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

Students in this concentration must complete the Teacher Education Minor in Secondary School Teaching (39 hours). See the College of Education section for requirements of the minor (http://catalog.illinois.edu/undergraduate/education/minors/teacher-education-secondary-school/).

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://admissions.illinois.edu/Content/docs/Handbook_LAS.pdf) for more information.

To remain in good standing in this program and be recommended for certification, candidates are required to maintain UIUC cumulative, general education, and professional education, grade-point averages of 2.5 (A=4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

Departmental distinction: Students qualify for graduation with distinction by exhibiting superior performance in both course work and in senior thesis research. To be eligible, a student must have a UIUC coursework major grade point average of 3.25, must take CHEM 499 (normally for two semesters) and submit a senior thesis for evaluation, and must have their undergraduate research advisor submit to the department Head a letter of support attesting to the effort invested by the student. The minimum major GPAs for Distinction, High Distinction, and Highest Distinction are 3.25, 3.5, and 3.75, respectively. Students in the Chemistry Teaching Concentration may submit their final teaching portfolio for evaluation in lieu of taking CHEM 499 and submitting a senior thesis. Final decisions on awarding Distinction honors will be made by the Head or designee.

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 hours required for graduation: 120 hours, to include a minimum of 40 hours of upper-division coursework generally at the 300 and 400 level. These hours can be drawn from all elements of the degree.
Chemistry Teaching Option Concentration

The following courses must be completed in or progress when
students apply to the Secondary Education minor.

Select one group of courses (Accelerated or General Chemistry):

CHEM 202 Accelerated Chemistry I
& CHEM 203 and Accelerated Chemistry Lab I
& CHEM 204 and Accelerated Chemistry II
& CHEM 205 and Accelerated Chemistry Lab II

or

CHEM 102 General Chemistry I
& CHEM 103 and General Chemistry Lab I
& CHEM 104 and General Chemistry II
& CHEM 105 and General Chemistry Lab II
& CHEM 222 and Quantitative Analysis Lecture
& CHEM 223 and Quantitative Analysis Lab

Select one of the following Organic Chemistry course groups:

CHEM 236 Fundamental Organic Chem I
& CHEM 237 and Structure and Synthesis

or

CHEM 232 Elementary Organic Chemistry I
& CHEM 233 and Elementary Organic Chem Lab I
MATH 220 Calculus I
or MATH 221 Calculus I
MATH 231 Calculus II

Additional Required Coursework

Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/secondary/)

CHEM 495 Teaching Secondary Chemistry
CHEM 150 First Semester Success in Chemistry
CHEM 440 Physical Chemistry Principles
or CHEM 442 Physical Chemistry I

At least four additional hours of 300- or 400-level chemistry and/or
biochemistry course work.

ASTR 100 Introduction to Astronomy
GEOL 107 Physical Geology
IB 100 Biology in Today's World
MATH 241 Calculus III
PHYS 211 University Physics: Mechanics
PHYS 212 University Physics: Elec & Mag
PHYS 214 Univ Physics: Quantum Physics

1 On- and off-campus transfer students in the BSLAS curriculum may substitute CHEM 152 for CHEM 150. Alternatively, transfer students may elect to take an additional 1 hour of 200 level or higher Chemistry, including CHEM 297, 397, 496, 497, or 499 as long as no more than 10 total hours of the total 22-26 required Chemistry hours come from CHEM 297, CHEM 397, CHEM 496, CHEM 497, CHEM 499.

Requirements for the Teacher Education in Secondary School Teaching Minor

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<td>EDUC 201</td>
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<td>EDUC 202</td>
<td>Social Justice, School and Society 1</td>
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</table>

1 PSYC 100 is a pre-requisite for EPSY 201.

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Chemistry, Chemistry Teaching Concentration

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 third 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

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Second Year

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Information listed in this catalog is current as of 05/2024
### Third Year

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Total Hours 16

### Fourth Year

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Total Hours 16

### Undergraduate Degree Programs in Chemistry

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

- Major in Computer Science & Chemistry, BSLAS
  (http://catalog.illinois.edu/undergraduate/eng_las/computer-science-chemistry-bslas/)
- Major in Chemistry (Sciences and Letters)
  (http://catalog.illinois.edu/undergraduate/las/chemistry-bslas/#degreerequirementstext)
- Major in Chemistry (Sciences and Letters), Chemistry Teaching Concentration (p. 1)

For the Degree of Bachelor of Science in Chemistry

- Major in Chemistry (Specialized Curriculum)
  (http://catalog.illinois.edu/undergraduate/las/chemistry-bs/
  #degreerequirementstext)
- Major in Chemistry (Specialized Curriculum), Environmental Chemistry Concentration
  (http://catalog.illinois.edu/undergraduate/las/chemistry-bs/environmental-chemistry/)

*for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Chemistry, Chemistry Teaching Concentration*

### Chemistry

Chemistry website (https://chemistry.illinois.edu)
Chemistry faculty (https://chemistry.illinois.edu/directory/faculty-by-type/)
SCS Academic Advising (http://advising.sc.edu/)