CURRICULUM PLAN COLLEGE OF SCIENCE 2020-2021

# GEOGRAPHY

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 | Composition I | ● | 3 | |
| ENG 201 | Composition II | ● | 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 | Core II Natural/Physical Sci | ● ♦ | 4 | |

### MAJOR-SPECIFIC

All Geology majors are required to take the following courses:

| CODE | COURSE NAME | | HRS | GRADE |
|---|---|---|---|---|
| GLY 200 | Physical Geology | ● ♦ | 3 | |
| GLY 210L | Earth Materials Lab | ● ♦ | 1 | |
| GLY 201 | Historial Geology | ♦ | 3 | |
| GLY 211L | Historical Geology Lab | ♦ | 1 | |
| GLY 212 | Introduction to 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 418 | Invertebrate Paleontology (or GLY 426 Geophysics) | ♦ | 4 | |
| GLY 420 | Geochemistry | ♦ | 3 | |
| GLY 421 | Petrology (or GLY 423 Sedimentary Petrograpohy) | ♦ | 4 | |
| GLY 455 | Hydrogeology | ♦ | 3 | |
| GLY 455L | Hydrogeology Lab | ♦ | 1 | |
| GLY 457 | Engineering Geology | ♦ | 4 | |
| GLY 491 | Capstone | ♦ | 2 | |

| CODE | COURSE NAME | | HRS | GRADE |
|---|---|---|---|---|
| CHM 211 | Principles of Chemistry I | ♦ | 3 | |
| CHM 217 | Principles of Chemistry Lab I | ♦ | 2 | |
| _____ | GLY Elective | ♦ | 4 | |
| _____ | GLY Elective | ♦ | 4 | |
| _____ | GLY Elective | ♦ | 3 | |
| PHY 201 | College Physics I | ♦ | 3 | |
| PHY 202 | General Physics I Lab | ♦ | 1 | |
| MTH 229 | Calculus I (CT) | ● ♦ | 5 | |
| _____ | Free Elective | | 3 | |
| _____ | Free Elective | | 3 | |
| _____ | Free Elective | | 3 | |
| _____ | Free Elective | | 3 | |
| _____ | Free Elective | | 3 | |
| _____ | Free Elective | | 3 | |
| _____ | 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.

● 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.

FOUR YEAR PLAN COLLEGE OF SCIENCE 2020-2021

# GEOGRAPHY

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. 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.

## YEAR ONE

| FALL SEMESTER | | | | | SPRING SEMESTER | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CODE | COURSE NAME | | HRS | GRADE | CODE | COURSE NAME | | HRS | GRADE |
| GLY 200 | Physical Geology | ♦ | 3 | | GLY 201 | Historical Geology | ♦ | 3 | |
| GLY 210L | Earth Materials Lab | ♦ | 1 | | GLY211L | Historical Geology Lab | ♦ | 1 | |
| ENG 101 | Composition I | ● | 3 | | ENG 201 | Advanced Composition | ● | 3 | |
| FYS 100 | First Year Seminar | ● | 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 | |
| **TOTAL HOURS** | | | **16** | | **TOTAL HOURS** | | | **16** | |

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 | | GLY 313 | Structural Geology | ♦ | 4 | |
| CHM 217 | Principles of Chemistry I Lab | ♦ | 2 | | _____ | GLY Elective (GLY 427 Recommended) | ♦ | 4 | |
| GLY 212 | Introduction to Field Methods | ♦ | 3 | | _____ | Writing Intensive | ● | 3 | |
| GLY 325 | Stratigraphy & Sediment | ♦ | 4 | | _____ | Free Elective | | 3 | |
| _____ | CT Designated Course | ● | 3 | | | | | | |
| **TOTAL HOURS** | | | **15** | | **TOTAL HOURS** | | | **14** | |

Summer Term (optional):

## YEAR THREE

| FALL SEMESTER | | | | | SPRING SEMESTER | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CODE | COURSE NAME | | HRS | GRADE | CODE | COURSE NAME | | HRS | GRADE |
| GLY 314 | Mineralogy | ♦ | 4 | | GLY 418 | Invertebrate Paleontology (or GLY 426 Geophysics) | ♦ | 4 | |
| _____ | Core II Social Science | ● | 3 | | GLY 421 | Petrology (or GLY 423 Fall) | ♦ | 4 | |
| _____ | Writing Intensive | ● | 3 | | _____ | GLY Elective (GLY 456 Rec.) | ♦ | 3 | |
| _____ | GLY Elective (GLY 330 or 451) | ♦ | 3-4 | | _____ | Free Elective | | 3 | |
| **TOTAL HOURS** | | | **13-14** | | **TOTAL HOURS** | | | **14** | |

Summer Term (optional):

## YEAR FOUR

| FALL SEMESTER | | | | | SPRING SEMESTER | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CODE | COURSE NAME | | HRS | GRADE | CODE | COURSE NAME | | HRS | GRADE |
| 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 | | GLY 420 | 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 | |
| **TOTAL HOURS** | | | **15** | | **TOTAL HOURS** | | | **16** | |

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.

# GEOLOGY — 2020-2021

## INVOLVEMENT OPPORTUNITIES

- Student Government Association
- Campus Activity Board
- JMELI
- Commuter Student Advisory Board
- Club Sports
- Religious Organizations
- Political Organizations
- Residence Hall Association
- Cultural Organizations
- National Society of Leadership and Success
- Greek Life

## RELATED MAJORS

- Environmental Science
- Environmental Chemistry
- Education
- Civil 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.

Take a pulse check. Know what you need to do every year to keep your grants, scholarships, or federal financial aid.

## 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 the Marshall Environmental Science Association or other organization.

## 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

- Scientific Ability
- Ability to Work as Part of a Team
- Technological Literacy
- Adaptability

## ASSOCIATED CAREERS

- Product Development
- Process Development
- Drilling Project Manager
- Field Seismologist
- Petroleum Technology
- Site Assessment
- Local/Regional Planner
- Quality Assurance/Control
- Environmental Analysis
- Civil Engineer
- Geotechnical Engineer
- Research and Development

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