

**Major: Biology, B.S.: 120 units**  
2018-2019 Academic Year

	Fall		Units	Spring		Units	Comments
	Courses	Requirements/Comments		Courses	Requirements/Comments		
<b>Year 1</b>	BIO 1210 Foundations of Biology: Energy, Matter, and Information (B2)		3	BIO 1220 Foundations of Biology: Evolution, Ecology, and Biodiversity	Prereq: BIO 121, BIO 121L, and BIO 1210B, or BIO 1210 and BIO 1210L. Coreq: BIO 1220L.	3	
	BIO 1210L Foundations of Biology: Energy, Matter, and Information Laboratory (B3)		1	BIO 1220L Foundations of Biology: Evolution, Ecology, and Biodiversity Laboratory	Prereq: BIO 121, BIO 121L, and BIO 1210B, or BIO 1210 and BIO 1210L. Coreq: BIO 1220.	1	
	CHM 1210 General Chemistry I (B1)	Prereq: C or better in MAT 12, 105, 106, 112, 114, 115, 116, 120, 125, 130, 191, 214, 216, 224, MAT 1050, MAT 1052, MAT 1060, MAT 1140, MAT 1150, MAT 1200, MAT 1250, MAT 1300, MAT 1310, MAT 1910, MAT 2140, MAT 2240, MAT 2250, STA 120, or STA 1200; or C- or better Coreq: CHM 1210L.	3	CHM 1220 General Chemistry II (B1)	Prereq: C- or better in CHM 1210, CHM 122 or CHM 122B; and C- or better in CHM 1210L, CHM 122L or CHM122LB. Coreq: CHM 1220L.	3	
	CHM 1210L General Chemistry Laboratory I (B3)	Prereq: C or better in MAT 12, 105, 106, 112, 114, 115, 116, 120, 125, 130, 191, 214, 216, 224, MAT 1050, MAT 1052, MAT 1060, MAT 1140, MAT 1150, MAT 1200, MAT 1250, MAT 1300, MAT 1310, MAT 1910, MAT 2140, MAT 2240, MAT 2250, STA 120, or STA 1200; or C- or better Coreq: CHM 1210.	1	CHM 1220L General Chemistry Laboratory II (B3)	Prereq: C- or better in CHM 1210, CHM 122 or CHM 122B; and C- or better in CHM 1210L, CHM 122L or CHM122LB. Coreq: CHM 1220.	1	
	GE Area A2: Written Communication		3	MAT 1200 Calculus for Life Sciences (B4)	Prereq: MAT 105; MAT 1050; MAT 1052; MDTP Alg >=18 and MDTP Trig >=6; MDTP Alg >=22; or ALEKS Comp >=61.	3	
	GE Area E: Lifelong Learning and Self-Development		3	GE Area A3: Critical Thinking		3	
			0			0	
			0			0	
	<b>Total Units</b>	<b>14</b>		<b>Total Units</b>	<b>14</b>		

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<b>Year 2</b>	BIO 2400 Genetics	Prereq: BIO 123/BIO 123L, BIO 1220/BIO 1220L, BIO 122/BIO 122L/BIO 1220C, BIO 115/BIO 115L/BIO 115A, BIO 1150/BIO 1150L, BIO 110/BIO 111 or BIO 1110/BIO 1110L.	3	BIO 3220 Cell and Molecular Biology	Prereq: BIO 303 or BIO 2400.	3	
	Major Core	CHM 2010/L or CHM 3140/L	4	BIO 3250 Principles of Ecology	Prereq: BIO 123/BIO 123L, BIO 1220/BIO 1220L or BIO 122/BIO 122L/BIO 1220C.	3	
	STA 1300 Biostatistics (B4)	Prereq: MAT 12, ESM 12, MAT 1060, MAT 106, MAT 1250, MAT 125, MAT 1910, MAT 191, MAT 1050, MAT 105, STA 1200, STA 120, or MAT 1051.	3	BIO 2110L Biostatistics Laboratory	STA 120 or STA 1300; and BIO 123/BIO 123L; BIO 1220/BIO 1220L; BIO 122/BIO 122L/BIO 1220c; BIO 115/BIO 115L/BIO 115A; or BIO 1150,BIO 1150L.	1	
	GE Area A1: Oral Communication		3	Emphasis Elective	Select from Curriculum Sheet	3	
	GE Area C1: Visual and Performing Arts		3	GE Area C2a: Philosophy and Civilization		3	
			0	GE Area C2b: Literature and Language Other than English		3	
			0			0	
			0			0	
		<b>Semester Total Units</b>	<b>16</b>		<b>Semester Total Units</b>	<b>16</b>	

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	Courses	Requirements/Comments		Courses	Requirements/Comments		
<b>Year 3</b>	BIO 3240 Principles of Evolution	Prereq: BIO 123/BIO 123L and BIO 303; or BIO 1220/BIO 1220L and BIO 2400; or BIO 122/BIO 122L and BIO 1220C.	3	Emphasis Elective	Select from Curriculum Sheet	4	<i>Graduation Writing Test must be taken before completion of 75 units.</i>
	PHY 1210 Physics of Motion, Fluids, and Heat (B1)	Prereq: C- or better in MAT 106, MAT 1060, MAT 114, MAT 1140/MAT 1140A, or MAT 112. Coreq: PHY 1210L.	3	PHY 1220 Physics of Electromagnetism, Circuits, and Light	Prereq: C- or better in PHY 122, PHY 122B, PHY 1210, or PHY 1210B. Coreq: PHY 1220L.	3	
	PHY 1210L Physics of Motion, Fluids, and Heat Laboratory (B3)		1	PHY 1220L Electromagnetism, Circuits, and Light Laboratory		1	
	Major Core	Prereq: CHM 3210 or CHM 3270	3	GE Area C3: Arts and Humanities Synthesis		3	
	GE Area B5: Science and Technology Synthesis	Select from Curriculum Sheet	3	GE Area D2: U.S. Constitution and California Government		3	
	GE Area D1: U.S. History American Ideals		3			0	
			0			0	
			0			0	
	<i>Take the Graduation Writing Test</i>						
	<b>Semester Total Units</b>			<b>16</b>	<b>Semester Total Units</b>		

Year 4	Fall		Units	Spring		Units	Comments
	Courses	Requirements/Comments		Courses	Requirements/Comments		
	Major Elective	Approved electives include any 2000, 3000, or 4000-level courses in the Biological Sciences Department not specifically designed for non-majors.	4	Emphasis Elective	Select from Curriculum Sheet	3	
Emphasis Elective	Select from Curriculum Sheet	4	Emphasis Elective	Select from Curriculum Sheet	3		
Emphasis Elective	Select from Curriculum Sheet	4	Emphasis Elective	Select from Curriculum Sheet	3		
GE Area D3: Social Sciences: Principles, Methodologies, Value Systems, and Ethics		3	Emphasis Elective	Select from Curriculum Sheet	3		
		0	GE Area D4: Social Science Synthesis		3		
		0			0		
		0			0		
		0			0		
<i>File an application to graduate</i>							
<b>Semester Total Units</b>		<b>15</b>	<b>Semester Total Units</b>		<b>15</b>		
<b>Total Units</b>					<b>120</b>		