ARCHAEOLOGICAL GEOLOGY, EMPHASIS

The study of how geological processes and materials have influenced past human activities and landscapes. Students will explore real-world problems and solutions through the lens of geoarchaeology, analyzing past human-environment interactions to inform contemporary challenges. This course prepares students for careers in cultural resource management, environmental consulting, and heritage conservation. This is an optional area of emphasis.

- General Education Course

- Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at https://www.marshall.edu/gened/.

Course Requirements

Code	Title	Credit Hours
Core Curriculum		
Core 1: Critical Thinking		
FYS 100	First Yr Sem Critical Thinking	3
Critical Thinking Course		3
Critical Thinking Course		3
Core 2		
ENG 101	Beginning Composition	3
ENG 201	Advanced Composition	3
CMM 103	Fund Speech-Communication	3
MTH 229 or MTH 140	Calculus/Analytic Geom I (CT) Applied Calculus	3-5
Core II Humanities		3
Core II Social Science		3
Core II Fine Arts		3
GLY 201 & GLY 211L	The Earth Through Time and Earth Through Time Lab	4
Additional University Requirements		
Writing Intensive		3
Writing Intensive		3
Multicultural or International		3
GLY 491 or GLY 492	Capstone Experience Capstone Class	2-4
Major-Specific		
GLY 200 or GLY 100	The Dynamic Earth Earth's Fury and Fortune	3
GLY 210L	Earth Materials Lab	1
GLY 201 & GLY 211L	The Earth Through Time and Earth Through Time Lab	4
GLY 212	Geologic Field Methods	3
GLY 314	Mineralogy	4
GLY 320L	Geology Lab Techniques	2
GLY 420	Principles of Geochemistry	3
GLY 491 or GLY 492	Capstone Experience Capstone Class	2-4
CHM 211 & CHM 217	Principles of Chemistry I and Principles of Chem Lab I	5
MTH 229 or MTH 140	Calculus/Analytic Geom I (CT) Applied Calculus	3-5
PHY 201 & PHY 202	College Physics I and General Physics I Laboratory	4
Area of Emphasis-Specific		
GLY 426	Applied Geophysics	3
GLY 450	Geoarchaeology	4
GLY 451	Principles Geomorphology	4
ANT 322	Archaeology	3
ANT 323	Archaeolog Field Train	3-6
ANT 324	Archaeological Analysis	3
ANT 442	The Native Americans	3
Choose one		3-4
NRRM 200	Analytical Methods: Statistics	
STA 150 & STA 150L	Foundations of Statistics and Foundations of Statistics Lab	
STA 225	Introductory Statistics (CT)	
NRE 423 or GEO 429	GIS and Data Systems GIS Location Analytics	3
ENG 354	Scientific & Tech Writing	3
Area of Emphasis Electives (choose 3)		*9-12*
GLY 325	Stratigraphy & Sediment	
GLY 455 & GLY 455L	Hydrogeology and Hydrogeology Laboratory	
GLY 457	Engineering Geology	
ANT 325	World Prehistory	
ANT 331	Biological Anthropology	
GEO 431	Remote Sensing & Photogram	
Free Electives		8

Major Information

- Students are strongly encouraged to select courses that meet two or more Core or College requirements. For example, a writing intensive literature course could satisfy the College of Science literature requirement as well as the Core II writing intensive requirement.
- Course offerings and course attributes are subject to change semesters. Please consult each semesters schedule of courses for availability and attributes.

- Math is based on an ACT Mathematics score of 27 or higher. Students with an ACT Mathematics score less than 27 will be placed in the appropriate mathematics and science courses.
- The capstone experience (GLY 491 Capstone Experience) is an individualized research project or internship experience requiring a written report and an oral presentation. The capstone requirement may be met alternatively by attending geology summer field camp or by completing the capstone seminar offered on demand in the spring (GLY 492 Capstone Class).

- General Education Course

- Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

Semester Plan

Programs of study offered by the Department of Geology are designed for individuals seeking a career as an earth scientist. The greatest numbers of geologists are employed by natural resource industries. These include metallic and nonmetallic mining companies as well as petroleum, natural gas, and coal companies. This area of emphasis utilizes an interdisciplinary curriculum, which will prepare graduates for careers involving the application of geologic concepts to the solution of environmental problems.

First Year

First Semester		Credit Hours
GLY 200 or GLY 100	The Dynamic Earth or Earth's Fury and Fortune	3
GLY 210L	Earth Materials Lab	1
ENG 101	Beginning Composition	3
FYS 100	First Yr Sem Critical Thinking	3
MTH 229 or MTH 140	Calculus/Analytic Geom I (CT) or Applied Calculus	3-5
UNI 100	Freshman First Class	1
	Credit Hours	**14-16**
Second Semester		
GLY 201 & GLY 211L	The Earth Through Time and Earth Through Time Lab	4
CMM 103	Fund Speech-Communication	3
ENG 201	Advanced Composition	3
Core II Fine Arts		3
Multicultural/International		3
	Credit Hours	**16**

Second Year

First Semester		
GLY 212	Geologic Field Methods	3
GLY 314	Mineralogy	4
CHM 211 & CHM 217	Principles of Chemistry I and Principles of Chem Lab I	5
Critical Thinking Course		3
	Credit Hours	**15**
Second Semester		
GLY 450	Geoarchaeology	4
GLY 451	Principles Geomorphology	4
NRE 423 or GEO 429	GIS and Data Systems or GIS Location Analytics	3
ANT 322	Archaeology	3
	Credit Hours	**14**

Third Year

Summer		
ANT 323	Archaeolog Field Train	3-6
	Credit Hours	**3-6**
First Semester		
ANT 324	Archaeological Analysis	3
Core 2 Social Science		3
Writing Intensive		3
Choose one		3-4
NRRM 200	Analytical Methods: Statistics	
STA 150 & STA 150L	Foundations of Statistics and Foundations of Statistics Lab	
STA 225	Introductory Statistics (CT)	
Free Elective		3
	Credit Hours	**15-16**
Second Semester		
ANT 442	The Native Americans	3
GLY 426	Applied Geophysics	3
ENG 354	Scientific & Tech Writing	3
Writing Intensive		3
Free Elective		2
	Credit Hours	**14**

Fourth Year

First Semester		
GLY 491 or GLY 492	Capstone Experience or Capstone Class	2-4
PHY 201 & PHY 202	College Physics I and General Physics I Laboratory	4
GLY 320L	Geology Lab Techniques	2
Area of Emphasis Elective		3-4
Critical Thinking Course		3
	Credit Hours	**14-17**
Second Semester		
GLY 420	Principles of Geochemistry	3
Area of Emphasis Elective		3-4
Area of Emphasis Elective		3-4
Core 2 Humanities		3
Free Elective		3
	Credit Hours	**15-17**
	Total Credit Hours	**120-131**