CURRICULUM PLAN COLLEGE OF SCIENCE 2024-2025

GEOLOGY
ENVIRONMENTAL GEOSCIENCE

MY ADVISOR'S NAME IS: _____

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.

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	_____

Additional University Requirements

_____	Writing Intensive	3	_____
_____	Writing Intensive	3	_____
_____	Multicultural or International	3	_____
GLY 491	Capstone	2	_____

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	_____
CHM 211/217	Principles of Chemistry I / Lab	● ♦	5	

MAJOR-SPECIFIC

All Geology majors with an area of emphasis in Environmental Geoscience are required to take the following courses:

CODE	COURSE NAME		HRS	GRADE
GLY 200	The Dynamic Earth	♦	3	_____
GLY 210L	Earth Materials Lab	♦	1	_____
GLY 201	The Earth Through Time	♦	3	_____
GLY 211L	Earth Through Time Lab	♦	1	_____
GLY 212	Geologic Field Methods	♦	3	_____
GLY 313	Structural Geology	♦	4	_____
GLY 314	Mineralogy	♦	4	_____
GLY 320L	Lab Techniques in Geology	♦	2	_____
GLY 325	Statigraphy & Sediment	♦	4	_____
GLY 420	Principles of Geochemistry	♦	4	_____
GLY 423	Sedimentary Petrology	♦	4	_____
GLY 426	Geophysics	♦	3	_____
GLY 455	Hydrogeology	♦	3	_____
GLY 455L	Hydrogeology Lab	♦	1	_____
GLY 456	Environmental Geology	♦	4	_____
GLY 457	Engineering Geology	♦	4	_____
GLY 491	Capstone	♦	2	_____

CODE	COURSE NAME		HRS	GRADE
MTH 229	Calculus I (CT)	● ♦	5	_____
CHM 211	Principles of Chemistry I	● ♦	3	_____
CHM 217	Principles of Chemistry Lab I	● ♦	2	_____
PHY 201	College Physics I	♦	3	_____
PHY 202	General Physics I Lab	♦	1	_____
PS 410	Remote Sensing	♦	4	_____
ENG 354	Scientific & Tech Writing	♦	3	_____
GEO 222	Global Environmental Issues	♦	3	_____
GEO 429	Location Analysis and GIS	♦	4	_____
_____	Free Elective		3	_____
_____	Free Elective		3	_____
_____	Free Elective		2	_____
_____	Free Elective		1	_____

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 each spring.
- 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.

FOUR YEAR PLAN COLLEGE OF SCIENCE 2024-2025

GEOLOGY
ENVIRONMENTAL GEOSCIENCE

MY ADVISOR'S NAME IS: _____

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.

YEAR ONE

FALL SEMESTER					SPRING SEMESTER				
CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
GLY 200	The Dynamic Earth	♦	3	_____	GLY 201	The Earth Through Time	♦	3	_____
GLY 210L	Earth Materials Lab	♦	1	_____	GLY 211L	Earth Through Time Lab	♦	1	_____
ENG 101	Beginning Composition	●	3	_____	_____	CT Designated Course	●	3	_____
FYS 100	First Year Sem Crit Thinking	●	3	_____	_____	Core II Fine Arts	●	3	_____
MTH 229	Calculus I (CT)	●	5	_____	_____	Multicultural/International	●	3	_____
UNI 100	Freshman First Class		1	_____	_____	Free Elective	●	1	_____
TOTAL HOURS			**16**		**TOTAL HOURS**			**14**	

Summer Term (optional):

YEAR TWO

FALL SEMESTER					SPRING SEMESTER				
CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
CHM 211	Principles of Chemistry I	♦	3	_____	ENG 354	Scientific & Tech Writing	♦	3	_____
CHM 217	Principles of Chemistry I Lab	♦	2	_____	GLY 313	Structural Geology	♦	4	_____
GLY 212	Geologic Field Methods	♦	3	_____	PS 410	Remote Sensing	♦	4	_____
GLY 325	Stratigraphy & Sediment	♦	4	_____	_____	Writing Intensive	●	3	_____
ENG 201	Advanced Composition	●	3	_____	_____	Free Elective		3	_____
TOTAL HOURS			**15**		**TOTAL HOURS**			**17**	

Summer Term (optional):

YEAR THREE

FALL SEMESTER					SPRING SEMESTER				
CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
GLY 320L	Lab Techniques in Geology	♦	2	_____	CMM 103	Fund Speech-Communcations	●	3	_____
GLY 314	Mineralogy	♦	4	_____	GLY 420	Principles of Geochemistry	♦	3	_____
PHY 201	College Physics I	♦	3	_____	GLY 456	Environmental Geology	♦	4	_____
PHY 202	General Physics I Lab	♦	1	_____	GLY 426	Geophysics	♦	3	_____
GLY 423	Sedimentary Petrology	♦	4	_____					
_____	Core II: Social Science	●	3	_____					
TOTAL HOURS			**17**		**TOTAL HOURS**			**13**	

Summer Term (optional):

YEAR FOUR

FALL SEMESTER					SPRING SEMESTER				
CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
GLY 491	Capstone	♦	2	_____	GEO 429	Location Analysis and GIS	♦	4	_____
GLY 457	Engineering Geology	♦	4	_____	_____	Writing Intensive	●	3	_____
_____	Core II: Humanities	●	3	_____	GEO 222	Global Environmental Issues	♦	3	_____
_____	Free Elective		3	_____	GLY 455	Hydrogeology	♦	3	_____
_____	Free Elective		2	_____	GLY 455L	Hydrogeology Lab	♦	1	_____
TOTAL HOURS			**14**		**TOTAL HOURS**			**14**	

Summer Term (optional):

● 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: ENVIRONMENTAL GEOSCIENCE — 2024-2025

INVOLVEMENT OPPORTUNITIES

- Geology Club
- Student Government Association
- Departmental seminars
- Student mentors
- Professional Organizations
- Scholarships and Tuition waiver
- Internships
- Research projects
- LinkedIn
- Club Sports
- Campus Activity Board
- Cultural Organizations

RELATED MAJORS

- Environmental Science
- Environmental Chemistry
- Civil Engineering
- Science Education
- Environmental Engineering
- Geography
- Meteorology
- Applied Physics

GRADUATION REQUIREMENTS

- Have a minimum of 120 credit hours (some colleges or majors require more);
- Have an overall and Marshall Grade Point Average of 2.00 or higher;
- Have an overall Grade Point Average of 2.00 or higher in the major area of study;
- Have earned a grade of C or better in English 201 or 201H;
- Have met all major(s) and college requirements;
- Have met the requirements of the Core Curriculum;
- Have met the residence requirements of Marshall University, including 12 hours of 300/400 level coursework in the student's college (see section entitled "Residence Requirements" in the undergraduate catalogue);
- Be enrolled at Marshall at least one semester of the senior year;
- Have transferred no more than 72 credit hours from an accredited West Virginia two-year institution of higher education.

Colleges and specific programs may have unique requirements that are more stringent than those noted above. Students are responsible for staying informed about and ensuring that they meet the requirements for graduation.

This academic map is to be used as a guide in planning your coursework toward a degree. Due to the complexities of degree programs, it is unfortunate but inevitable that an error may occur in the creation of this document. The official source of degree requirements at Marshall University is DegreeWorks available in your myMU portal. Always consult regularly with your advisor.

YEAR ONE

Have questions? Need to talk? You already have a Friend-At-Marshall ready to help you succeed. Find your FAM Peer Mentor here: www.marshall.edu/fam

Stay on the Herd Path and come to class! Class attendance is more important to your success than your high school GPA, your class standing, or your ACT/SAT scores.

In order to graduate on time, you need to take an average of 15 credits per semester. Are you on track? Take 15 to Finish!

No need to wait until graduate school. Discuss undergraduate research opportunities with faculty in your major right now.

Take a career self-assessment to help determine what jobs fit your talents and interests. We can get you there.

Join the Marshall Environmental Science Association or other organization.

Sign up for Handshake! Handshake is the #1 place to launch a career with no connections, experience, or luck required. The platform connects up-and-coming talent with 650,000+ employers.

YEAR TWO

Are you completing enough credits to graduate on time? Dropping or failing a class can put you behind. Use summer terms to quickly get back on track.

Attend civic meetings, such as the school board, neighborhood associations, city council, or important state legislative sessions.

Have you considered adding a minor or certification? Think about personal areas of interest that might give you a more marketable skill set.

Get involved! Strengthen your resume by gaining valuable field and laboratory experience.

Run for Student Government and represent your fellow students while making a long-term difference on Marshall's Campus.

Don't enter your field with zero experience! Secure an internship related to your field of study.

Join or create a club or organization on campus about a particular issue you care about. Marshall has more than 200 student organizations.

YEAR THREE

Join professional associations in your field, like: Geological Society of America or American Institute of Professional Geologists.

Run for Student Government and represent your fellow students while making a long-term difference on Marshall's Campus.

Are you on track to graduate? Meet with your advisor for your Junior Eval to make sure you know what requirements you have left.

Think about who can help you grow as a student and a professional (professors, advisors, alumni, etc.)and ask at least one to be your mentor.

Don't enter your field with zero experience! Meet with your advisor to discuss your internship options.

Strengthen your resume and enhance your presentation skills. Present what you've learned at an academic conference off campus.

Conservation and sustainability outreach is available. Join up!

YEAR FOUR

This is it! Are you on track to graduate? Meet with your advisor for your Senior Eval to see what requirements you have left.

Think about who can help you grow as a student and a professional (professors, advisors, alumni, etc.)and ask at least one to be your mentor.

Want to continue your education and increase your opportunities? Talk to a faculty member about whether graduate school fits your career goals.

Conservation and sustainability outreach is available. Join up!

Join professional associations in your field, like: Geological Society of America or American Institute of Professional Geologists.

Pursue research and funding opportunities for undergraduates.

Be at the top of your professional game! Prepare a final resume and practice your interview skills with a career coach in Career Education.

TRANSFERABLE SKILLS ASSOCIATED WITH THIS MAJOR

- Oral and written communication
- Critical thinking
- Quantitative reasoning
- "Big Data" processing
- Field work and geological mapping
- Scientific reasoning and problem-solving ability
- Ability to work individually and as part of a team
- Technological literacy

ASSOCIATED CAREERS

- Petroleum Geology (Oil & Gas)
- Mining Industry
- National Parks
- Drilling Project Management
- Well logging
- Seismic Data Interpretation
- Environmental Consultancies
- Environmental Analysis and Site Assessment
- Geotechnical Engineering
- Civil Engineering
- Research and Development

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