

CENTRAL CONNECTICUT STATE UNIVERSITY

School of Education and Professional Studies

B.S.ED. (Grades 7 - 12) 120 Credits

CHEMISTRY

Name: _____ ID#: _____ Matriculation Semester: _____ Date: _____

| | | | | | |
|--|-------------|-------------|--|-------------|-------------|
| GENERAL EDUCATION (44-46 credits) | Crs. | Grd. | CHEMISTRY MAJOR (31-32 credits) | Crs. | Grd. |
|--|-------------|-------------|--|-------------|-------------|

Some General Education courses can also fulfill Related Requirements

STUDY AREAS

Study Area I Arts & Humanities (9 credits)

| | | |
|----------------|---|--|
| ENG literature | 3 | |
| | 3 | |
| | 3 | |

Study Area II Social Sciences (9 credits)

| | | |
|------|---|--|
| HIST | 3 | |
| | 3 | |
| | 3 | |

Study Area III Behavioral Sciences (6 credits)

| | | |
|--|---|--|
| | 3 | |
| | 3 | |

Study Area IV Natural Sciences (6 or 7 credits)

| | | |
|---------------------------------------|---|---|
| Course can be double-counted in major | X | X |
| Course can be double-counted in major | X | X |

SKILL AREAS

Skill Area I Communication Skills (6 credits)

| | | |
|--|---|--|
| ENG 105 & 105P or ENG 110 Freshman Composition | 3 | |
| | 3 | |

Skill Area II Mathematics Requirement (6 credits)

| | | |
|--|---|--|
| | 3 | |
| | 3 | |

Skill Area III Foreign Language Proficiency Requirement (check one)

| | | |
|--|--|--|
| - completion of a level-three high school foreign language | | |
| - passed a standardized foreign language exam | | |
| - completion of 112 or 114 foreign language course | | |
| - successful completion of an upper level foreign language course | | |
| - demonstration of native proficiency in a language other than English | | |

Skill Area IV University Requirement (2 or 3 credits)

| | | |
|---|--------|--|
| PE 144 required for students matriculating with fewer than 15 credits | 2 or 3 | |
|---|--------|--|

ELECTIVES (if necessary to reach 120 credits)

| | | |
|--|--|--|
| | | |
| | | |

| | | |
|-----------------------------------|--|--|
| International Requirement | | |
| International Requirement | | |
| First Year Experience Requirement | | |

Grade of C- or better required

| | | |
|--|--------|--|
| CHEM 161 General Chemistry | 3 | |
| CHEM 162 General Chemistry Lab | 1 | |
| CHEM 200 Foundations of Analytical Chemistry | 3 | |
| CHEM 201 Foundations of Analytical Chemistry Lab | 1 | |
| CHEM 210 Foundations of Organic Chemistry | 3 | |
| CHEM 211 Foundations of Organic Chemistry Lab | 1 | |
| CHEM 212 Organic Synthesis | 3 | |
| CHEM 213 Organic Synthesis Lab | 1 | |
| CHEM 238 Introduction to Research | 1 | |
| CHEM 260 Foundations of Inorganic Chemistry | 3 | |
| CHEM 316 Spectroscopic Identification of Organic Compounds | 3 | |
| CHEM 332 Chemical Literature | 1 | |
| CHEM 432 Chemistry Seminar | 1 | |
| One of the following: | 3 | |
| CHEM 320 Biophysical Chemistry | | |
| CHEM 321 Physical Chem. of Thermodynamics & Kinetics | | |
| CHEM 322 Physical Chem. of Quantum & Statistical Mechanics | | |
| One of the following: | 3 or 4 | |
| CHEM 354 Biochemistry (3) | | |
| CHEM 402 Instrumental Analysis (4) | | |
| CHEM 406 Environmental Chemistry (3) | | |
| CHEM 485 Topics in Chemistry (3) | | |

RELATED REQUIREMENTS (31 credits)

Grade of C- or better required

SCIENCE RELATED REQUIREMENTS (18 credits)

| | | |
|--|---|--|
| BIO 121 General Biology I or BMS 102 and 103 | 4 | |
| GSCI 121 The Dynamic Earth | 3 | |
| PHYS 121 or PHYS 125 Physics I | 4 | |
| PHYS 122 or PHYS 126 Physics II | 4 | |
| SCI 320 The Nature of Science and Technology | 3 | |

ADDITIONAL REQUIREMENTS (13 credits)

| | | |
|--|---|--|
| <i>Required for the Program & can also fulfill General Education</i> | | |
| HIST 161 or HIST 162 (ST II) | 3 | |
| PSY 136 Lifespan Development (ST III) | 3 | |
| EDF 215 Education in a Multicultural Society (ST III) | 3 | |
| MATH 152 Calculus I (SK II) | 4 | |

PROFESSIONAL EDUCATION (27 credits)

All courses require admission to the Professional Program and a grade of C or better

| | | |
|---|---|--|
| SPED 315 Intro. to Educating Learners with Exceptionalities | 3 | |
| EDTE 316 Principles of Learning in Diverse Settings (7-12) | 4 | |
| RDG 440 Literacy in the Secondary School | 3 | |
| EDSC 425 Multicultural, Interdisciplinary Teaching (7-12) | 3 | |
| SCI 417 Teaching of Science in the Secondary School | 4 | |
| SCI 419 Student Teaching Seminar | 1 | |
| EDSC 435 Secondary Education Student Teaching | 9 | |