CHEMISTRY TEACHING CONCENTRATION

This concentration is designed to prepare the student to teach chemistry with a second teaching field in general science. In order 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.

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

Degree title: Bachelor of Science in Liberal Arts and Sciences

General education: Students must complete the Campus General Education (https://courses.illinois.edu) requirements including the campus general education language requirement. In addition, one course must be selected from: CMN 101 or CMN 113.

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

Minimum hours required for graduation: 120 hours

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.

Prerequisites to transfer to the Teaching Concentration (must be completed or be in progress prior to transfer into the teaching concentration):

EPSY 201 Educational Psychology 3
EPS 201 Foundations of Education 3
or EPS 202 Foundations of Education-ACP

Select one of the following (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

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

CHEM 232 Elementary Organic Chemistry I
& CHEM 238 and Elementary Organic Chem Lab I

Select on of the following Math course groups:

MATH 220 Calculus
& MATH 23 and Calculus II

MATH 221 Calculus I
& MATH 231 and Calculus II

In addition, the student is required to pass the State Basic Skills Test before application to the teaching minor.

Requirements

In addition to the requirements for the concentration listed below, students must complete the Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/secondary) (37-38 hours). Conferral of the degree of Bachelor of Science in Liberal Arts and Sciences prior to completion of the minor requires approval by petition to the LAS Student Affairs Office. Ordinarily, all students will require 10 semesters to complete this program.

Select one group of courses: 9-11

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

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 group of courses: 5-6

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

CHEM 232 Elementary Organic Chemistry I
& CHEM 238 and Elementary Organic Chem Lab I

CHEM 495 Teaching Secondary Chemistry 4

CHEM 440 Physical Chemistry Principles 4
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 3
GEOL 107 Physical Geology 4

IB 100 Biology in Today's World 3

MATH 220 Calculus 4-5
or MATH 221 Calculus I

MATH 231 Calculus II 3

MATH 241 Calculus III 4

PHYS 211 University Physics: Mechanics 4

PHYS 212 University Physics: Elect & Mag 4

PHYS 214 Univ Physics: Quantum Physics 2

Information listed in this catalog is current as of 03/2016