EDUCATION MAJOR: CHEMISTRY ST OLAF COLLEGE EDUCATION DEPARTMENT

(For Students Entering the Teacher Education Program Fall 2022 and After)

Chemistry Teacher Candidates Must:

- 1. Meet all Professional Educator Licensing and Standards Board (PELSB) Pedagogy and Content Standards.
- 2. Pass the Minnesota Teacher Licensure Exam (MTLE) competency exams in their Content Area(s) and in Pedagogy before licensure.
- 3. Have a major in Chemistry.

| PROFESSIONAL EDUCATION REQUIREMENTS | Course Credit |
|--|----------------------|
| Education 231: Understanding Substance Abuse | 0.00 |
| Education 295: Foundation of Education (Fall) | 1.00 |
| Education 330: Planning, Instruction, and Assessment (Spring) | 1.00 |
| Education 330 Lab (Spring) | 0.00 |
| Education 340: Differentiating Instruction (Fall) | 1.00 |
| Education 381: Senior Seminar | 0.50 |
| Education 382: Human Relations Component | 0.00 |
| Education 389: Student Teaching | 3.00 |
| One Interim | 1.00 |
| Education 378: Multicultural Education in Hawaii (Offered in even years)(OEP, PA | AR) |
| Education 379: Urban Education Practicum and Seminar (OEP, PAR) | • |
| One additional PAR course to meet licensure standards | 1.00 |
| CHEMISTRY (9-12) CONTENT AREA LICENSURE REQUIREMENTS | |
| Education 364: Teaching of Science 5-12* (Spring) | 1.00 |
| Education 374: Reading in the Content Area* | 0.50 |
| Chemistry 247*: Organic Chemistry I/CHEM 253 Synthesis Laboratory* | 1.25 |
| Chemistry 248*: Organic Chemistry II/CHEM 254 Synthesis Laboratory* | 1.25 |
| Chemistry 255: Analytical Chemistry/CHEM 256: Analytical Laboratory | 1.25 |
| Chemistry 371: Physical Chemistry/CHEM 357: Physical Laboratory | 1.25 |
| Chemistry 379*: Biochemistry I | 1.00 |
| Research Component | |
| One of the following*: | 1.00 |
| Chemistry 122: Introductory Chemistry (NTS) | |
| Chemistry 125: Structural Chemistry and Equilibrium (NTS) | |
| CHBI 125: Chemical Concepts with Biological Applications (NTS) | |
| One of the following*: | |
| Chemistry 126: Energies and Rates of Chemical Reactions (NTS) | 1.00 |
| CHBI 126: Thermodynamics and Kinetics with Biological Relevance | |
| ADDITIONAL COURSES FOR THE CHEMISTRY MAJOR | |
| Two semesters of Physics (124/125) (NTS) | 2.00 |
| Math through Calculus II (QCR) | 0-2.00 |

This document is intended to serve as an advising tool and is subject to change. It is important for students to meet with Education Faculty regularly to verify that they are satisfying all requirements for licensure and with content faculty to ensure that major requirements are being met. All course substitutions must be documented on a Course Substitution Form and approved by the Director of Licensure.

Revised: 03.08.2024

^{*} Indicates content courses in which Professional Educator Licensing and Standards Board (PELSB) Standards are embedded.