### Science Education – Chemistry Concentration

#### Curriculum Check-sheet

**120 Credits**

**Student’s Name:**

**Email Address:**

**CSU ID Number:**

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**Note to the Student:** This check-sheet describes the curricular requirements for both the Bachelor of Science in Natural Sciences with a concentration in Chemistry Education and for the teacher licensing program in science. The courses listed are courses in both areas. All curricular requirements on this check-sheet, along with other programmatic requirements, must be met in order to receive the institutional recommendation for the teaching endorsement. A minimum of 42 credits must be completed in upper-division coursework. The Teacher Licensing Program is a non-degree program; bachelor degrees in education are not awarded.

### Professional Education Courses – 33 credits

- **EDUC 275** Schooling in the US 3
- **EDUC 340** Literacy & the Learner 3
- **EDUC 350** Instruction I 3
- **EDUC 386** Practicum-Instruction I 1
- **EDUC 461A** Science Methods I 3
- **EDUC 450** Instruction II 4
- **EDUC 486E** Practicum-Instruction II 1
- **EDUC 461B** Science Methods II 3
- **EDUC 485B** Student Teaching-Secondary 11
- **EDUC 493A** Seminar: Prof Relations 1

### All University Core Curriculum – 18 credits

- **Written Communication (1A)** 3  
  **CO150**
- **Mathematics**
  - **Calculus I (1B)** 4
  - **Diversity, Equity & Inclusion (1C)** 3
- **Advanced Writing (2)** 3

### Biological/Physical Sciences (3A)

- **LIFE 102** Attributes of Living Systems 4
- **LIFE 103** Bio Organisms-Animal/Plant 4

### Chemistry Concentration Content Courses – 34 credits

- **CHEM 120** Fdns in Modern Chemistry 4
- **CHEM 121** Modern Chemistry Lab 1
- **CHEM 231** Fdns of Analytical Chemistry 3
- **CHEM 232** Analytical Chemistry Lab 2

### General Science Content Courses – 35 credits

- **AA 100** Intro to Astronomy 3
- **AA101** Astronomy Laboratory 1
- **GEOL 120** Physical Geology 3
- **GEOL 121** Physical Geology Lab 1
- **LIFE 102** Attributes of Living Systems 4
- **LIFE 103** Bio Organisms-Animal/Plant 4
- **CHEM 120** Fdns in Modern Chemistry 4
- **CHEM 121** Modern Chemistry Lab 1
- **CHEM 231** Fdns of Analytical Chemistry 3
- **STAT 301** Intro to Statistical Methods 3

### Depth & Integration (4A, 4B, 4C)

- **EDUC 485B** Student Teaching-Sec 11
- **EDUC 493A** Seminar: Prof Relations 1

### Need 6 credits of general science/mathematics electives:

- **Science Electives**
- **Science Electives**

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*Offered Summer Semester

1 Offered only Fall Semester

2 Offered only Spring Semester

See the back of this check-sheet for important course requirements and advising reminders.

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Science (Chemistry) Education (revised Fall 2023)
**Important Coursework Requirements:**

1. Students must be admitted to the Licensure Program to enroll in Phase II courses, EDUC 350, EDUC 386, and EDUC 461A.
2. Students must have a 2.75 or higher GPA to graduate with this degree.
3. Because the coursework content and field experiences build upon previous courses, the phases cannot be taken concurrently or out of sequence.
4. Grades in ALL education courses and teaching content courses must be a C or above.
5. Students cannot advance to the next phase of the program with incomplete grades or grades of C- or below in professional education courses.

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**Coursework Model of the Teacher Licensure Program – Secondary and K-12 Endorsements** *(Revised for Fall 2023)*

- **Colorado State University**

<table>
<thead>
<tr>
<th>PHASE I</th>
<th>PHASE II</th>
<th>PHASE III</th>
<th>PHASE IV</th>
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| **EDUC 275**  
Schooling in the United States  
3 credits  
(Course includes field experiences in the P-12 school system) | **EDUC 350**  
Instruction I: Individualization and Management  
3 credits  
(Course is a Professional Development School (PDS) at the public middle schools) | **EDUC 450**  
Instruction II: Standards and Assessment  
4 credits  
(Course is a Professional Development School (PDS) at the public high schools) | **EDUC 485B**  
Student Teaching  
11 credits  
(Course entails 15-16 weeks of full-time experience at a cooperating school site) |
| **EDUC 340**  
Literacy and the Learner  
3 credits  
(Course includes field experiences in the school system) | **EDUC 386**  
Practicum: Instruction I  
1 credit  
(Course includes field experiences aligned with EDUC 350) | **EDUC 486E**  
Practicum II: Instruction II  
1 credit  
(Course includes field experiences aligned with EDUC 450) | **EDUC 493A**  
Seminar: Professional Relations  
1 credit  
(Course is taken concurrently with EDUC 485B) |
| **EDUC 461A**  
Methods & Materials in Teaching Science I  
3 credits  
(Course is a Fall only class) | | **EDUC 461B**  
Methods & Materials in Teaching Science II  
3 credits  
(Course is a Spring only class) | **Successful completion of program coursework, field experiences and other requirements leads to an:** |
| | | | **Institutional Recommendation for a Colorado Initial Educator License in Secondary Science** |

**Substitution Approval:**

- **Student**  
Date  
**BSNS Advisor**  
Date  
**Director, Teacher Preparation Program**  
Date

**Mission of the Teacher Licensure Program**
To teach and model best educational practice in order to prepare emerging professionals to facilitate student success.

**Professional Program Accreditation**
The Program is accredited by the Teacher Education Accreditation Council, the Colorado Commission on Higher Education, and the Colorado Department of Education.