REQUIREMENTS FOR THE BACHELOR OF SCIENCE
MEWBOURNE COLLEGE OF EARTH AND ENERGY
THE UNIVERSITY OF OKLAHOMA

Academic Year	General Requirements	Program
For Students Entering the Oklahoma State System for Higher Education **Summer 2024 through Spring 2025**	Minimum Total Credit Hours ..... **120** Minimum Upper-Division Hours ..... **48** **Minimum Retention/Graduation Grade Point Averages:** Overall - Combined and OU ..... **2.50** Major - Combined and OU **2.50**	**Paleontology** **B760** Bachelor of Science

OU encourages students to complete at least 30 hours of applicable coursework each year to have the opportunity to graduate in 4 years.

Minimum Total Credit Hours: 120
Minimum Upper-Division Hours: 48

Overall GPA - Combined and OU: 2.50
Major GPA - Combined and OU: 2.50

Program Code: B760

General Education and College Requirements

Courses for fulfillment of General Education and college requirements must be from the approved General Education course list at http://www.ou.edu/content/gened/courses.html. **Courses graded P/NP will not apply**

UNIVERSITY-WIDE GENERAL EDUCATION (MINIMUM 40 HOURS) AND COLLEGE REQUIREMENTS

At least three hours of Upper-Division General Education coursework must be completed **outside the major.**

Code	Title	Credit Hours
Core Area I: Symbolic and Oral Communication		
English Composition (6 hours)		
ENGL 1113	Principles of English Composition	3
ENGL 1213	Principles of English Composition	3
or EXPO 1213	Expository Writing	
Language (0-10 hours)		
(0-10 hours in the same language) Students who have not completed two years of the same language in high school are required to take two college courses in the same language		
Beginning Course		0-5
Beginning Course, continued		0-5
Mathematics (minimum 3 hours)		
MATH 1823	Calculus and Analytic Geometry I [1]	3-4
or MATH 1914	Differential and Integral Calculus I	
Core Area II: Natural Science (minimum 7 hours, 2 courses)		
CHEM 1315	General Chemistry (Science with Lab) [1]	5
or CHEM 1335	General Chemistry I: Signature Course	
PHYS 2514	General Physics for Engineering and Science Majors [1]	4
Core Area III: Social Science (6 hours)		
P SC 1113	American Federal Government	3
Choose one course from the General Education Social Science list		3
Core Area IV: Arts and Humanities		
Artistic Forms (3 hours)		
Choose one course from the General Education Artistic Forms list.		3
Western Culture (6 hours)		
HIST 1483	United States to 1865	3
or HIST 1493	United States, 1865 to the Present	
Choose one course from the General Education Western Culture list (Excluding HIST 1483 and HIST 1493)		3
World Culture (3 hours)		
Choose one course from the General Education World Culture list		3
Core Area V: First Year Experience (3 hours)		
Choose one course		3
Total Credit Hours		**39-50**

[1] Mewborne College of Earth and Energy Sciences requirements that also satisfy University General Education requirements.

ADDITIONAL MEWBORNE COLLEGE OF EARTH & ENERGY REQUIREMENT

Code	Title	Credit Hours
PHYS 2524	General Physics for Engineering and Science Majors	4
Total Credit Hours		**4**

Free Electives

Electives to bring total applicable hours to 120 including 48 upper-division hours.

Major Requirements

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. All prerequisite courses must also be completed with a grade of C or better before proceeding to the next course.

Code	Title	Credit Hours
GEOL 1114	Physical Geology for Science and Engineering Majors	4
GEOL 1124	Earth History	4
GEOL 2224	Introduction to Mineral Sciences	4
GEOL 3223	Igneous and Metamorphic Petrology	3
GEOL 3233	Sedimentary Petrology and Sedimentology	3
GEOL 3114	Structural Geology	4
GEOL 4113	Depositional Systems and Stratigraphy	3
GEOL 3513	Fundamentals of Invertebrate Paleontology	3
GEOL 3123	Introductory Field Geology	3
GEOL 4513	Evolutionary Paleobiology [1]	3
GEOL 4413	[1]	3
GEOL 4136	Field Geology	6
GPHY 4413	Global Geophysics	3
or GEOL 4223	Principles of Geochemistry (Slashlisted with 5223)	
Total Credit Hours		**46**

[1] GEOL 4513, GEOL 4413 and BIOL 4204 are taught in alternate years in the Junior and Senior Spring semesters. Students should plan their coursework based on when the courses are offered. If GEOL 4513 is offered Junior Spring, then GEOL 4413 and BIOL 4204 must be taken Senior Spring. If GEOL 4413 and BIOL 4204 are offered Junior Spring, then GEOL 4513 must be taken Senior Spring.

Major Support Requirements

Code	Title	Credit Hours
MATH 2423	Calculus and Analytic Geometry II [1]	3
MATH 2433	Calculus and Analytic Geometry III [1]	3
CHEM 1415	General Chemistry (Continued)	5
or CHEM 1435	General Chemistry II: Signature Course	
BIOL 1124	Intro Biol: Molecule/Cell/Phys	4
BIOL 2013		3
BIOL 3403	Principles of Ecology	3
BIOL 4204	Vertebrate Paleobiology	4
ENGL 3153	Technical Writing	3
or GEOL 3333	Geowriting	
Math/Science Elective (list maintained by the department) [2]		3
Total Credit Hours		**31**

[1] MATH 1914 and MATH 2924 may be substituted for MATH 1823, MATH 2423, MATH 2433, These tracks have a difference of one credit hour, so those enrolling in the 4 credit hour courses may need to enroll in 1 additional hour of free elective to meet the 120 total credits.

[2] Students need to select one course in the areas of statistics, quantitative and computer programming. The School of Geosciences maintains list of approved courses.

More information in the catalog: (http://ou-public.courseleaf.com/mewbourne-earth-energy/geosciences/paleontology-bachelor-science/).

Suggested Semester Plan of Study

Students who have not completed two years of the same language in high school are required to take two college courses in the same 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 in this curriculum. Students must also successfully complete **all** prerequisite courses with a grade of C or better before proceeding to the next course.

Year		FIRST SEMESTER	Hours		SECOND SEMESTER	Hours
FRESHMAN	ENGL 1113	Principles of English Composition (Core I)	3	ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
	MATH 1823	Calculus and Analytic Geometry I [1]	3	MATH 2423	Calculus and Analytic Geometry II [1]	3
	GEOL 1114	Physical Geology for Science and Engineering Majors	4	CHEM 1315	General Chemistry [2]	5
		First Year Experience (Core V) [3]	3	GEOL 1124	Earth History	4
		General Education Artistic Forms (Core IV) [3]	3			
		CREDIT HOURS	**16**		**CREDIT HOURS**	**15**
SOPHOMORE	MATH 2433	Calculus and Analytic Geometry III [1]	3	PHYS 2514	General Physics for Engineering and Science Majors (Core II)	4
	GEOL 2224	Introduction to Mineral Sciences	4	GEOL 3233	Sedimentary Petrology and Sedimentology	3
	BIOL 1124	Intro Biol: Molecule/Cell/Phys	4	GEOL 3223	Igneous and Metamorphic Petrology	3
	CHEM 1415	General Chemistry (Continued) [2]	5		Math/Science Elective from approved list maintained by the department [7]	3
		CREDIT HOURS	**16**		**CREDIT HOURS**	**13**
JUNIOR	GEOL 3114	Structural Geology	4	GEOL 3123	Introductory Field Geology	3
	GEOL 3513	Fundamentals of Invertebrate Paleontology	3	ENGL 3153 or GEOL 3333	Technical Writing 5 or Geowriting[5]	3
	GEOL 4113	Depositional Systems and Stratigraphy	3		Choose one (offered alternating Spring semesters): [4]	3-7
	PHYS 2524	General Physics for Engineering and Science Majors	4	GEOL 4513	Evolutionary Paleobiology	
				GEOL 4413 & BIOL 4204	and Vertebrate Paleobiology	
					General Education Western Culture (Core IV) [3]	3
		CREDIT HOURS	**14**		**CREDIT HOURS**	**12-16**
		SUMMER				
	GEOL 4136	Field Geology	6			
		CREDIT HOURS	**6**			
SENIOR	GPHY 4413 or GEOL 4223	Global Geophysics 6 or Principles of Geochemistry (Slashlisted with 5223)[6]	3		Choose one (offered alternating Spring semesters): [4]	3-7
	BIOL 2013		3	GEOL 4513	Evolutionary Paleobiology	
	BIOL 3403	Principles of Ecology	3	GEOL 4413 & BIOL 4204	and Vertebrate Paleobiology	
	P SC 1113	American Federal Government (Core III)	3	HIST 1483 or HIST 1493	United States to 1865 (Core IV) or United States, 1865 to the Present	3
		General Education Social Science (Core III) [3]	3		General Education World Culture (Core IV) [3]	3
		CREDIT HOURS	**15**		**CREDIT HOURS**	**9-13**

1 MATH 1914 and MATH 2924 may be substituted for MATH 1823, MATH 2423, MATH 2433, These tracks have a difference of one credit hour, so those enrolling in the 4 credit hour courses may need to enroll in 1 additional hour of free elective to meet the 120 total credits.

2 CHEM 1335 and CHEM 1435 may be substituted for CHEM 1315 and CHEM 1415.

3 To be chosen from the University-Wide General Education Approved Course List. Three hours of general education must be upper-division outside the major.

4 GEOL 4513, GEOL 4413 and BIOL 4204 are taught in alternate years in the Junior and Senior Spring semesters. Students should plan their coursework based on when the courses are offered. If GEOL 4513 is offered Junior Spring, then GEOL 4413 and BIOL 4204 must be taken Senior Spring. If GEOL 4413 and BIOL 4204 are offered Junior Spring, then GEOL 4513 must be taken Senior Spring.

5 GEOL 3333 is taught on an irregular basis and may be substituted for ENGL 3513.

6 Only one of the following courses is required. GPHY 4413 is taught alternate fall semesters; GEOL 4223 is taught alternate spring semesters.

7 Students need to select one course in the areas of statistics, quantitative and computer programming. The School of Geosciences maintains list of approved courses.