GEOLOGY: SECONDARY TEACHER CERTIFICATION, BS

Degree Requirements

Requirements for Students Matriculating in or before Academic Year 2026-2027. Learn more about University Academic Regulation 3.1 (https://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.50
Total Hours: 120

Code	Title	Hours
General Education Requirements		
English Composition		
See Academic Regulation 3.5 (https://catalog.okstate.edu/university-academic-regulations/#english-composition)		
ENGL 1113	Composition I	3
or ENGL 1313	Critical Analysis and Writing I	
Select one of the following:		3
ENGL 1213	Composition II	
ENGL 1413	Critical Analysis and Writing II	
ENGL 3323	Technical Writing	
American History & Government		
HIST 1103	Survey of American History	3
or HIST 1483	American History to 1865 (H)	
or HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
Quantitative Thought & Logical Reasoning (Q)		
MATH 2144	Calculus I (Q) [1,2]	4
Reasoning in the Natural Sciences (N)		
Must include one Laboratory-Based Inquiry (L) course		
ASTR 1023	Stars, Galaxies, Universe (N)	3
CHEM 1314	Chemistry I (LN)	4
CHEM 1515	Chemistry II (LN)	5
Understanding Humanities-Human Heritage & Cultures (H)		
Courses designated (H)		3
Courses designated (DH)		3
Exploring Society & Human Behavior (S)		
Course designated (S)		3
Diversity (D)		
Courses designated (D)		
May be paired with another designated course		
Global Cultural Competency (G)		
Courses designated (G)		3
Additional General Education		
Additional general education credit hours may be required to meet the total 40-hour minimum of general education credit if courses carry more than one general education designation and can be used to meet multiple general education designation hour requirements above.		
Courses designated (Q), (H), (N), (S), (D), (G), or (F).		0
Hours Subtotal		**40**
College/Departmental Requirements		
UNIV 1111	First Year Seminar (or other approved first-year seminar course)	1
Arts & Humanities		
PHIL 3933	Creation and Evolution	3
Natural & Mathematical Sciences		
PHYS 2014	University Physics I (LN) [1,2]	4
or PHYS 1114	College Physics I (LN)	
STAT 2013	Elementary Statistics (Q)	3
or STAT 4013	Statistical Methods I (Q)	
Select four hours from the following:		4
BIOL 1114	Introductory Biology (LN) [1,2]	
BIOL 1113 & BIOL 1111	Introductory Biology (N) and Introductory Biology Laboratory (LN) [1,2]	
Foreign Language		
See note 3		0
0-6 hours		
Upper-Division General Education		
Select 6 hours outside major department. See note 2.c.		
Hours Subtotal		**15**
Major Requirements		
Minimum GPA 2.50 and minimum grade of "C" or "P" for courses in Geology Core and those denoted with [2]		
GEOL 1214	Introductory Geological Processes (LN) [1,2]	4
or GEOL 1114	Physical Geology (LN)	
GEOL 1224	Evolution of the Earth (LN)	4
GEOL 2464	Rocks and Minerals	4
GEOL 2773	Introduction to Planetary Geology (N)	3
GEOL 3014	Structural Geology	4
GEOL 3034	Principles of Stratigraphy and Sedimentology	4
GEOL 3503	Environmental Geology (N)	3
GEOL 4503	Introduction to Oceanography (N)	3
GEOG 3023	Climatology (N)	3
or GEOG 3033	Meteorology (N)	
Secondary Education Professional Core		
Minimum GPA 2.50 and minimum grade of "C" or "P" in each course		
SMED 1012	Inquiry Approaches to Teaching	2
SMED 3013	Knowing and Learning in K-12 Education	3
SMED 4023	Advanced Field Placement in Mathematics and Science	3
SMED 4611	Authentic Research in the Science Classroom	1
SMED 4613	Teaching the Nature of Science Through an Inquiry Approach [3]	3
SMED 4713	Teaching and Learning Science in the Secondary School [3]	3
SMED 4723	Senior Seminar in Secondary Mathematics and Science Education [3]	3
SPED 3202	Educating Exceptional Learners	2
CIED 3313	Field Experience in the Secondary Schools	3

CIED 4720	Internship in the Secondary Classroom (6 hours) [3]	6
Hours Subtotal		**61**
Electives		
Select 4 hours		4
May need to include 6 hours of a foreign language (see note 3)		
Suggested electives for Physical Science Certification: CHEM 3013 or CHEM 3015 and PHYS 1214 or PHYS 2114		
MATH 1513 and MATH 1813 required for students who do not place directly into MATH 2144		
Hours Subtotal		**4**
Total Hours		**120**

[1] College and Departmental Requirements that may be used to meet General Education Requirements.

[2] Minimum GPA 2.50 and minimum grade of "C" or "P" for courses in Geology Core and those denoted with [2].

[3] Full admission to Professional Education required.

Other Requirements

- See the College of Arts and Sciences Requirements.
- **Upper-Division Credit:** Total hours must include at least 40 hours in courses numbered 3000 or above.

College of Arts and Sciences Requirements

1. **Hours in One Department:** For B.A. and B.S. degrees, no more than 54 hours in one department may be required to meet degree requirements. Courses used to satisfy the General Education English Composition, U.S. History, American Government, and Mathematics or Statistics requirements will not count toward the 54-hour maximum required from one department.
2. **A&S College/Departmental Requirements**
   a. Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, DANC, ENGL (except ENGL 3323 Technical Writing) HIST, MUSI, PHIL (except PHIL 1313 Logic and Critical Thinking (Q), PHIL 3003 Symbolic Logic (Q) and PHIL 4003 Mathematical Logic and Computability), REL, TH, and foreign languages.
   b. Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOC, BIOL, CHEM, CS (except CS 4883 Social Issues in Computing), GEOL, MATH, MICR, PBIO, PHYS, and STAT; or courses from other departments that carry an (Q) or (N) general education designation.
   c. Six upper-division hours are required from General Education or any CAS courses outside the student's major department (https://catalog.okstate.edu/college-arts-sciences-major-departments/). This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
   d. Non-Western Studies Requirement for B.A. and B.F.A.; One course in Non-Western Studies (N.W.). This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
   e. The College of Arts & Sciences requires a minimum 2.0 GPA in all major requirements and a minimum 2.0 GPA in all major-prefix courses applied to the degree.
3. **Foreign Language Proficiency**
   a. The foreign language requirement for the B.A. may be satisfied by 9 hours college credit in the same language, which must include 3 hours at the 2000-level, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement. Currently Arabic and Mvskoke are not offered at the 2000-level at OSU.
   b. The foreign language requirement for the B.S., B.M. and B.F.A. may be satisfied by presenting a high school transcript which demonstrates two years of study of a single foreign language (passing grades at second-year level of study). It may also be satisfied by 6 hours college credit in the same language, which must include language courses 1713 and 1813, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement.
   c. In addition to a. and b., students pursuing teacher certification must meet novice-high foreign language proficiency by presenting a high school transcript which demonstrates two years of study of a single foreign language with no grade below B. Or, students may complete 3 hours college credit in a single language with no grade below C (or pass an advanced standing examination, College Level Examination Program (CLEP) exam, or Oral Proficiency Interview developed by the American Council on the Teaching of Foreign Languages, equivalent to 3 hours of college credit.) Or, students may meet the requirement by transfer of documentation of meeting the foreign language competency from one of the teacher education programs in the State of Oklahoma approved by the Oklahoma State Regents for Higher Education.
4. **Exclusions**. Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit.

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2032.