

# REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN GEOPHYSICS

## MEWBORNE COLLEGE OF EARTH AND ENERGY

### THE UNIVERSITY OF OKLAHOMA

For Students Entering the Oklahoma State System for Higher Education  
**Summer 2017 through Spring 2018**

GENERAL REQUIREMENTS	
Total Credit Hours . . . . .	126*
Total Upper-Division Credit Hours . . . . .	48
<b>Minimum Retention/Graduation Grade Point Averages:</b>	
Minimum in OU Coursework . . . . .	2.50
Minimum in Major Coursework- Combined and OU . . . . .	2.50
Overall - Combined and OU . . . . .	2.50

**Geophysics**  
**B481**  
 Bachelor of Science  
 in Geophysics

**OU encourages students to complete at least 33 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 1914, Differential and Integral Calculus I (Core I)	4	EXPO 1213, Expository Writing (Core I)	4
	²CHEM 1315, General Chemistry (Core II)	5	§MATH 2924, Differential and Integral Calculus II	4
	GEOL 1114, Physical Geology for Science & Engineering Majors	4	²CHEM 1415, General Chemistry	5
			GEOL 1124, Earth History	4
	<b>TOTAL CREDIT HOURS</b>	<b>16</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>
<b>SOPHOMORE</b>	§MATH 2934, Differential and Integral Calculus III	4	HIST 1483 or 1493, U.S. (Core IV)	3
	PHYS 2514, General Physics for Engineering & Science Majors (Core II)	4	PHYS 2524, General Physics for Engineering & Science Majors	4
	C S 1313, Programming for Non-Majors with C	3	P SC 1113, American Federal Government (Core III)	3
	GEOL 2224, Introduction to Mineral Sciences	4	GEOL 3233, Sedimentary Petrology and Sedimentology	3
	¹General Education Western Civilization & Culture (Core IV)	3	¹General Education Understanding Artistic Forms (Core IV)	3
	<b>TOTAL CREDIT HOURS</b>	<b>18</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>
<b>JUNIOR</b>	MATH 3113, Introduction to Ordinary Differential Equations	3	PHYS 3043, Physical Mechanics I	3
	GEOL 3114, Structural Geology	4	Geology Math Elective (upper-division)	3
	GPHY 4413, Global Geophysics	3	Geophysics Elective (upper-division)	3
	Physics Elective (upper-division)	3	Geology Elective (upper-division)	3
			¹General Education Social Sciences (Core III)	3
	<b>TOTAL CREDIT HOURS</b>	<b>13</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>
<b>SENIOR</b>	ENGL 3153, Technical Writing, or	3	GEOL 3123, Introductory Field	3
	³GEOL 3333, Geowriting	4	Geology Elective (upper-division)	3
	GPHY 4874, Seismic Exploration	4	Geophysics Elective (upper-division)	3
	GPHY 5864, Gravimetric & Magnetic Exploration	4	¹General Education Non-Western Culture (Core IV)	3
	Physics Elective (upper-division)	3		
Geophysics Elective (upper-division)	3			
	<b>TOTAL CREDIT HOURS</b>	<b>17</b>	<b>TOTAL CREDIT HOURS</b>	<b>12</b>
<b>SUMMER</b>		GPHY 4133, Colorado Field Experience (Capstone) — 3 HOURS		

\* = 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 course listed in the curriculum. Students must also successfully complete all prerequisite courses with a grade of C or better before proceeding to the next course.  
 ¹ = To be chosen from the University-Wide General Education Approved Course List. Three hours of general education outside the major must be upper-division.  
 ² = CHEM 1335 and 1435 may be substituted for CHEM 1315 and 1415.  
 ³ = GEOL 3333 is taught on an irregular basis and may be substituted for ENGL 3513 Technical Writing  
 § = Math 1823, 2423, 2433, and 2443 may be substituted for Math 1914, 2924 and 2934.

#### 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 (7 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>	