

# GEOLOGY: ENVIRONMENTAL GEOLOGY, BS

## Degree Programs

**Requirements for Students Matriculating in or before Academic Year 2023-2024.** Learn more about University Academic Regulation 3.1 (<http://catalog.okstate.edu/university-academic-regulations/#matriculation>).

**Minimum Overall Grade Point Average: 2.00**

**Total Hours: 120**

Code	Title	Hours
<b>General Education Requirements</b>		
<i>English Composition</i>		
See Academic Regulation 3.5 ( <a href="http://catalog.okstate.edu/university-academic-regulations/#english-composition">http://catalog.okstate.edu/university-academic-regulations/#english-composition</a> )		
ENGL 1113	Composition I	3
or ENGL 1313	Critical Analysis and Writing I	
ENGL 1213	Composition II	3
or ENGL 1413	Critical Analysis and Writing II	
or ENGL 3323	Technical Writing	
<i>American History &amp; Government</i>		
HIST 1103	Survey of American History	3
or HIST 1483	American History to 1865 (H)	
or HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
<i>Analytical &amp; Quantitative Thought (A)</i>		
MATH 2144	Calculus I (A) <sup>1</sup>	4
<i>Humanities (H)</i>		
Courses designated (H)		6
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (L) course.		
PHYS 2014	University Physics I (LN) <sup>1</sup>	4
Select four hours from the following:		4
BIOL 1113	Introductory Biology (N)	
& BIOL 1111	and Introductory Biology Laboratory (LN) <sup>1</sup>	
BIOL 1114	Introductory Biology (LN) <sup>1</sup>	
<i>Social &amp; Behavioral Sciences (S)</i>		
Course designated (S)		3
<i>Additional General Education</i>		
Courses designated (A), (H), (N), or (S)		7
<b>Hours Subtotal</b>		<b>40</b>
<b>Diversity (D) &amp; International Dimension (I)</b>		
May be completed in any part of the degree plan.		
At least one Diversity (D) course		
At least one International Dimension (I) course		
<b>College/Departmental Requirements</b>		
<i>First Year Seminar</i>		
(Transfer students with 15 hours exempt)		1
<i>Arts &amp; Humanities</i>		
(See note 2.a.)		3

### Natural & Mathematical Sciences

CHEM 1314	Chemistry I (LN)	4
CHEM 1515	Chemistry II (LN)	5
(See note 2.b.)		

### Foreign Languages

(See note 3.)

0-6 hours

### Upper-Division General Education

6 hours outside major department

(See note 2.c.)

**Hours Subtotal 13**

### Major Requirements

Minimum grade of "C" in all Major Required courses.

#### Core Curriculum:

GEOL 1214	Introductory Geological Processes (LN)	4
or GEOL 1114	Physical Geology (LN)	
GEOL 1224	Evolution of the Earth (LN)	4
GEOL 2464	Rocks and Minerals	4
GEOL 3014	Structural Geology	4
GEOL 3034	Principles of Stratigraphy and Sedimentology	4
GEOL 3503	Environmental Geology (N)	3
GEOL 4403	Environmental Geochemistry	3
GEOL 4453	Hydrogeology	3
GEOL 3546	Field Geology	6
ENVR 1113	Elements of Environmental Science (N)	3
GEOG 4203	Fundamentals of Geographic Information Systems	3
PHYS 2114	University Physics II (LN)	4
3 hours STAT designated (A)		3

#### Related Curriculum:

9 hours upper-division related from: CHEM, ENVR, GEOG, GEOL, NREM, POLS, SOIL <sup>2</sup>

**Hours Subtotal 57**

### Electives

Select 10 hours. 10

May need to include 6 hours of a foreign language. See note 3.

MATH 1513 and MATH 1813 required for students who do not place directly into MATH 2144.

**Hours Subtotal 10**

**Total Hours 120**

## Other Requirements

- See the College of Arts and Sciences Requirements.
- Upper-Division Credit:** Total hours must include at least 40 hours in courses numbered 3000 or above.

## College of Arts and Sciences Requirements

- Hours in One Department:** For B.A. and B.S. degrees, no more than 54 hours in one department may be required to meet degree requirements. Courses used to satisfy the General Education English Composition, U.S. History, American Government, and

Mathematics or Statistics requirements will not count toward the 54-hour maximum required from one department.

2. **A&S College/Departmental Requirements**

- a. Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, DANC, ENGL (except ENGL 3323 Technical Writing) HIST, MUSI, PHIL (except PHIL 1313 Logic and Critical Thinking (A), PHIL 3003 Symbolic Logic (A) and PHIL 4003 Mathematical Logic and Computability), REL, TH, and foreign languages.
- b. Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOC, BIOL, CHEM, CS (except CS 4883 Social Issues in Computing), GEOL, MATH, MICR, PBIO, PHYS, and STAT; or courses from other departments that carry an (A) or (N) general education designation.
- c. Six upper-division hours are required from General Education or any CAS courses outside the student's major department (<http://catalog.okstate.edu/college-arts-sciences-major-departments/>). This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
- d. Non-Western Studies Requirement for B.A. and B.F.A.; One course in Non-Western Studies (N.W.). This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
- e. The College of Arts & Sciences requires a minimum 2.0 GPA in all major requirements and a minimum 2.0 GPA in all major-prefix courses applied to the degree.

3. **Foreign Language Proficiency**

- a. The foreign language requirement for the B.A. may be satisfied by 9 hours college credit in the same language, which must include 3 hours at the 2000-level, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement. Currently Arabic and Mvskoke are not offered at the 2000-level at OSU.
- b. The foreign language requirement for the B.S., B.M. and B.F.A. may be satisfied by presenting a high school transcript which demonstrates two years of study of a single foreign language (passing grades at second-year level of study). It may also be satisfied by 6 hours college credit in the same language, which must include language courses 1713 and 1813, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement.
- c. In addition to a. and b., students pursuing teacher certification must meet novice-high foreign language proficiency by presenting a high school transcript which demonstrates two years of study of a single foreign language with no grade below B. Or, students may complete 3 hours college credit in a single language with no grade below C (or pass an advanced standing examination, College Level Examination Program (CLEP) exam, or Oral Proficiency Interview developed by the American Council on the Teaching of Foreign Languages, equivalent to 3 hours of college credit.) Or, students may meet the requirement by transfer

of documentation of meeting the foreign language competency from one of the teacher education programs in the State of Oklahoma approved by the Oklahoma State Regents for Higher Education.

- 4. **Exclusions.** Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit.

**Additional State/OSU Requirements**

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2029.

**Example Plan of Study**

**Finish in Four Plan of Study**

The plan below is an **example** of how students can successfully complete degree requirements in four years. This suggested class schedule plan may be used as a guide and can be adjusted based on individual needs. Students are required to meet with an academic advisor prior to enrollment each semester to plan their class schedule, and students are ultimately responsible for completing all degree requirements.

Course	Title	Hours
<b>Freshman</b>		
<b>Fall</b>		
GEOL 1214	Introductory Geological Processes (LN)	4
CHEM 1314	Chemistry I (LN)	4
MATH 2144	Calculus I (A)	4
General Education courses		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
GEOL 1224	Evolution of the Earth (LN)	4
GEOL 2403 or CHEM 1515	Chemistry of Earth Systems (every other year) or Chemistry II (LN)	3
MATH 2153 or STAT 2013	Calculus II (A) (recommended) or Elementary Statistics (A)	3
General Education courses		4
<b>Hours</b>		<b>14</b>
<b>Sophomore</b>		
<b>Fall</b>		
GEOL 2464	Rocks and Minerals	4
ENVR 1113	Elements of Environmental Science (N)	3
College and General Education courses		7
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
BIOL 1113 & BIOL 1111	Introductory Biology (N) and Introductory Biology Laboratory (LN)	4
GEOL 2403 or CHEM 1515	Chemistry of Earth Systems ((if needed)) or Chemistry II (LN)	3
PHYS 1114	College Physics I (LN)	4
Major, College, and Elective courses		4
<b>Hours</b>		<b>15</b>

**Junior****Fall**

GEOL 3014	Structural Geology	4
GEOG 4203	Fundamentals of Geographic Information Systems	3
Major, College, and Elective courses		7
<b>Hours</b>		<b>14</b>

**Spring**

GEOL 2103 or PHYS 1214	Fundamentals of Geophysics (every other year) or College Physics II (LN)	3
GEOL 3034	Principles of Stratigraphy and Sedimentology	4
GEOL 3503	Environmental Geology (N)	3
GEOL 4403	Environmental Geochemistry (every other year)	3
Major, College, and Elective courses		3
<b>Hours</b>		<b>16</b>

**Summer**

GEOL 3546	Field Geology	6
<b>Hours</b>		<b>6</b>

**Senior****Fall**

GEOL 4453	Hydrogeology	3
Major, College, and Elective courses		10
<b>Hours</b>		<b>13</b>

**Spring**

GEOL 4403	Environmental Geochemistry (if needed)	3
Major, College, and Elective courses		10
<b>Hours</b>		<b>13</b>
<b>Total Hours</b>		<b>120</b>