CHEMISTRY TEACHING CONCENTRATION

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

Major in Chemistry (Sciences and Letters), Chemistry Teaching Concentration

For advising contact SCS Academic Advising (http://publish.illinois.edu/scsadvising).

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

Twelve hours of 300- or 400-level courses in Chemistry must be taken on this campus.

Minimum hours required for graduation: 120 hours

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/secondary).

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, content area, 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 an 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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 202</td>
<td>Accelerated Chemistry I &amp; CHEM 20:and Accelerated Chemistry Lab I &amp; CHEM 20:and Accelerated Chemistry II &amp; CHEM 20:and Accelerated Chemistry Lab II</td>
<td>10-12</td>
</tr>
<tr>
<td>or</td>
<td>CHEM 102</td>
<td>General Chemistry I &amp; CHEM 10:and General Chemistry Lab I &amp; CHEM 10:and General Chemistry II &amp; CHEM 10:and General Chemistry Lab II &amp; CHEM 22:and Quantitative Analysis Lecture &amp; CHEM 22:and Quantitative Analysis Lab</td>
</tr>
<tr>
<td>Select one of the following Organic Chemistry course groups:</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>CHEM 236</td>
<td>Fundamental Organic Chem I &amp; CHEM 23 and Structure and Synthesis</td>
<td></td>
</tr>
<tr>
<td>MATH 220</td>
<td>Calculus</td>
<td>4-5</td>
</tr>
<tr>
<td>or MATH 221</td>
<td>Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 231</td>
<td>Calculus II</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Required Coursework

Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/secondary) 39

CHEM 495 | Teaching Secondary Chemistry | 4 |

CHEM 440 | Physical Chemistry Principles | 4 |

or CHEM 44Physical Chemistry I | |

At least four additional hours of 300- or 400-level chemistry and/or biochemistry course work. 4

ASTR 100 | Introduction to Astronomy | 3 |

GEOL 107 | Physical Geology | 4 |

IB 100 | Biology in Today’s World | 3 |

MATH 241 | Calculus III | 4 |

PHYS 211 | University Physics: Mechanics | 4 |

PHYS 212 | University Physics: Elec & Mag | 4 |

PHYS 214 | Univ Physics: Quantum Physics | 2 |