

GEOLOGY

FIRST YEAR ADVISING 2008-2009

GEOLOGY

Geology can be either a comprehensive or a standard major.

The core of the geology program consists of several sequenced courses. This sequence requires a minimum of two years to complete. Chemistry is a prerequisite for the second course within the major and should be taken as soon as a major in geology is selected. Required math and supporting science courses must also be taken in sequential order. The department can help you determine the minimum number of semesters required to complete the major.

COURSE SELECTION

UW-Eau Claire respects individual differences and the department is eager to help each student develop a plan for timely graduation. Please see the department for individual advising.

• ESSENTIAL COURSES

Below are the courses we would recommend for comprehensive majors:

Geol 110 (Physical Geology) or Geol 115 (Environmental Geology) or Geol 130 (Society Issues in Earth Science) and Geol 131 (Societal Issues Lab)
Math 114 or 215* (Calculus and Analytic Geometry I and II)
Engl 110 (Introduction to College Writing) or a course from General Education (I, III or IV)

• Math course is determined in consultation with an adviser.

• PROGRAM READINESS

1. Math readiness. A strong math placement is helpful because the program starts with Math 114 or 215 to be taken the first semester.

If the student has not placed high enough on the placement exam, he/she will first need to successfully complete Math 112 (Precalculus Mathematics) prior to 114. A minimum of Math 112 is a prerequisite for CS 170 (Computing for the Sciences and Mathematics) and also is highly recommended as a prerequisite for Chem 115 (Chemical Principles). These two courses are recommended not later than the second semester of the Geology major sequence.

2. Willingness to participate in fieldwork.

The Geology Department involves students in field activities in many courses. These activities may be as short as 50 minutes or as long as 2-3 weeks.

• ENROLLMENT CAUTIONS

For students with a strong background in high school mathematics and chemistry, Chem 115 is the preferred course within the major. For other students, the department will substitute the two semester sequence of Chem 103 and 104 as an equivalent experience. At a minimum, Chem 103 should be taken prior to enrollment in Geol 312 (Mineralogy and Petrology I).

Math 111 should be avoided for potential geology majors. Geology requires math 114 for most emphases and Math 111 will not be substituted for the Math 114 experience.

• COURSES TO BE AVOIDED

Chem 103 (General Chemistry) - Geology requires Chem 115, which is a one-semester chemistry course. If Chem 103 is taken, you will be required to take two semesters of general chemistry

(e.g. Chem 103 and 104).

Math 111 - Geology requires Math 114 for most emphases, and Math 111 will not be substituted for the Math 114 experience.

GENERAL EDUCATION

Students majoring in Geology will meet many of the General Education requirements for the Bachelor of Science degree from the College of Arts and Sciences as they take the required math, computer science and science courses.

However, students may elect to follow the general education requirements for the Bachelor of Arts degree as noted in the University Catalogue.

(Schedules should include one or two University General Education requirements each semester.) NOTE: Some geology courses may be used for General Education.

In addition to the required course, Engl 110 (Introduction to College Writing), we strongly recommend that you take Engl 308 (Scientific Comm. for Expert Audiences).

Category IA: Minimum of 3 credits: Strongly recommend taking Engl 308.

Category IB: Minimum of 3 credits required. The required math courses in the major meet this category requirement.

Category II: Minimum of 15 credits (including at least two laboratory classes) from at least two of the six subcategories (Biology, Chemistry, Geography-Physical, Geology, Physics and Interdisciplinary Studies-Natural Sciences): Geol 110 or 115 or 131, Chem 115, and Phys 211 (College Physics) or 231 (University Physics) are all laboratory courses required

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of geology comprehensive majors. A second semester of physics (Phys 212 or 232) is usually required for entrance to graduate school.

Category III: Minimum of 9 credits of course work, including at least one course from two of the seven subcategories (Anthropology, Economics, Geography-Cultural, Political Science, Psychology, Sociology, and Interdisciplinary Studies-Social Studies).

Category IV: Minimum of 9 credits, including at least one course from two of the five subcategories (Fine Arts, Philosophy, History, English, and Interdisciplinary Studies-Humanities).

Category V: None required, but 0-6 credits may be earned toward the 45 credits of GE that are required. CS 170 is required for all comprehensive majors and is strongly recommended for non-comprehensive majors. Geol 130 is also a GE-V.

TYPICAL SCHEDULE

See program guides for each major, available in the Department of Geology.

MESSAGES FOR NEW MAJORS

- If you have any problems registering for any of our courses, or if you have any questions about schedule, career possibilities, etc., contact the Geology Department office—We would be glad to try to help!
- The department offers two organizations. The Geology Club, which is open to all majors and minors, and Sigma Gamma Epsilon, which is only open for students that have completed at least 12 semester hours in earth science courses and have maintained an overall 3.0

GPA (on a 4.0 system) in all earth science courses together with an overall GPA of 2.67 in all college courses.

- In addition to other competencies, professional geologists are required to have strong quantitative, written and oral communication skills. General Education courses that emphasize these skills can be particularly useful in preparing students to be professional geologists or for entrance into graduate studies in geology.

ADDITIONAL INFORMATION

All of the suggestions given in this handout are assuming that the advisee is a new freshman with normal General Education requirements. Other students starting a major later in their college careers should pay careful attention to the course sequence and take Chem 115 as early as possible to avoid delay in taking Geol 312 (Mineralogy and Petrology I). This will minimize delay in taking Geol 320 (Sedimentation and Stratigraphy), 345 (Geomorphology) and 418 (Earth History).

All Geology majors are required to complete Geol 470 (Field Geology I). If a student is required or chooses to also take Geol 471 (Field Geology II) they should be aware that Geol 330 (Structural Geology) is a prerequisite for this course. Ideally, the student would enroll in Geol 330 and 470 in their sixth semester (spring), and then Geol 471 would be taken during the



*Excellence. Our measure,
our motto, our goal.*

following summer interim. NOTE: Geol 471 is typically offered every other summer, but is based on student demand.

MINORS

Geology minors complement non-geology majors in a variety of fields but are especially suited to majors in Biology, Geography, Computer Science, Physics, Math or Pre-Law.

FOR MORE INFORMATION

<http://www.uwec.edu/Geology>

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To learn how to declare this major, visit
<http://www.uwec.edu/registrar/ChgofMajor/procedures/index.htm>

Academic requirements change every year. For the most current information, refer to your catalogue and degree audit.