

# GEOSCIENCES (BIOGEOSCIENCE & PALEONTOLOGY), B.S.

## Requirements for a Concentration in Biogeoscience & Paleontology

Code	Title	Hours
<b>Concentration Requirements</b>		
Thirteen semester hours including the following:		
GEO 3435	Invertebrate Paleontology	4
Select nine hours from the following: 9		
GEO 4322	Global Biogeochemical Cycles	
GEO 4324	Geomicrobiology	
GEO 4337	Paleoecology	
GEO 4388	Earth System Science	
GEO 4430	Vertebrate Paleontology	
GEO 4431	Evolutionary History of Plants	
No more than six hours from the following:		
GEO 4373	Global Soil Systems	
GEO 4381	Paleoclimatology	
GEO 4383	Climate Change and Society I	
GEO 4384	Monsoon Climatology and Paleoclimatology	
GEO 4386	Remote Sensing	
ANT 3331	Human Osteology	
ANT 4314	Human Biological Variation	
ANT 4335	The Human Fossil Record	
ANT 4380	Bioarchaeology	
ANT 4416	Human Evolutionary Anatomy	
BIO 3303	Ecology	
BIO 3320	Climate Change Biology	
BIO 3342	Molecular Cell Biology	
BIO 3350	Genomics and Bioinformatics	
BIO 3366	Foundations of Evolutionary Biology <sup>1</sup>	
BIO 4302 & BIO 4102	General Microbiology and General Microbiology Lab	
BIO 4310	Biogeography	
BIO 4317 & BIO 4117	Plant Physiology and Plant Physiology Lab	
BIO 4405	Limnology	
BIO 4406	Aquatic Biology	
CHE 4341	General Biochemistry	
GEO 4300	Senior Thesis	
or GEO 4302	Mentored Research Experience	
or GEO 4303	Internship	
<b>Subtotal</b>		<b>13</b>
<b>Required Courses in Other Fields</b>		
MTH 1321	Calculus I	3
MTH 1322	Calculus II	3
or STA 2381	Introductory Statistical Methods	
Sixteen semester hours from the following:		16

BIO 1303	Human Ecology: Our Place in Nature
BIO 1305 & BIO 1105	Modern Concepts of Bioscience and Modern Concepts of Bioscience Laboratory
BIO 1306 & BIO 1106	Modern Concepts of Bioscience, continued and Modern Concepts of Bioscience Laboratory
CHE 1301 & CHE 1101	Basic Principles of Modern Chemistry I and General Chemistry Laboratory I
CHE 1302 & CHE 1102	Basic Principles of Modern Chemistry II and General Chemistry Laboratory II
PHY 1408	General Physics for Natural and Behavioral Sciences I
PHY 1409	General Physics for Natural and Behavioral Sciences II
PHY 1420	General Physics I
PHY 1430	General Physics II
No more than four hours from:	
ANT 1404	Introduction to Human Evolution
ANT 1407	Introduction to Archaeology
AVS 1313	Introduction to Meteorology
BUS 2222	Introduction to Energy Commerce
CSI 1430	Introduction to Computer Science I with Laboratory
ENV 1301 & ENV 1101	Exploring Environmental Issues and An Introduction to Environmental Analysis (Lab)

**Total Hours** **35**

<sup>1</sup> BIO 3366 is a recommended course.