

**REQUIREMENTS FOR THE BACHELOR OF SCIENCE  
JEANNINE RAINBOLT COLLEGE OF EDUCATION  
THE UNIVERSITY OF OKLAHOMA**

Academic Year
For Students Entering the Oklahoma State System for Higher Education <b>Summer 2024 through Spring 2025</b>

General Requirements	
Minimum Total Credit Hours .....	124
Minimum Upper-Division Hours .....	40
<b>Minimum Retention/Graduation Grade Point Averages:</b>	
Overall - Combined and OU .....	2.75
Major - Combined and OU .....	2.75

Program
<b>Science Education: Earth Science</b>  B832  Bachelor of Science

OU encourages students to complete at least 31 hours of applicable coursework each year to have the opportunity to graduate in 4 years.

**Minimum Total Credit Hours: 124**  
**Minimum Upper-Division Hours: 40**

**Overall GPA - Combined and OU: 2.75**  
**Major GPA - Combined and OU: 2.75**

**Program Code: B832**

### General Education and College Requirements

Courses taken to fulfill the University General Education Requirements must be chosen from the approved General Education course list published in the Class Schedule or at <http://www.ou.edu/gened/courses>. The following courses meet minimum University, College, and State General Education Requirements.

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

Code	Title	Credit Hours
<b>Core Area I: Symbolic and Oral Communication</b>		
<i>Communication Skills (9 hours)</i>		
ENGL 1113	Principles of English Composition (Core I-EN1)	3
ENGL 1213	Principles of English Composition (Core I-EN2)	3
or EXPO 1213	Expository Writing	
COMM 1113	Principles of Communication (Core I)	3
or COMM 2613	Public Speaking	
<i>Language (0-10 hours)</i> <span style="float:right">0-10</span>		
University-Wide General Education Requirement: Choose two college-level courses in a single language; may be satisfied by successful completion of 2 years in a single language in high school (Core I)		
Oklahoma State Regents for Higher Education Requirement: Teacher candidates must demonstrate conversational skills at a novice-high level in a language other than English OR demonstrate the knowledge and skills necessary to address the needs of Emergent Bilingual (English Learner) students in the P-12 classroom and are proficient in the strategies required for successful delivery of P-12 instruction in that area <sup>1</sup>		
<i>Mathematics (6 hours)</i>		
MATH 1823	Calculus and Analytic Geometry I (or higher; Core I-MATH)	3
MATH 2423	Calculus and Analytic Geometry II (or higher; Core I-MATH)	3
<b>Core Area II: Natural Science (8 hours)</b>		
BIOL 1124	Intro Biol: Molecule/Cell/Phys (Core II-NSL)	4
GEOL 2014	The Earth System (Core II-NSL)	4
<b>Core Area III: Social Science (6 hours)</b>		

P SC 1113	American Federal Government (Core III-PSC)	3
GEOG 3253	Environmental Conservation (Core III-SS)	3
<b>Core Area IV: Arts and Humanities (12 hours)</b>		
HIST 1483	United States to 1865 (Core IV-HIST)	3
or HIST 1493	United States, 1865 to the Present	
HSTM 3013	History of Science to the Age of Newton (Western Culture, Core IV-WC)	3
or HSTM 3023	History of Science Since the Seventeenth Century	
Choose one course from Core IV-Artistic Forms (Core IV-AF)		3
Choose one of the following Core IV-World Culture (Core IV-WDC):		3
HSTM 3313	Science and Technology in Asian History	
HSTM 3453	Science and Civilization in Islam	
HSTM 3483	Technology, Politics, and International Development	
<b>Core Area V: First Year Experience (3 hours)</b>		
Choose one course (Core V-FYE)		3
<b>Total Credit Hours</b>		<b>44-54</b>

<sup>1</sup> The novice-high level language requirement may be satisfied by classical, modern, Native or American Sign Language. Courses that demonstrate knowledge and skills necessary to address the needs of Emergent Bilingual students are determined by the College of Education.

The 44 above hours, along with CHEM 1315, CHEM 1415, ASTR 1514, GEOL 1024, and METR 2603 (11 hours needed, total) in the Specialized Education requirements, comprise the 55 required Liberal Arts hours.

## Major Requirements

- Students must maintain a minimum of 2.75 grade point average with no grade less than a C in the Professional Education and Specialized Education courses for graduation.

*Certification: To be fully certified, students must pass Certification Examinations for Oklahoma Educators and apply for a license.*

Code	Title	Credit Hours
<b>Professional Education (37 hours)</b>		
EIPT 3473	Learning, Development, and Assessment for Teachers <sup>1</sup>	3
EDSP 3053	Understanding and Accommodating Exceptional Learners	3
EIPT 3043	Learning with Educational Technologies	3
EDS 4003	Schools in American Cultures <sup>1</sup>	3
EIPT 3483	Motivation and Classroom Management for Teachers	3
EDWL 4323	Foundations and Practice for Bi/Multilingual Learners PK-12	3
EDSC 4513	Teaching Science in Secondary Schools	3
EDSC 4533	Advanced Methods in Science Teaching <sup>1</sup>	3
EDUC 4060	Teaching Experiences in the Secondary School <sup>1,2</sup>	10
ILAC 4243	Student Teaching Seminar <sup>2</sup>	3
<b>Specialized Education (43 hours)</b>		
<i>Biological Science - Satisfied under Gen Ed</i>		
<i>Chemistry</i>		
CHEM 1315 & CHEM 1415	General Chemistry and General Chemistry (Continued) <sup>3</sup>	10
<i>Physics</i>		
Choose one of the following 10 hour Physics tracks:		10
PHYS 1205 & PHYS 1215	Introductory Physics I for Physics Majors and Introductory Physics II for Physics Majors	
OR		
PHYS 2514 & PHYS 1311	General Physics for Engineering and Science Majors and General Physics Lab I	
PHYS 2524 & PHYS 1321	General Physics for Engineering and Science Majors and General Physics Lab II	
<i>Earth &amp; Space Science</i>		
ASTR 1514	Astronomy: Exploring the Universe with Laboratory <sup>3</sup>	4
GEOL 1024	The History of the Earth and Life <sup>3</sup>	4
GEOL 1114	Physical Geology for Science and Engineering Majors	4
METR 1014	Introduction to Weather and Climate	4
METR 2603	Severe and Unusual Weather <sup>3</sup>	3
METR/GEOL 4533	Earth's Past Climate	3
<b>Science Electives</b>		
If additional hours are needed to meet the 124 total hours, choices include:		1

ASTR 1523	Life in the Universe	
ASTR 2513	Introductory Astrophysics	
GEOL 3633	Introduction to Oceanography	
GIS 2023	Introduction to Spatial Thinking and Computer Mapping	
GIS 4133	Fundamentals of Remote Sensing	
<b>Total Credit Hours</b>		<b>80</b>

<sup>1</sup> These courses require field experience.

<sup>2</sup> These courses are taken together in the final semester.

<sup>3</sup> These 14 hours along with the 41 hours listed in General Education comprise the 55 hours required for Liberal Arts & Sciences.

More information in the catalog: (<http://ou-public.courseleaf.com/rainbolt-education/instructional-leadership-academic-curriculum/science-education-earth-science-bachelor-science/>).

## Certification and Degree Requirements

**Field Experiences:** Transfer students without appropriate field experiences may be required to enroll in EDUC 2400.

**Pass/No Pass Enrollment:** Only general education electives may be taken under the pass/no pass option.

**Residence Requirements:** Students must complete either the last 30 hours or 45 of the last 60 hours after being fully admitted to a teacher education program to satisfy this requirement.

**Requirements to be Completed to be Eligible for Student Teaching Internship:** Students must be in good standing and have completed all baccalaureate degree requirements with the exception of the appropriate internship course itself and the courses taken with it in the final semester per their major requirements.

**Junior College Transfer Students:** Students transferring from a junior college may use the transferred credit to meet certain lower-division course requirements only; that is, freshman and sophomore-level courses.

**Degree Completion Responsibility:** Although the Dean's Office checks each student's records, **the responsibility for meeting degree requirements lies with the student** and not with the advisor or the Dean. Each student should obtain a copy of his or her requirements for graduation and check it regularly as he or she completes his or her degree program.

**Graduation Application:** The final step to be completed by the student before graduation is the filing of an official Application for Graduation. The Application for Graduation should be filled out online by May 1 for fall graduation, December 1 for spring graduation, and March 1 for summer graduation. **The student's degree will not be conferred, nor any completion statement entered on their transcript, until the required application is filed.**

## Admission & Retention Requirements

It is the responsibility of the student to read and be familiar with the requirements for Admission to, and Retention in, the Jeannine Rainbolt College of Education. The current Admission and Retention policies can be found in the college's overview page in the OU General Catalog, under the Undergraduate tab here: <http://ou-public.courseleaf.com/rainbolt-education/#undergraduatetext>.

## Suggested Semester Plan of Study

This plan shows *one possible grouping* of courses that would allow students to graduate in four years. Please refer to the front of the degree checklist for official requirements. Students must consult with College of Education academic advisors to verify that courses selected each semester fulfill the recommended plan and satisfy university, College of Education, and major requirements.

Year	FIRST SEMESTER		Hours	SECOND SEMESTER		Hours
FRESHMAN	ENGL 1113	Principles of English Composition ( Core I-EN1 )	3	ENGL 1213 or EXPO 1213	Principles of English Composition ( Core I-EN2 ) or Expository Writing	3
	MATH 1823	Calculus and Analytic Geometry I ( or higher) (Core I-MATH )	3	MATH 2423	Calculus and Analytic Geometry II ( or higher, Core I-MATH )	3
	HIST 1483 or HIST 1493	United States to 1865 ( Core IV-HIST ) or United States, 1865 to the Present	3	P SC 1113	American Federal Government ( Core III-PSC )	3
	BIOL 1124	Intro Biol: Molecule/Cell/Phys ( Core II-NSL )	4	GEOL 1024	The History of the Earth and Life	4
		First Year Experience (Core V-FYE)	3	GEOL 2014	The Earth System ( Core II-NSL )	4
	<b>CREDIT HOURS</b>		<b>16</b>	<b>CREDIT HOURS</b>		<b>17</b>
SOPHOMORE	EIPT 3473	Learning, Development, and Assessment for Teachers	3	EDSP 3053	Understanding and Accommodating Exceptional Learners	3
		Understanding Artistic Forms (Core IV-Artistic Forms)	3	EDSC 4513	Teaching Science in Secondary Schools	3
	METR 1014	Introduction to Weather and Climate	4	CHEM 1415	General Chemistry (Continued)	5
	CHEM 1315	General Chemistry	5	GEOL 1114	Physical Geology for Science and Engineering Majors	4
	COMM 1113 or COMM 2613	Principles of Communication ( Core I ) or Public Speaking	3			
	<b>CREDIT HOURS</b>		<b>18</b>	<b>CREDIT HOURS</b>		<b>15</b>
JUNIOR	EDS 4003	Schools in American Cultures	3	EIPT 3043	Learning with Educational Technologies	3
	HSTM 3013 or HSTM 3023	History of Science to the Age of Newton ( Core IV-WC ) or History of Science Since the Seventeenth Century	3	GEOG 3253	Environmental Conservation ( Core III-SS )	3
		Choose one of the following:	5		Choose one of the following:	5
	PHYS 1205	Introductory Physics I for Physics Majors		PHYS 1215	Introductory Physics II for Physics Majors	
	PHYS 2514 & PHYS 1311	General Physics for Engineering and Science Majors and General Physics Lab I		PHYS 2524 & PHYS 1321	General Physics for Engineering and Science Majors and General Physics Lab II	
	ASTR 1514	Astronomy: Exploring the Universe with Laboratory	4	METR 2603	Severe and Unusual Weather	3
				Science Elective from approved list	1	
	<b>CREDIT HOURS</b>		<b>15</b>	<b>CREDIT HOURS</b>		<b>15</b>
SENIOR	EDSC 4533	Advanced Methods in Science Teaching	3	EDUC 4060	Teaching Experiences in the Secondary School	10
	EIPT 3483	Motivation and Classroom Management for Teachers	3	ILAC 4243	Student Teaching Seminar	3
	EDWL 4323	Foundations and Practice for Bi/Multilingual Learners PK-12	3			
	GEOL 4533 or METR 4533	Earth's Past Climate or Earth's Past Climate	3			
		Choose one of the following (Core IV-WDC):	3			
	HSTM 3313	Science and Technology in Asian History				
	HSTM 3453	Science and Civilization in Islam				
HSTM 3483	Technology, Politics, and International Development					
	<b>CREDIT HOURS</b>		<b>15</b>	<b>CREDIT HOURS</b>		<b>13</b>