR</b>			
<b>See the ADT ADVISER and apply for graduation through MyCSUEB by the posted deadline, available at Important Dates</b>			
ELECTIVE	CHOOSE FROM UD BIOL LIST		<b>3</b>
ELECTIVE	CHOOSE FROM UD BIOL LIST		3
ELECTIVE			3
ELECTIVE			3
ELECTIVE			3
		<b>TOTAL:</b>	<b>15</b>
<b>GRAND TOTAL:</b>			<b>60</b>