# Academic Planning Sheet

## B.S. Chemistry
### Secondary Education

**Colorado State University – Pueblo**

## 2016-2017 Catalog

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<table>
<thead>
<tr>
<th><strong>Fall Semester</strong></th>
<th><strong>Spring Semester</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
</tr>
<tr>
<td>CHEM 121/L: General Chemistry I/Lab</td>
<td>CHEM 122/L: General Chemistry II/Lab</td>
</tr>
<tr>
<td>ENG 101: English Composition I</td>
<td>ENG 102: English Composition II</td>
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<tr>
<td>PSYCH 151 or PSYCH 251 or PSYCH 342</td>
<td>BIOL 100/L: Principles of Biology/Lab</td>
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<tr>
<td>(151 or 251 will count for Social Science Gen Ed)</td>
<td>General Education Course: Humanities</td>
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<tr>
<td>COMR 103: Speaking &amp; Listening (Humanities)</td>
<td><strong>Total Semester Hours</strong></td>
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<tr>
<td><strong>Second Year</strong></td>
<td></td>
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<tr>
<td>MATH 126: Calculus &amp; Analytic Geometry I</td>
<td>CHEM 211/L: Introduction to Organic Chem. (4)</td>
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<tr>
<td>BIOL 121/L: Environmental Conservation/Lab</td>
<td>OR</td>
</tr>
<tr>
<td>ED 280: Educational Media &amp; Technology</td>
<td>CHEM 301/L: Organic Chemistry I (5)</td>
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<tr>
<td>General Education Course: Humanities</td>
<td>MATH 224: Calculus &amp; Analytic Geometry II</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td>GEOL 101/L: Earth Science/Lab</td>
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<tr>
<td></td>
<td>ED 202: Foundations of Education</td>
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<tr>
<td><strong>Third Year</strong></td>
<td></td>
</tr>
<tr>
<td>ED 301: Frameworks of Teaching</td>
<td>PHYS 221/L: General Physics I/Lab</td>
</tr>
<tr>
<td>CHEM 317/L: Quantitative Analysis</td>
<td>CHEM 419/L: Instrumental Analysis (5)</td>
</tr>
<tr>
<td>RDG 435: Content Area Literacy</td>
<td>OR</td>
</tr>
<tr>
<td>CHEM 311: Survey of Biochemistry</td>
<td>CHEM 221/L: Inorganic Chemistry (4)</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td>ED 412: Teaching Diverse Learners</td>
</tr>
<tr>
<td></td>
<td>General Education Course: Social Science</td>
</tr>
<tr>
<td><strong>Fourth Year</strong></td>
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<tr>
<td>CHEM 321: Physical Chemistry I</td>
<td>ED 485: Capstone Seminar in Education</td>
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<tr>
<td>PHYS 222/L: General Physics II</td>
<td>ED 488: Secondary Student Teaching</td>
</tr>
<tr>
<td>CHEM 493: Seminar</td>
<td><strong>Total Semester Hours</strong></td>
</tr>
<tr>
<td>ED 444: Teaching Secondary Science</td>
<td><strong>Total Semester Hours</strong></td>
</tr>
<tr>
<td>General Education Course: History</td>
<td></td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
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</tbody>
</table>

- COMR 103 required for admission into Teacher Education Program

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The Academic Planning Sheet is designed as a guide for students planning their course selections. The information on this page provides only a suggested schedule. Actual course selections should be made with the advice and consent of an academic adviser. While accurately portraying the information contained in the college catalog, this form is not considered a legal substitute for that document. Students should become familiar with the catalog in effect at the time in which they entered the institution.
**General Education Requirements:** 21-24 semester hours

(21 credits if PSYCH 151 or PSYCH 251 taken as Social Science.
If either not taken and if student took the non-general education course of PSYCH 342 then student would need 6 credits of Social Science.)

- ENG 101: English Composition I (3)
- ENG 102: English Composition II (3)
- Mathematics Course (3)
  - MATH 126: Calculus I (5)
- Humanities Courses (9)
  - COMR 103: Speaking and Listening (3)
- History Course (3)
- Social Sciences Courses (6)
  - PSYCH 151 or PSYCH 251 (3)
- Natural and Physical Sciences Courses (8) (2 courses with labs)
  - CHEM 121/L: General Chemistry I/Lab (5)
  - CHEM 122/L: General Chemistry II/Lab (5)

<table>
<thead>
<tr>
<th>Course Completed elsewhere</th>
<th>CSU-Pueblo equivalent</th>
</tr>
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<tbody>
<tr>
<td>(Ex: English 101)</td>
<td>(Ex: English 101)</td>
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</tbody>
</table>

**Major Requirements:**

**Required Chemistry Courses:** 30-32 semester hours

- CHEM 121/L: General Chemistry I/Lab (5)
- CHEM 122/L: General Chemistry II/Lab (5)
- CHEM 211/L: Intro to Organic Chemistry/Lab (4)
  - OR
- CHEM 301/L: Organic Chemistry I/Lab (5)
- CHEM 311: Survey of Biochemistry (3)

**Institutional Graduation Requirements:**

- Total of 120 semester hours, minimum.
- Complete a minimum of 40 semester hours in upper-division courses.
- Overall cumulative grade point average of 2.00.
- A minimum of 60 semester hours must be earned from a four-year institution. Of these, a minimum of 30 semester hours of credit must be earned in residence.
- Of the last 30 semester credits earned immediately preceding graduation, no more than 15 may be completed at other colleges or universities.
- All other requirements as specified in the Catalog.

**Additional Major Graduation Requirements:**

- Students majoring in chemistry must receive a grade of “C” or better in all core chemistry courses.
- Proficiency in physics, math and computer science is essential for understanding and applying chemical principles; therefore, graduates must complete approved math and physics courses with an overall GPA of 2.00 or better.

**Additional Minor Graduation Requirements:**

- Cumulative grade point average of 2.600.

**Required Chemistry Courses cont’d:**

- CHEM 317/L: Quantitative Analysis/Lab (5)
- CHEM 321: Physical Chemistry I (3)
- CHEM 419/L: Instrumental Analysis/Lab (5)
  - OR
- CHEM 221/L: Inorganic Chemistry/Lab (4)
- CHEM 493: Seminar (1)

**Other Required Courses:** 69 semester hours

- BIOL 100/L: Principles of Biology/Lab (4)
- BIOL 121/L: Environmental Conservation/Lab (4)
- GEOG 101/L: Earth Science/Lab (4)
- MATH 126: Calculus I (5)
- MATH 224: Calculus II (5)
- PHYS 221/L: General Physics I/Lab (5)
- PHYS 222/L: General Physics II/Lab (5)
- PSYCH 151 or PSYCH 251 or PSYCH 342 (3)
- ED 202: Foundation of Education (3)
- ED 280: Educational Media & Technology (3)
- ED 301: Frameworks of Teaching (4) - completion of 45 college hours and a cumulative GPA of 2.6
  - ED 412: Teaching Diverse Learners (3)
  - ED 444: Teaching Secondary Science (4)
  - EDG 435: Content Area Literacy (4)
  - ED 485: Capstone Seminar (1)
  - ED 488: Student Teaching Secondary (12)

(Courses italicized meet General Education requirements)

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06/09/16