GEOLOGY: EARTH SCIENCE TEACHING, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences in Geology (Sciences & Letters), Earth Science Teaching Concentration

The **Sciences and Letters Curriculum in Geology (BSLAS)**, administered by the Department of Geology, is designed for students who want a more flexible course of study than is provided by the Specialized Curriculum in Geology and Geophysics. It may be used by those wishing to obtain a more liberal education and/or background in geology for use in fields such as anthropology, business, mineral economics, regional planning, journalism, law, sales, or library and information science. It is not intended to prepare a student for graduate work in the geological sciences unless the student selects additional courses in mathematics, chemistry, and physics comparable to those required in the Specialized Geology and Geophysics Curriculum. Students must choose from the following: Geology, Earth and Environmental Sciences, or Earth Science Teaching. The Earth Science Teaching Concentration is designed for students preparing to teach earth science at the secondary school level.

Undergraduate Degree Programs in Geology

For the Degree of Bachelor of Science in Liberal Arts and Sciences

Students select one of the following in consultation with an adviser:

- Major in Geology (Sciences and Letters) (http://catalog.illinois.edu/undergraduate/las/geology-bslas/)
- Major in Geology (Sciences and Letters), Earth and Environmental Sciences Concentration (http://catalog.illinois.edu/undergraduate/las/geology-bslas/earth-environmental-sciences/)
- Major in Geology (Sciences and Letters), Earth Science Teaching Concentration (p. 1)

For the Degree of Bachelor of Science in Geology

Students select one of the following in consultation with an adviser:

- Major in Geology (Specialized Curriculum) (http://catalog.illinois.edu/undergraduate/las/geology-bs/)
- Major in Geology (Specialized Curriculum), Environmental Geology Concentration (http://catalog.illinois.edu/undergraduate/las/geology-bs/environmental-geology/)
- Major in Geology (Specialized Curriculum), Geophysics Concentration (http://catalog.illinois.edu/undergraduate/las/geology-bs/geophysics/)

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This concentration fulfills state licensure requirements to teach high school (grades 9-12) Earth and Space Science through the AP/honors level and biology, chemistry, environmental science and physics up to but not including the AP/honors level.

Time to degree completion varies. Minimum time to completion is 8 semesters. Some students require 10 semesters. Transfer students may need 10 total semesters combined to complete the program. Please see the LAS section in the transfer handbook (https://transferhandbook.illinois.edu/las/open-majors/) for more information.

In order to remain in good standing in this program and be recommended for licensure, candidates are required to maintain a cumulative grade-point average of 2.5 (A= 4.0).

Departmental Distinction: Students majoring in Geology can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

- **Distinction**: A minimum cumulative grade point average of 3.3, and must present evidence of exemplary teaching
- **High Distinction**: A minimum cumulative grade point average of 3.5, and must present evidence of exemplary teaching
- **Highest Distinction**: A minimum cumulative grade point average of 3.7, and must present evidence of exemplary teaching

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) requirements including the campus general education language requirement.

Minimum required major and supporting course work: Normally equates to 55-59 hours in the concentration and 39 hours for the Teacher Education Minor in Secondary School Teaching. Twelve hours of 300- and 400-level in the major must be taken on this campus.

Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Foundation Courses		
The following courses must be completed or in progress when students apply to the Secondary Education minor.		
GEOL 107	Physical Geology	4
GEOL 208	History of the Earth System	4
GEOL 333	Earth Materials and the Env (Students can substitute GEOL 333 with GEOL 432)	4
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
or MATH 234	Calculus for Business I	
Additional Required Coursework		
Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/secondary/)		39
Select one group of courses:		5-6
ASTR 100 & ASTR 131 & ASTR 132	Introduction to Astronomy and and	
or		
ASTR 121 & ASTR 122	Solar System and Worlds Beyond and Stars and Galaxies	
ATMS 100	Introduction to Meteorology	3
IB 100	Biology in Today's World	3

Select one group of courses:		4
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
or		
CHEM 202 & CHEM 203	Accelerated Chemistry I and Accelerated Chemistry Lab I	
GEOL 117	The Oceans	3
GEOL 143	History of Life	3
Advanced-hour course work in Geology		8
Select one group of courses:		10-12
PHYS 101 & PHYS 102	College Physics: Mech & Heat and College Physics: E&M & Modern	
or		
PHYS 211 & PHYS 212 & PHYS 213 & PHYS 214	University Physics: Mechanics and University Physics: Elec & Mag and Univ Physics: Thermal Physics and Univ Physics: Quantum Physics	

Requirements for the Teacher Education in Secondary School Teaching Minor

Code	Title	Hours
Professional Education Required Courses		
EDUC 201	Identity and Difference in Education [1]	3
EDUC 202	Social Justice, School and Society [1]	3
CI 401	Introductory Teaching in a Diverse Society	3
CI 403	Teaching a Diverse High School Student Population	3
CI 404	Teaching and Assessing Secondary School Students	3
CI 473	Disciplinary Literacy	3
EPSY 201	Educational Psychology [1, 2]	3
EPSY 485	Assessing Student Performance	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	12
Total Hours		**39-40**

[1] EDUC 201, EDUC 202 and EPSY 201 can be completed at any time during the degree and are not pre-requisites to apply for the minor.

[2] PSYC 100 is a pre-requisite for EPSY 201.

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Sample Sequence

This sample sequence is intended to be used only as a guide for degree completion. All students should work individually with their academic advisors to decide the actual course selection and sequence that works best for them based on their academic preparation and goals. Enrichment programming such as study abroad, minors, internships, and so on may impact the structure of this four-year plan. Course availability is not guaranteed during the semester indicated in the sample sequence.

Students must fulfill their Language Other Than English requirement by successfully completing a fourth level of a language other than English. See the corresponding section on the Degree and General Education Requirements page *(*http://catalog.illinois.edu/general-information/degree-general-education-requirements/*).*

First Year

First Semester	Hours
Free Elective course	1
GEOL 107	4
Language Other Than English (3rd level)	4
Composition I or General Education course	4
CHEM 102 or 202	3
CHEM 103 or 203	1
	17

Total Hours 17

First Year

Second Semester	Hours
GEOL 208	4
EDUC 201	3
Language Other Than English (4th level)	4
General Education course or Composition I	3
General Education course	3
	17

Total Hours 17

Second Year

First Semester	Hours
EPSY 201	3
ASTR 121	3
MATH 221, 220, or 234	4
IB 100	3
ASTR 122	3
	16

Total Hours 16

Second Year

Second Semester	Hours
EDUC 202	3
ATMS 100	3
PHYS 211 or 101	4
GEOL 333	4
General Education course (Choose Humanities or Social/Behavioral Science course with Cultural Studies designation)	3
	17

Total Hours 17

Third Year

First Semester	Hours
GEOL 117	3
PHYS 212 or 102	4
CI 401	3
CI 473	3
	13

Total Hours 13

Third Year

Second Semester	Hours
GEOL 143	3
CI 403	3
Geology 300-400 level course	3
SPED 405	3
	12

Total Hours 12

Fourth Year

First Semester	Hours
Geology 300-400 level course	3
EPSY 485	3
PHYS 213 (or Free Elective course)	2
PHYS 214 (or Free Elective course)	2
Geology 300-400 level course	2
Free Elective course	1
	13

Total Hours 13

Fourth Year

Second Semester	Hours
EDPR 442	12
CI 404	3
	15

Total Hours 15

Total Hours: 120

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1. Students will develop cross-disciplinary skills of observation, data collection, and spatial display of data (e.g., map making) related to geological materials, features, and processes.
2. Students will develop an understanding of the physical, chemical and mathematical theories fundamental to earth processes through rigorous coursework and research.
3. Students will develop and apply critical thinking skills to synthesize principles learned in the classroom, and data collected in the laboratory and in the field in order to evaluate hypotheses and solve geological problems.
4. Students will demonstrate the ability to communicate effectively scientific data, interpretations, and hypotheses through written and oral methods.
5. Students will hone and apply interpersonal skills in a professional setting through group work, research activities, and field studies.

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Department of Earth Science & Environmental Change (https://www.esec.illinois.edu/undergraduate/)

esec@illinois.edu
Earth Science & Environmental Change Faculty (https://esec.illinois.edu/directory/faculty/)

Advising

Geology advising (https://esec.illinois.edu/academics/undergraduate-programs/undergraduate-advising/)

College of Liberal Arts & Sciences

LAS College website (https://las.illinois.edu/)

Admissions

Liberal Arts & Sciences Admissions & Requirements (http://catalog.illinois.edu/schools/las/academic-units/)
University of Illinois Urbana-Champaign Undergrad Admissions (https://www.admissions.illinois.edu/)