



College of Arts & Science

Geological Sciences

The curriculum outlined below is a semester-by-semester plan of study for the BS in Geology (BS3321), Environmental Geology (BS3323) and BA3321 in adherence to section 3333.71 of the Revised Code for the three-year baccalaureate degrees.

The estimated number of hours transferred or taken as AP is set at 15. Please note these are just examples. The actual slate of courses would be dependent upon what courses a student actually has previous credit for. Students with additional AP credits would be allowed to count them (as appropriate) to the 3-year degree pathway. Successful language placement tests and appropriate courses taken during the summer would also help reduce the number of credit hours per semester needed to graduate.

Students interested in graduate school are encouraged to take a full year of calculus.

The scheduling scenario below is intended to present an example pattern by which this major can be completed in three years. Those interested in pursuing this option need to work with an academic advisor to develop a specific plan to earn the 123 credit hours required for graduation.

BS3321 Geology

Post-Secondary Coursework or Transfer/AP/IB Credit

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Tier I Freshman Composition	3		
Tier 1I Cross Cultural Perspectives	3		
Tier II Humanities & Literature	3		
Tier I Quantitative Skills	3		
Tier II Social Science	3		
Total hours (minimum 15)	15		

Semester 1: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 1010 Introduction to Geology	4		
CHEM 1210 or CHEM 1510 General Chemistry	4		C
MATH 2310 Calculus	4		
Tier II Natural Sciences	3		
Foreign Language	4		
Total hours for semester	19		

Semester 2: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 2550 Historical Geology	3		
GEOL 3300 Geomorphology	3	Yes	
Foreign Language	4		
CHEM 1220 or CHEM 1520 General Chemistry II	4		
Arts & Sciences Social Science	3		
Total hours for semester	17		

Semester 3: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 3150 Mineralogy	4	Yes	
GEOL 3400 Planetology	3	Yes	
PHYS 2001 or 2051 or BIOS 1700	4		
Arts & Sciences Humanities	3		
Arts & Sciences Social Sciences	3		
Total hours for semester	17		

Semester 4: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 3201 Petrology	4	Yes	
GEOL 3050 Statistics	4	Yes	
PHYS 2002 or 2052 or BIOS 1710	4		
ENG 3090 J or other Tier I Junior Composition	3		
Arts & Sciences Humanities 2XXX	3		
Total hours for semester	18		

Semester 5: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 3500 Stratigraphy & Sedimentology	3	Yes	
GEOL 3600 Structural Geology	4	Yes	
GEOL 4XXX Elective	3	Yes	
Arts & Sciences Social Sciences 2XXX	3		
Arts & Sciences 2XXX	3		
Total hours for semester	16		

Semester 6: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 4910 Field Geology (Tier III Equivalent)	6	Yes	
Total hours for semester	6		

¹Major Electives- A minimum of 2 courses from GEOL 4XXX

BS3323 Environmental Geology

Post-Secondary Coursework or Transfer/AP/IB Credit

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Tier II Fine Arts	3		
Tier II Cross Cultural Perspectives	3		
Tier II Humanities & Literature	3		
Tier I Quantitative Skills	3		
Tier II Social Science	3		
Total hours (minimum 15)	15		

Semester 1: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 1010 Introduction to Geology	4		
CHEM 1210 or CHEM 1510 General Chemistry	4		C
MATH 2310 Calculus	4		
Tier II Natural Sciences	3		
Foreign Language	4		
Total hours for semester	19		

Semester 2: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 2550 Historical Geology	3		
GEOL 3300 Geomorphology	3	Yes	
Foreign Language	4		
CHEM 1220 or CHEM 1520 General Chemistry II	4		
Arts & Sciences Social Science	3		
Total hours for semester	17		

Semester 3: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 3150 Mineralogy	4	Yes	
GEOL 4270 Water Geochemistry	3	Yes	
PHYS 2001 or 2051 or BIOS 1700	4		
Arts & Sciences Humanities	3		
Arts & Sciences Social Sciences	3		
Total hours for semester	17		

Semester 4: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 3201 Petrology	4	Yes	
GEOL 3050 Statistics	4	Yes	
PHYS 2002 or 2052 or BIOS 1710	4		
ENG 3090 J or other Tier I Junior Composition	3		
Arts & Sciences Humanities 2XXX	3		
Total hours for semester	18		

Semester 5: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 3500 Stratigraphy & Sedimentology	3	Yes	
GEOL 3600 Structural Geology	4	Yes	
GEOL 4800 Hydrogeology	3	Yes	
Arts & Sciences Social Sciences 2XXX	3		
Arts & Sciences 2XXX	3		
Total hours for semester	16		

Semester 6: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 4290 Contaminant Geochemistry	3	Yes	
GEO 4XXX Elective	4	Yes	
Arts & Sciences Social Sciences 2XXX	3		
Arts & Sciences Fine Arts 2XXX	3		
Arts & Sciences Tier II 2XXX	3		
Total hours for semester	15		

Semester 7: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 4910 Field Geology (Tier III Equivalent)	6	Yes	
Total hours for semester	6		

¹Major Electives- A minimum of 2 courses from GEOL 4XXX

BA3321 Geology**Post-Secondary Coursework or Transfer/AP/IB Credit**

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
Tier I Freshman Composition	3		
Tier 1I Cross Cultural Perspectives	3		
Tier II Humanities & Literature	3		
Tier I Quantitative Skills	3		
Tier II Social Science	3		
Total hours (minimum 15)	15		

Semester 1: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 1010 Introduction to Geology	3		
CHEM 1210 General Chemistry	4		C
MATH 1300	4		
Tier II Social Sciences	3		
Foreign Language	4		
Total hours for semester	18		

Semester 2: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 2550 Historical Geology	3		
GEOL 2110 Oceanography	3		
Foreign Language	3		
CHEM 1220 General Chemistry II	4		
Arts & Sciences Social Science	3		
Total hours for semester	17		

Semester 3: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 3120 Earth Materials	3	Yes	
GEOL 3400 Paleontology	3	Yes	
PHYS 2001	4		
Arts & Sciences Humanities Elective 2XXX	3		
Foreign Language	3		
Total hours for semester	16		

Semester 4: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 3050	4	Yes	
GEOL 3300 Gemorphology	3	Yes	
Foreign Language	3	Yes	
Cross Cultural Perspectives Tier II	3		
Arts & Sciences Humanities 2XXX	3		
ENG 3090 J or other Tier I Junior Composition	3		
Total hours for semester	16		

Semester 5: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 3500 Stratigraphy & Sedimentology	3	Yes	
GEOL 3600 Structural Geology	4	Yes	
GEOL 4460 Arts 7 Sciences Tier III	3	Yes	
Arts & Sciences Elective 2XXX	3		
Arts & Sciences Tier II Elective 2XXX	3		
Elective	3		
Total hours for semester	19		

Semester 6: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
GEOL 4660 Geodynamics	3	Yes	
GEOL 4XXX Elective	4	Yes	
Arts & Sciences Tier II Elective 2XXX	3		
Arts & Sciences Humanities 2XXX	3		
Arts & Sciences Social Sciences 2XXX	3		
Elective	3		
Total hours for semester	18		

¹Major Electives- A minimum of 2 courses from GEOL 4XXX