

# GEOLOGY

## REQUIREMENTS

### CORE CURRICULUM

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 [marshall.edu/gened](http://marshall.edu/gened).

#### CORE 1: CRITICAL THINKING

CODE	COURSE NAME		HRS	GRADE
FYS 100	First Year Seminar	●	3	_____
MTH 229	Critical Thinking Course	●◆	5	_____
_____	Critical Thinking Course	●	3	_____
<b>Additional University Requirements</b>				
_____	Writing Intensive		3	_____
_____	Writing Intensive		3	_____
_____	Multicultural or International		3	_____
GLY 491	Capstone		2-4	_____

#### CORE 2:

CODE	COURSE NAME		HRS	GRADE
ENG 101	Beginning Composition	●	3	_____
ENG 201	Advanced Composition	●	3	_____
🌿 CMM 103	Fund Speech-Communication	●	3	_____
MTH 229	Calculus I (CT)	●◆	5	_____
_____	Core II Humanities	●	3	_____
_____	Core II Social Science	●	3	_____
_____	Core II Fine Arts	●	3	_____
🌿 GLY 200/210L	The Dynamic Earth/Lab	●◆	4	_____

### MAJOR-SPECIFIC

All Geology majors are required to take the following courses:

CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
🌿 GLY 200	The Dynamic Earth	●◆	3	_____	🌿 CHM 211	Principles of Chemistry I	◆	3	_____
🌿 GLY 210L	Earth Materials Lab	●◆	1	_____	CHM 217	Principles of Chemistry Lab I	◆	2	_____
GLY 201	The Earth Through Time	◆	3	_____	_____	GLY Elective	◆	4	_____
GLY 211L	The Earth Through Time Lab	◆	1	_____	_____	GLY Elective	◆	4	_____
🌿 GLY 212	Geologic Field Methods	◆	3	_____	_____	GLY Elective	◆	3	_____
🌿 GLY 313	Structural Geology	◆	4	_____	🌿 PHY 201	College Physics I	◆	3	_____
🌿 GLY 314	Mineralogy	◆	4	_____	🌿 PHY 202	General Physics I Lab	◆	1	_____
GLY 320L	Lab Techniques in Geology	◆	2	_____	MTH 229	Calculus I (CT)	●◆	5	_____
🌿 GLY 325	Statigraphy & Sediment	◆	4	_____	_____	Free Elective		4	_____
GLY 426	Geophysics (or GLY 186 Invertebrate Paleontology)	◆	3-4	_____	_____	Free Elective		3	_____
GLY 420	Principles of Geochemistry	◆	3	_____	_____	Free Elective		3	_____
GLY 421	Petrology (or GLY 423 Sedimentary Petrology)	◆	4	_____	_____	Free Elective		3	_____
GLY 455	Hydrogeology	◆	3	_____					
GLY 455L	Hydrogeology Lab	◆	1	_____					
GLY 457	Engineering Geology	◆	4	_____					
GLY 491	Capstone	◆	2-4	_____					

### 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) 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 semester.
- See faculty or advisor for a list of recommended electives.

● General Education Requirement  
 ■ College Requirement  
 ◆ Major Requirement  
 ● Area of Emphasis

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

# GEOLOGY

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. New and challenging careers are also available in environmental and engineering geology. The majority of graduates in the past few years have found employment with environmental and geotechnical companies.

		FALL SEMESTER				SPRING SEMESTER			
		CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
YEAR ONE		GLY 200	The Dynamic Earth	◆	3	GLY 201	The Earth Through Time	◆	3
		GLY 210L	Earth Materials Lab	◆	1	GLY211L	The Earth Through Time Lab	◆	1
		ENG 101	Beginning Composition	●	3	ENG 201	Advanced Composition	●	3
		FYS 100	First Year Sem Crit Thinking	●	3	_____	Core II Fine Arts	●	3
		MTH 229	Calculus I (CT)	●◆	5		CMM 103 Fund- Speech Communication	●	3
		UNI 100	Freshman First Class		1	_____	Multicultural or International	●	3
		<b>TOTAL HOURS</b>		<b>16</b>		<b>TOTAL HOURS</b>		<b>16</b>	
Summer Term (optional):									
		FALL SEMESTER				SPRING SEMESTER			
		CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
YEAR TWO		CHM 211	Principles of Chemistry I	◆	3		GLY 313 Structural Geology	◆	4
		CHM 217	Principles of Chemistry I Lab	◆	2	_____	GLY Elective (GLY 427 Recommended)	◆	4
		GLY 212	Geologic Field Methods	◆	3	_____	Writing Intensive	●	3
		GLY 325	Stratigraphy & Sediment	◆	4	_____	Free Elective		3
		_____	CT Designated Course	●	3				
		<b>TOTAL HOURS</b>		<b>15</b>		<b>TOTAL HOURS</b>		<b>14</b>	
Summer Term (optional):									
		FALL SEMESTER				SPRING SEMESTER			
		CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
YEAR THREE		GLY 314	Mineralogy	◆	4	GLY 426	Geophysics (or GLY 186 Invertebrate Paleontology)	◆	3-4
		_____	Core II Social Science	●	3	GLY 421	Petrology (or GLY 423 Fall)	◆	4
		_____	Writing Intensive	●	3	_____	GLY Elective (GLY 456 Rec.)	◆	4
		_____	GLY Elective (GLY 330 or 451)	◆	3-4	_____	Free Elective		4
		<b>TOTAL HOURS</b>		<b>13-14</b>		<b>TOTAL HOURS</b>		<b>15-16</b>	
Summer Term (optional):									
		FALL SEMESTER				SPRING SEMESTER			
		CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
YEAR FOUR		PHY 202	General Physics I Lab	◆	1	GLY 455	Hydrogeology	◆	3
		PHY 201	College Physics I	◆	3	GLY 455L	Hydrogeology Lab	◆	1
		GLY 491	Capstone	◆	2-4	GLY 420	Principles of Geochemistry	◆	3
		GLY 320L	Lab Techniques in Geology	◆	2	_____	Core II Humanities	●	3
		GLY 457	Engineering Geology	◆	4	_____	Free Elective		3
		_____	Free Elective		3	_____	Free Elective		3
		<b>TOTAL HOURS</b>		<b>15-17</b>		<b>TOTAL HOURS</b>		<b>16</b>	
Summer Term (optional):									

◆ Area of Emphasis

◆ Major Requirement

■ College Requirement

● General Education Requirement

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