

# Geology and Environmental Geology

*Geology is the science devoted to the study of the Earth, including its origin and evolution, the processes that shape its surface, and the dynamic events such as earthquakes, floods, landslides, and volcanic eruptions that “rock” our world. Geologists apply principles from chemistry, physics, biology, and mathematics in their quest to understand the planet we live on. Geologic research is particularly relevant to environmental issues such as climate change or clean drinking water, and the search for energy and mineral resources.*

*We have two majors to choose from: **Geology** and **Environmental Geology**. The main difference between the two is an increased emphasis on environmental issues and earth surface processes in the Environmental Geology program. If you decide to major in one of our programs, your faculty advisor will explain the different requirements in detail and help you choose an academic path that is right for you.*

*Both majors provide a solid foundation for students wishing to pursue careers in industry, environmental consulting, government, teaching, or many other fields. Both majors also prepare students for graduate study, and many of our students have gone on to obtain advanced degrees at highly competitive universities. Dr. Hayob-Matzke, chair*

## Department of Earth & Environmental Sciences

Jepson Science Center

[Department Website](http://cas.umw.edu/ees)

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[Department Chair](#)

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New students considering a major in Geology or Environmental Geology should select **EESC 111-112** their first year, and take the chemistry placement test before registration to determine if they should enroll in **CHEM 101** (to prepare for CHEM 111) or **CHEM 111**. Students needing CHEM 101 should take this Fall of their first year, to prepare for CHEM 111 (which is a co-requisite to major courses in the second year).

Below please find some examples of first semester schedules for a Geology or Environmental Geology major. There are many variations of a first semester schedule; the examples are just meant to help you see that there are many ways to reach the same goals. Please note also that we do not recommend

you take more than 15 or 16 credits in your first semester; the courses listed are examples only of some typical choices that might be suitable for you.

**Example 1:**

Course (credits)	Requirement(s) Met
1. EESC 111 – Our Dynamic Earth with Lab (4)	Major, NS
2. CHEM 111 – General Chemistry I with Lab (4)	Major Prerequisite, NS
3. MATH 110** – Finite Math with Applications (3)	QR
4. FSEM 100N3 – Climate Change & Energy Resources (3)	FSEM, Honors

**Example 2:**

Course (credits)	Requirement(s) Met
1. EESC 111 – Our Dynamic Earth with Lab (4)	Major, NS
2. CHEM 101 – Foundations of Chemistry (3)	Elective
3. SPAN 101** – Beginning Spanish (3)	Language
4. FSEM 100XX – Escaping Death: Geologic Hazards/Prediction (3)	FSEM
5. COMM 205 – Public Speaking (3)	Elective, SI*

**Example 3:** Athletes for varsity sports must register for the 400-level course of the sport. Practice times for varsity sports can vary, but generally speaking, athletes should allow for enough time to get to and from practice on weekdays from 3 to 6 p.m. Please check with the individual coach for your sport to verify specific practice times each semester.

Course (credits)	Requirement(s) Met
1. EESC 111 – Our Dynamic Earth with Lab (4)	Major, NS
2. CHEM 111 – General Chemistry I with Lab (4)	Major Prerequisite, NS
3. GERM 101** – Beginning German (3)	Language
4. FSEM 100BB – Critical Thinking and the Internet (3)	FSEM
5. PHYD 484 – Intercollegiate Volleyball - Women (1)	Elective

*\*Please note that not all sections of a course may have the Speaking Intensive (SI) or Writing Intensive (WI) attributes. These designations for a course are dependent on instructor and semester, and are listed in the Banner description for the semester in which you are registering.*

*\*\*This particular course is in a discipline that allows students with demonstrated competence upon admission to UMW (such as AP/IB credit, dual enrollment, etc.) to begin courses at a higher level.*