## Major in Biological Sciences - Bachelor of Science Emphasis in Pre-professional Studies

University Requirements:		
See University General Requirements for Baccalaureate degrees (p. 41)		ō
First Year Making Connections Course:	Sem. Hrs.	
BIO 1013, Making Connections - Biology	3	0
General Education Requirements:	Sem. Hrs.	
See General Education Curriculum for Baccalaureate degrees (p. 84)	35	
Students with this major must take the following:  MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite  CHEM 1013 AND 1011, General Chemistry I and Laboratory  BIO 2013 AND 2011, Biology of the Cell and Laboratory  COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)		
Language Requirement:	Sem. Hrs.	
A student must complete the foreign language requirements before being considered a Biological Sciences Major. (Refer to Department of Biological Sciences Foreign Language Requirement).		
Major Requirements:	Sem. Hrs.	
BIO 1303 AND 1301, Biology of Animals and Laboratory	4	0
BIO 1503 AND 1501, Biology of Plants and Laboratory	4	0
BIO 3013 AND 3011, Genetics and Laboratory	4	0
BIO 3023, Principles of Ecology	3	ō
BIO 4021, Biological Seminar	1	ō
CHEM 1023 AND 1021, General Chemistry II and Laboratory	4	ō
CHEM 3103 AND 3101, Organic Chemistry I and Laboratory	4	0
CHEM 3113 AND 3111, Organic Chemistry II and Laboratory	4	0

MATH 2194, Survey of Calculus <b>OR</b> MATH 2204, Calculus I	4	0
PHYS 2054, General Physics I	4	
PHYS 2064, General Physics II	4	0
Sub-total	40	0
Emphasis Area (Pre-professional Studies):	Sem. Hrs.	
BIO 3302 AND 3312, Comparative Anatomy and Laboratory AND	8	
BIO 3323 <b>AND</b> 3321, Animal Physiology and Laboratory <b>OR</b>		_
BIO 3223 <b>AND</b> 3221, Human Structure and Function I and Laboratory <b>AND</b>		
BIO 3233 <b>AND</b> 3231, Human Structure and Function II and Laboratory		
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BIO 4104, Microbiology	4	
BIO 4133 AND 4131, Cell Biology and Laboratory OR	3-4	
CHEM 4243, Biochemistry		_
Select three of the following:	9-12	
BIO 3203, Pathophysiology		
BIO 4103, Virology		
BIO 4113 <b>AND</b> 4111, Immunology and Laboratory		
BIO 4123, Cell Signaling		
BIO 4133 <b>AND</b> 4131, Cell Biology and Laboratory		
BIO 4143, Pharmacology		
BIO 4163 <b>AND</b> 4161, Mammalian Neurobiology and Laboratory		
BIO 4213 <b>AND</b> 4211, Human Genetics and Laboratory		
BIO 4332 <b>AND</b> 4342, Animal Histology and Laboratory		
BIO 4343 <b>AND</b> 4341, Animal Embryology and Laboratory		
BIO 4552 <b>AND</b> 4551, Medical Mycology and Laboratory		
BIO 4623 AND 4621, Environmental Microbiology and Laboratory		
CHEM 3154, Survey of Physical Chemistry		
CHEM 4243, Biochemistry		
PHIL 3713, Ethics in the Health Professions		
STAT 3233, Applied Statistics I		
Sub-total	24-28	0
Electives:	Sem. Hrs.	
Electives	14-18	П
Electives	14-18	
Total Required Hours:	120	
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