

**Biological Science Major (B.S.) (76 credits total, 43 BIOL credits)**A minor is required with this major. *Requisites, previous, required in (). Please check the catalog.*

Semester	Biology courses	Other required courses
<b>YEAR #1 – FRESHMAN YEAR</b>		
1 <sup>st</sup> semester	BIOL 181 (MATH 082 or successful placement out of) BIOL 181L (MATH 082 or successful placement out of)	CHEM 111 CHEM 111L MATH 132B
2 <sup>nd</sup> semester	BIOL 182 (CHEM 111 requisite, previous or concurrent) BIOL 182L (CHEM 111 requisite, previous or concurrent)	CHEM 112 CHEM 112L MATH 140 or 161
<b>YEAR #2 – SOPHOMORE YEAR</b>		
3 <sup>rd</sup> semester	BIOL 260 (BIOL 182, 182L, MATH 132B or 140 or 161) <b>At least one of:</b> BIOL 211, 212, or 213 (BIOL 182)	CHEM 230 CHEM 231 PHYS 111 or 211 PHYS 111L or 211L
4 <sup>th</sup> semester	BIOL 291 (BIOL 181, Math 132B or 140 or 161) <b>At least one of:</b> BIOL 211, 212, or 213, (BIOL 182) BIOL 370 (BIOL 182L; 211 or 212 or 213)	PHYS 112 or 212 PHYS 112L or 212L
<b>YEAR #3 – JUNIOR YEAR</b>		
5 <sup>th</sup> semester	BIOL 380 (BIOL 182L, 211; MATH 132B or 140 or 161)	
6 <sup>th</sup> semester	BIOL 360 (BIOL 182L, 260; CHEM 230) <b>Continue or begin required electives listed below</b>	
<b>YEAR #4 – SENIOR YEAR</b>		
7 <sup>th</sup> semester	BIOL 491 (BIOL 211, 212, 291; and 260 or 360 or 370 or 380) <b>Continue required electives listed below</b>	
8 <sup>th</sup> semester	<b>Complete required electives listed below</b>	
<b>REQUIRED ELECTIVES: A minimum of 11 credits. Many electives are taught biennially and have different requisites, so please check the catalog and plan accordingly. See the catalog descriptions for BIOL 390, 393, 498, 499.</b>		
BIOL 331 Microbiology, 4 cr BIOL 352 Evolution, 3 cr BIOL 420 Applied Biology, 2-4 cr BIOL 423 Electron Microscopy, 4 cr BIOL 437 Immunology & Hematology, 4 cr BIOL 442 Molecular Biology, 4 cr BIOL 443 Bioinformatics, 3 cr BIOL 450 Advanced Studies in Genetics, 2-4 cr BIOL 451 Human Genetics, 3 cr BIOL 453 Biology of Cancer, 3 cr BIOL 455 Evolutionary Genetics, 3 cr BIOL 455L Evolutionary Genetics Lab, 1 cr BIOL 456 Icons & Ideas of Biology, 3 cr BIOL 460 Advanced Studies in Physiology, 2-5 cr BIOL 461 Endocrinology, 3 cr BIOL 461L Endocrinology Lab, 2 cr BIOL 462 Comparative Physiology, 3 cr		BIOL 463 Neurobiology, 3 cr BIOL 464 Plant Physiology, 4 cr BIOL 465 Cardiovascular Physiology & Disease, 3 cr BIOL 470 Advanced Studies in Systematics, 2-4 cr BIOL 471F Invert Zoology, 4 cr BIOL 472 Parasitology, 3 cr BIOL 473F Ichthyology, 4 cr BIOL 475 Vert Zoology, 3 cr BIOL 476 Mammalogy, 3 cr BIOL 477F Ornithology, 3 cr BIOL 478F Entomology, 4 cr BIOL 480 Advanced Studies in Ecology, 2-4 cr BIOL 482F Freshwater Science, 3 cr BIOL 483 Biogeography, 3 cr BIOL 484 Ethology, 3 cr BIOL 484L Ethology Lab, 1 cr BIOL 490 Selected Topics in Molecular Biology, 1-4 cr
<b>Additional Elective option: Only 1 credit from Biol 494 or 495 may be applied to Required Elective credits but you may take both courses if desired.</b>		
BIOL 494 Research Credit, 1 cr		
BIOL 495 Lab Assistant, 1 cr		

*BIOL 390, 393, 491, 498, 499 do NOT satisfy the Required Electives category.*