

Degree: Biological Sciences, B.S.: Physiology Concentration 24-25				
Requirement Area	Course	Course Title	Prerequisites	Units
<b>First Semester (FALL)</b>				
E	BIOL 130	Connecting to Biology		2
A1	COMM 100	Communication		3
B4/LD Major Prereq	Math 120	Precal		3
C1				3
D1/CODE 1				3
			<b>Total:</b>	<b>14</b>
<b>Second Semester (SPRING)</b>				
A2	ENGL 102			3
A3	PHIL 100	Workshop in Critical Thinking		3
B2/LD Major	BIOL 140A	Principles of Cell and Molecular Biology		5
UD Major	STAT 303	Statistical Methods in Biology	Completion of GE area B4.	3
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
			<b>Total:</b>	<b>18</b>
<b>Third Semester (SPRING)</b>				
E				1
C2				3
LD Major	BIOL 140B	Principles of Organismal Biology	BIOL 140A with grade C- or better.	5
B1/LD Major	CHEM 111	General Chemistry I		3
B3/LD Major	CHEM 111L	General Chemistry Lab I		2
			<b>Total:</b>	<b>14</b>
<b>Fourth Semester (FALL)</b>				
Writing II/WID (2nd Comp)	ENGL 200 or PHYS 230	Accelerated College Writing		3
B3/LD Major	CHEM 112	General Chemistry II	CHEM 111 with grade C- or better.	5
UD Major	BIOL 310	Genetic Analysis I	BIOL 140B with a grade of C- or better.	4
UD Major	BIOL 350	Ecology		4
			<b>Total:</b>	<b>16</b>
<b>Fifth Semester (SPRING)</b>				
UWR/UD-C/Overlay				3
LD Major	PHYS 125	Principles of Physics I	Satisfactory score of 78 or higher on Math Proficiency Assessment or MATH 120.	4
UD Major	CHEM 230	Survey of Organic Chemistry	CHEM 112 with grade C- or better.	5
UD Major	BIOL 320	Evolutionary Biology	BIOL 310.	3
			<b>Total:</b>	<b>15</b>
<b>Sixth Semester (SPRING)</b>				
Add'l C1 or C2*				3
UD-B/Overlay				3
LD Major	PHYS 126	Elementary Physics II	PHYS 125.	4
UD Major	BIOL 370	Animal Physiology	BIOL 140B with grade C- or better and CHEM 112.	4
			<b>Total:</b>	<b>14</b>
<b>Seventh Semester (FALL)</b>				
UD Major	CHEM 340	Survey of Biochemistry		3
UD Major/Capstone	BIOL 488	Environmental Physiology	BIOL 370.	3
D2/Code 2				3
UD Major/Elective 1				3
UD Major/Elective 2				3
			<b>Total:</b>	<b>15</b>
<b>Eighth Semester (FALL)</b>				
Free Elective				2
UD-D/Overlay				3
UD Major/Elective 3				3
UD Major/Elective 4				3
UD Major/Elective 5				3
			<b>Total:</b>	<b>14</b>
<b>Total Units:</b>				<b>120</b>

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.

Updated: 5/31/2024

CSUEB General Breadth and Graduation Requirement Checklist	
<b>Area A (9 units): Communication in the English Language &amp; Critical Thinking (Must earn passing grade of C-/CR or better)</b>	
<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
<b>Area B (9 units): Scientific Inquiry &amp; Quantitative Reasoning</b>	
<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.)
<b>Area C (9 units): Arts &amp; Humanities - Minimum of two different disciplines as designated by course prefix (e.g., ART, THEA, MUS)</b>	
<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)
<b>Area D (6 units): Social Sciences - Minimum of two different disciplines as designated by course prefix (e.g., ANTH, ECON, POSC)</b>	
<input type="checkbox"/>	D1.
<input type="checkbox"/>	D2.
<b>Area E (3 units): Lifelong Learning and Self-Development</b>	
<input type="checkbox"/>	E.
<b>Area F (3 units): Ethnic Studies</b>	
<input type="checkbox"/>	F.
<b>Second Composition: Requires completion of GE A2 with a C-/CR or better. Must be completed before attaining junior standing.</b>	
<input type="checkbox"/>	Second Composition
<b>University Writing Requirement</b>	
<input type="checkbox"/>	UWR
<b>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 &amp; Local Government).</b>	
<input type="checkbox"/>	Code 1.
<input type="checkbox"/>	Code 2.
<b>Upper Division GE Requirements (9 units): Should be taken after completion of A1, A2, A3, and B4 with a C- (CR)</b>	
<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
<b>Overlay Requirements (9 units): Courses may be upper or lower division, and GE or major</b>	
<input type="checkbox"/>	Diversity (Div)
<input type="checkbox"/>	Social Justice (SJ)
<input type="checkbox"/>	Sustainability (S)
<b>Elective Courses</b>	
Choose 14 units of electives from the following courses. Note: BIOL 490 Independent Study and/or BIOL 498 Internship 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.	
BIOL 330 - General Microbiology Units: 5	
BIOL 425 - Techniques in Mammalian Cell Culture Units: 3	
BIOL 430 - Microbial Physiology and Metabolism Units: 3	
BIOL 431 - Medical Microbiology Units: 5	
BIOL 432 - Microbe-Host Interactions 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	
BIOL 475 - Global Change Biology Units: 4	
BIOL 476 - General Endocrinology Units: 3	
BIOL 490 - Independent Study Units: 1-4	
BIOL 498 - Internship Units: 1-4	

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