# 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 2013 through Spring 2014

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**Environmental Geology Option** 

<u>B395</u> 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
MAN	ENGL 1113, Principles of English Composition (Core I) MATH 1914, Differential and Integral Calculus I (Core I) § CHEM 1315, General Chemistry (Core II) GEOL 1114, Physical Geology for Science and Engr. Majors	3 4 5 4	ENGL 1213, Principles of English Composition (Core I), or EXPO 1213, Expository Writing (Core I) MATH 2924, Differential and Integral Calculus II § CHEM 1415, General Chemistry (Continued)	3 4 5
FRESHMAN			<sup>4</sup> GEOL Elective	3
	TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	15
MORE	MATH 2934, Differential and Integral Calculus III § HIST 1483 or 1493, U.S. (Core IV) GEOL 2224, Introduction to Mineral Sciences	4 3 4	PHYS 2514, General Physics for Engineering and Science Majors (Core II)  GEOL 3223, Igneous and Metamorphic Petrology  GEOL 3233, Sedimentary Petrology and Sedimentology	3 3
SOPHOMORE	<sup>2</sup> General Education Understanding Artistic Forms (Core IV)	3	1 Free Elective	3
S	TOTAL CREDIT HOURS	14	TOTAL CREDIT HOURS	13
JUNIOR	PHYS 2524, General Physics for Engr. & Science Majors GEOL 3114, Structural Geology GEOL 3513, Invertebrate Paleontology Free Elective	4 4 3 3	P SC 1113, American Federal Government (Core III)  Free Elective  Science Elective (not Geology)  General Education Social Science (Core III)  Core IV)	3 3 3 3 3
	TOTAL CREDIT HOURS	14	TOTAL CREDIT HOURS	15
)R	FINGL 3153, Technical Writing, or 5GEOL 3333, Geowriting GEOL 4113, Depositional Systems and Stratigraphy	3	GEOL 3123, Introductory Field Geology GEOL 3154, Environmental Geology	3 4
SENIOR	GEOL 4633, Hydrogeology  One of the following: (see note below) GPHY 4413, Global Geophysics GEOL 4223, Principles of Geochemistry  Science Elective (outside the College)	3 3	Free Elective  3 Science Elective (outside the major)  2 General Education Non-Western Culture (Core IV)	4 3 3
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	17
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 16 hours of geology/geophysics and allied science electives which are more narrowly specified. The student must satisfy 7 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.
- 1 = Thirteen hours of 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 faculty adviser approved courses in geophysics, geography, meteorology, biological sciences, chemistry, computer science, math, physics, and/or engineering. Six hours must be upper-division (3000-4000-level) and three hours must be outside the College of Earth and Energy.
- <sup>4</sup> = One Geology course from the following: 1003, 1013, 1024, 1133, 3633, 4213, 4533, or other non-required geology courses as approved by adviser (notation must be placed on Degree Navigator). Upper-division courses require additional prerequisites.
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  = GEOL 3333 is taught on an irregular basis and may be substituted for ENGL 3513, Technical Writing.
- <sup>6</sup> = Only one of the following courses is required. GPHY 4413 is taught fall semesters; GEOL 4223 is taught alternate spring semesters.
- § = MATH 1823, 2423, 2433, and 2443 may be substituted for MATH 1914, 2924 and 2934.

Senior Capstone Experience (3 hours, 1 course)

# **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.

#### Symbolic and Oral Communication (9–19 hours, 3–5 courses) Core I • 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) Natural Science (8 hours, 2 courses) Core II · Courses must be taken from different disciplines in the biological and/or physical sciences; one of which must include a laboratory. Social Science (6 hours, 2 courses) Core III •One course must be P SC 1113, "American Federal Government" Humanities (12 hours, 4 courses) Core IV • 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