

Degree: Biological Sciences, B.S.: Cell and Molecular Biology Concentration				
Requirement Area	Course	Course Title	Prerequisites	Units
<b>First Semester</b>				
E	GS 101A	Foundations of Success I		1
A1	COMM 100	Communication		3
A2	ENGL 102	College Writing (English Composition)		3
B2/B3/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
<b>Total:</b>				16
<b>Second Semester</b>				
E	GS 101B	Foundations of Success II		1
A3	PHIL 100	Workshop in Critical Thinking		3
C1				3
LD Major	BIOL 140B	Principles of Organismal Biology	BIOL 140A with grade C- or better.	5
Writing II/WID (2nd Comp)	ENGL 200			3
<b>Total:</b>				15
<b>Third Semester</b>				
B1/LD Major	CHEM 111	General Chemistry I		5
UD Major	BIOL 310	Genetic Analysis I	BIOL 140A.	4
LD Major	PHYS 125	Principles of Physics I		4
C2				3
<b>Total:</b>				16
<b>Fourth Semester</b>				
LD	CHEM 112	General Chemistry II	CHEM 111 with grade C- or better.	5
LD Major	PHYS 126	Principles of Physics II	PHYS 125.	4
UD Major	BIOL 410	Genetic Analysis II	BIOL 310.	3
D1/CODE 1				3
<b>Total:</b>				14
<b>Fifth Semester</b>				
E				1
D2				3
UD Major	CHEM 331	Organic Chemistry I	CHEM 112 with grade C- or better.	5
UD Major	BIOL 424	Bioinformatics	BIOL 310.	3
UD Major	BIOL 320	Principles of Evolutionary Biology	BIOL 310.	3
<b>Total:</b>				15
<b>Sixth Semester</b>				
D3				3
UD Major	CHEM 332	Organic Chemistry II	CHEM 331 with grade C- or better.	5
UD Major	BIOL 428	Genomics	BIOL 424.	3
UD Major/Elective 1				4
<b>Total:</b>				15
<b>Seventh Semester</b>				
Add'l C1 or C2*				3
B6/Overlay				3
UD Major	CHEM 441	General Biochemistry I	CHEM 332 with grade C- or better.	4
UD Major/Elective 2				4
<b>Total:</b>				14
<b>Eighth Semester</b>				
Code 2				3
C4/Overlay				3
D4/Overlay				3
UD Major/Capstone	BIOL 426	Advanced Cell and Molecular Biology	BIOL 310.	3
UD Major	BIOL 427	Molecular and Cell Biology Lab	BIOL 310.	3
<b>Total:</b>				15
<b>Total Units:</b>				120

General Education & University Requirements - Suggested Courses
Area A (9 units): Communication in the English Language & Critical Thinking (Must earn passing grade of C-/CR or better)
<input type="checkbox"/> A1. COMM 100 or 104
<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 (9 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.
<input type="checkbox"/> D3.
Area E (3 units) : Lifelong Learning and Self-Development
<input type="checkbox"/> E.
Second Composition : Requires completion of GE A2 with a C-/CR or better.
<input type="checkbox"/> Writing II.
University Writing Skills Requirement
<input type="checkbox"/> UWSR Writing Skills Test (WST) or First and/or Second Tier Courses.
U.S. Code (American Institutions Requirement) - Two courses (6 units)
<input type="checkbox"/> Code 1.
<input type="checkbox"/> Code 2.
Upper Division GE Requirements (9 units): Should be taken after completion
<input type="checkbox"/> B6. Upper-division Science Inquiry and Quantitative Reasoning
<input type="checkbox"/> C4. Upper-division Arts OR Humanities
<input type="checkbox"/> D4. Upper-division Social Sciences
Overlay Requirements (9 units): Courses may be upper or lower division, and
<input type="checkbox"/> Diversity (Div)
<input type="checkbox"/> Social Justice (SJ)
<input type="checkbox"/> Sustainability (S)