

# REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN GEOLOGY

## COLLEGE OF EARTH AND ENERGY

### THE UNIVERSITY OF OKLAHOMA

For Students Entering the Oklahoma State System for Higher Education  
**Summer 2010 through Spring 2011**

#### GENERAL REQUIREMENTS

Total Credit Hours . . . . . **125 •**  
 Total Upper-Division Credit Hours . . . . . **48**  
**Minimum Retention/Graduation Grade Point Averages:**  
 Minimum in OU Coursework . . . . . **2.00**  
 Minimum in Major Coursework- Combined and OU . . . . . **2.00**  
 Overall - Combined and OU . . . . . **2.00**

#### Environmental Geology Option

**B395**  
 Bachelor of Science  
 in Geology

**OU encourages students to complete at least 32 hours of applicable coursework each year to have the opportunity to graduate in four years.**

Year	FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
<b>FRESHMAN</b>	ENGL 1113, Principles of English Composition (Core I)	3	ENGL 1213, Principles of English Composition (Core I), or	3
	MATH 1823, Calculus & Analytic Geometry I (Core I)	3	EXPO 1213, Expository Writing (Core I)	
	CHEM 1315, General Chemistry (Core II)	5		
	GEOL 1114, Physical Geology for Science and Engr. Majors	4	MATH 2423, Calculus & Analytic Geometry II	3
			CHEM 1415, General Chemistry (Continued)	5
			<sup>5</sup> GEOL Elective	3-4
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>14-15</b>
<b>SOPHOMORE</b>	MATH 2433, Calculus & Analytic Geometry III	3	MATH 2443, Calculus & Analytic Geometry IV	3
	HIST 1483 or 1493, U.S. (Core IV)	3	PHYS 2514, General Physics for Engineering and Science	4
	GEOL 2224, Introduction to Mineral Sciences	4	Majors (Core II)	
	<sup>1</sup> Free Elective	3	GEOL 3223, Igneous and Metamorphic Petrology	3
	<sup>2</sup> General Education Understanding Artistic Forms (Core IV)	3	GEOL 3233, Sedimentary Petrology and Sedimentology	3
	<b>TOTAL CREDIT HOURS</b>	<b>16</b>	<b>TOTAL CREDIT HOURS</b>	<b>13</b>
<b>JUNIOR</b>	PHYS 2524, General Physics for Engr. & Science Majors	4	P SC 1113, American Federal Government (Core III)	3
	<sup>4</sup> C S 1313, Programming for Non-Majors	3	<sup>1</sup> Free Elective	3
	GEOL 3114, Structural Geology	4	<sup>3</sup> Science Elective	3
	GEOL 3513, Invertebrate Paleontology	3	<sup>2</sup> General Education Social Science (Core III)	3
			<sup>2</sup> General Education Western Civilization & Culture (Core IV)	3
	<b>TOTAL CREDIT HOURS</b>	<b>14</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>
<b>SENIOR</b>	ENGL 3153, Technical Writing	3	GEOL 3123, Introductory Field Geology	3
	GEOL 4113, Depositional Systems and Stratigraphy	3	GEOL 4633, Hydrogeology	3
	GEOL 3154, Environmental Geology	4	<sup>1</sup> Free Elective	3-4
	<sup>6</sup> One of the following: (see note below)	3	<sup>3</sup> Science Elective (outside the major)	3
	GPHY 4413, Global Geophysics		<sup>2</sup> General Education Non-Western Culture (Core IV)	3
GEOL 4223, Principles of Geochemistry				
<sup>3</sup> Science Elective (outside the College)	3			
	<b>TOTAL CREDIT HOURS</b>	<b>16</b>	<b>TOTAL CREDIT HOURS</b>	<b>15-16</b>

#### SUMMER

GEOL 4136, Field Geology (Capstone)—6 CREDIT HOURS

To obtain a BS in Geology with an Environmental Geology option, a student must take the same coursework as that for a BS in Geology except for 12 hours of geology/geophysics and allied science electives which are more narrowly specified. The student must satisfy 6 hours of geology/geophysics and allied science elective requirements by taking GEOL 3154, Environmental Geology and GEOL 4633, Hydrogeology. The student must also satisfy 9 additional hours of allied science elective requirements chosen from an approved course list.

- = Students who have not completed two years of the same foreign language in high school are required to take two college courses in the same foreign language. This additional coursework may add 6-10 hours to the minimum hours required for graduation.
- ‡ = In order to progress in your curriculum, and as a specific graduation requirement, a grade of C or better is required in each major course. The requirement includes both Geology (GEOL) and Geophysics (GPHY) courses. Students must also successfully complete **major** prerequisite courses with a grade of C or better before proceeding to the next course.
- <sup>1</sup> = Nine hours of faculty-adviser-approved electives. Foreign language courses taken to satisfy University-Wide Gen. Ed. requirements may be counted as lower-division free electives.
- <sup>2</sup> = To be chosen from the University-Wide General Education Approved Course List. Three hours of General Education must be upper-division outside the major.
- <sup>3</sup> = A minimum of 9 hours of courses chosen from the approved course list available from the ConocoPhillips School of Geology and Geophysics. Six hours must be upper-division (3000-4000-level) and three hours must be outside the College of Earth and Energy.
- <sup>4</sup> = This course fulfills the Computer Literacy Requirement for graduation as required by the Oklahoma State Regents for Higher Education.
- <sup>5</sup> = One Geology course from the following: 1003, 1013, 1024, 1133, 1203, 3633, 4213, 4533, or other non-required courses as approved by adviser. Upper-division courses require additional prerequisites.
- <sup>6</sup> = Only one of the following courses is required. GPHY 4413 is taught alternate fall semesters; GEOL 4223 is taught alternate spring semesters.

**NOTE:** No more than 52 hours of Geology coursework may be taken to fulfill the 125 minimum total credit hours required. Students must complete 36 of the last 60 credit hours in residence.

#### University-Wide General Education Requirements (minimum 40 hours)

Courses designated as Core I, II, III, IV, or Capstone are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list, including at least one upper-division Gen. Ed. course outside of the student's major. Courses graded S/U or P/NP will not apply.

<b>Core I</b>	<b>Symbolic and Oral Communication (9–19 hours, 3–5 courses)</b> • English Composition—6 hours, 2 courses • Mathematics—3 hours, 1 course • Foreign Language—0–10 hours, 2 courses in the same language, (can be met by successfully completing 2 years of the same foreign language in high school) • Other (courses such as communication, logic or public speaking)
<b>Core II</b>	<b>Natural Science (8 hours, 2 courses)</b> • Courses must be taken from different disciplines in the biological and/or physical sciences; one of which must include a laboratory.
<b>Core III</b>	<b>Social Science (6 hours, 2 courses)</b> • One course must be P SC 1113, "American Federal Government"
<b>Core IV</b>	<b>Humanities (12 hours, 4 courses)</b> • Understanding Artistic Forms—3 hours, 1 course • Western Civilization and Culture—6 hours, 2 courses, including HIST 1483 or HIST 1493 • Non-Western Cultures—3 hours, 1 course
<b>Senior Capstone Experience (3 hours, 1 course)</b>	