GEOLOGY: ENVIRONMENTAL GEOLOGY, BS

Requirements for Students Matriculating in or before Academic Year 2018-2019. 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 1113</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>or ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
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<tr>
<td>ENGL 1213</td>
<td>Composition II</td>
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<tr>
<td>or ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
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<tr>
<td>HIST 1103</td>
<td>Survey of American History</td>
<td>3</td>
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<td>POLS 1113</td>
<td>American Government</td>
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<tr>
<td>MATH 2144</td>
<td>Calculus I (A)</td>
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<tr>
<td>ENVR 1113</td>
<td>Elements of Environmental Science</td>
<td>3</td>
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<tr>
<td>PHYS 2114</td>
<td>University Physics II (LN)</td>
<td>4</td>
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<tr>
<td>SOIL 2124</td>
<td>Fundamentals of Soil Science (N)</td>
<td>4</td>
</tr>
<tr>
<td>STAT 4013</td>
<td>Statistical Methods I (A)</td>
<td>3</td>
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<tr>
<td>ENVR 3113</td>
<td>Sampling and Analyses for Solving Environmental Problems</td>
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<tr>
<td>ENVR 4363</td>
<td>Environmental Soil Science</td>
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<tr>
<td>ENVR 4512</td>
<td>Environmental Impact Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 3513</td>
<td>Earthquakes, Volcanoes, and Disasters (N)</td>
<td>4</td>
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<tr>
<td>GEOL 4503</td>
<td>Introduction to Oceanography (N)</td>
<td>3</td>
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<tr>
<td>GEOL 4513</td>
<td>Marine Geology</td>
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<tr>
<td>GEOL 4573</td>
<td>Marine Biogeochemical Cycles</td>
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<tr>
<td>MICR 3033</td>
<td>Cell and Molecular Biology</td>
<td>3</td>
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<tr>
<td>SOIL 3433</td>
<td>Soil Genesis, Morphology, and Classification</td>
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<tr>
<td>SOIL 4463</td>
<td>Soil and Water Conservation</td>
<td>3</td>
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Diversity (D) & International Dimension (I)
May be completed in any part of the degree plan.
At least one Diversity (D) course
At least one International Dimension (I) course

College/Departmental Requirements
First Year Seminar
(Transfer students with 15 hours exempt) 1
Arts & Humanities
(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 76

Major Requirements
A minimum graduation retention GPA of 2.5 and completion of GEOL 1114 with a grade of "C" or better required to declare major.
Minimum grade of "C" in all Major Required courses.

Core Curriculum:
GEOL 1114 | Physical Geology (LN) | 4
GEOL 1224 | Evolution of the Earth (LN) | 4
GEOL 2254 | Practical Mineralogy | 4
GEOL 2364 | Igneous and Metamorphic Petrology | 4
GEOL 3014 | Structural Geology | 4
GEOL 3034 | Principles of Stratigraphy and Sedimentology | 4
GEOL 3503 | Environmental Geology | 3
GEOL 4403 | Geochemistry | 3
GEOL 4453 | Hydrogeology | 3
GEOL 3546 | Field Geology | 6
ENVR 1113 | Elements of Environmental Science | 3
GEOG 4203 | Fundamentals of Geographic Information Systems | 3
PHYS 2114 | University Physics II (LN) | 4
SOIL 2124 | Fundamentals of Soil Science (N) | 4
STAT 4013 | Statistical Methods I (A) | 3

Related Curriculum:
6 hours upper-division related from:
CHEM 3013 | Survey of Organic Chemistry | 3
CHEM 3353 | Descriptive Inorganic Chemistry | 3
ENVR 3113 | Sampling and Analyses for Solving Environmental Problems | 3
ENVR 4363 | Environmental Soil Science | 3
ENVR 4512 | Environmental Impact Analysis | 3
GEOG 4063 | Geochaeology and Environmental History | 3
GEOG 4073 | Climate Change: Past, Present, and Future | 3
GEOG 4263 | Geospatial Applications for Unmanned Aerial Systems | 3
GEOG 4273 | Land Use Science | 3
GEOL 3073 | Geomorphology | 3
GEOL 3103 | Paleontology | 3
GEOL 3513 | Earthquakes, Volcanoes, and Disasters (N) | 3
GEOL 4463 | Physical Hydrogeology | 3
GEOL 4503 | Introduction to Oceanography (N) | 3
GEOL 4513 | Marine Geology | 3
GEOL 4573 | Marine Biogeochemical Cycles | 3
GEOL 4753 | Volcanology | 3
MICR 3033 | Cell and Molecular Biology | 3
SOIL 3433 | Soil Genesis, Morphology, and Classification | 3
SOIL 4463 | Soil and Water Conservation | 3

Hours Subtotal 62

Electives
Select 5 hours.
May need to include 6 hours of a foreign language. See note 3.

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<tr>
<th>Hours Subtotal</th>
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<td>120</td>
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</table>

**College of Arts and Sciences Requirements**

1. **General Education Requirements**
   No more than two courses (or eight hours) from the major department may be used to meet General Education and College and Departmental Requirements. The General Education required English Composition, required U.S. History, required American Government, one required MATH or STAT course, and required foreign language for B.A. degrees do not count against the two-course maximum.

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), GEO, MATH, MICR, PBIO, PHYS, and STAT; or courses from other departments that carry an (A) or (N) general education designation.
   c. The required six hours of upper-division General Education may not include courses from the student’s major department. 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 3-hour 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.

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.
   b. 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**
   a. 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 allowed from one department.
   b. Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit.

5. **Teacher Certification**
   Students can satisfy the requirements for secondary schools teaching certification while earning a B.A. or B.S. in the College of Arts & Sciences. Those interested should see their Arts and Sciences advisor and the OSU Professional Education Unit in room 325 Willard.

**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 2024.