

CONCORDIA COLLEGE – MOORHEAD MN

Major in Chemistry Education

The major in Chemistry Education prepares students to be recommended by the
Concordia College Department of Education for Minnesota licensure to teach in grades 9-12.

Courses fulfill standards for MN Rule 8710.4750

The requirements are 46 credits plus 32 credits in education:

| Course Number | Course Name | Semester Credits | Status |
|---|---|------------------|--------|
| CHEM 127/128 OR CHEM 137/138 | General Chemistry I/II OR (4 credits each) Honors Chemistry I/II (4 credits each) | 8 | |
| CHEM 330 | Analytical Chemistry I | 4 | |
| CHEM 341 | Organic Chemistry I | 4 | |
| CHEM 342 | Organic Chemistry II | 4 | |
| CHEM 351 | Physical Chemistry I | 4 | |
| CHEM 373 | Biochemistry I | 4 | |
| CHEM 403 | Senior Seminar I | 1 | |
| CHEM 404 | Senior Seminar II | 1 | |
| 4 additional credits from the following: | | 4 | |
| CHEM 344 | Spectroscopy (4 cr) | | |
| CHEM 352 | Physical Chemistry II (4 cr) | | |
| CHEM 374 | Biochemistry II (4 cr) | | |
| CHEM 380 | Special Topics (2-4 cr) | | |
| CHEM 431 | Analytical Chemistry II (4 cr) | | |
| CHEM 445 | Organic Chemistry III (4 cr) | | |
| CHEM 462 | Advanced Inorganic Chemistry (4 cr) | | |
| CHEM 475 | Neurochemistry (4 cr) | | |
| CHEM 490 | Introduction to Research (1-4 cr) | | |
| MATH 121 | Calculus I (4 cr) | 4 | |
| PHYS 111/112 OR PHYS 128/211 | General College Physics I/II OR Physics for Scientists and Engineers I/II (4 credits each) | 8 | |
| Required Methods Course: | | | |
| EDUC 372 | Methods of Teaching in Science | 4 | |
| Education Requirements: | | | |
| PSYC 212 | Educational Psychology | 4 | |
| EDUC 210 | Foundations in K-12 Education | 2 | |
| EDUC 221 | Teaching in the Middle School | 2 | |
| EDUC 350 | The Art and Science of Teaching | 2 | |
| EDUC 351 | Ecology of the Educational Setting | 2 | |
| EDUC 399 | Orientation to Student Teaching | 0 | |
| EDUC 420 | Knowledge, Literacy, and Inquiry | 2 | |
| EDUC 425 | Education of the Exceptional Child | 2 | |
| EDUC 439 | Human Relations | 2 | |
| EDUC 494 | Student Teaching | 10 | |