<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</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>
</tr>
<tr>
<td>ED 202: Foundations of Education</td>
<td>MATH 221: Applied Calculus</td>
</tr>
<tr>
<td>BIOL 181/L: College Biology I /Organismal Bio/Lab</td>
<td>BIOL182/L: College Biology II/Cellular Bio/Lab</td>
</tr>
<tr>
<td><strong>TOTAL SEMESTER HOURS</strong></td>
<td><strong>TOTAL SEMESTER HOURS</strong></td>
</tr>
<tr>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td><strong>Second Year</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 201/L: Botany/Lab (Spring)</td>
<td>ED 301: Frameworks of Teaching</td>
</tr>
<tr>
<td>OR</td>
<td>BIOL 351: Molecular biology and genetics</td>
</tr>
<tr>
<td>BIOL 202/L: Zoology/Lab (Fall)</td>
<td>PHYS 201/L: Principles of Physics I/Lab</td>
</tr>
<tr>
<td>ED 280: Educational Media &amp; Technology</td>
<td>PSYCH 151: Human Development</td>
</tr>
<tr>
<td>COMR 103: Speaking &amp; Listening (Hum)</td>
<td>Or</td>
</tr>
<tr>
<td>BIOL 350: Mendelian and Population Genetics</td>
<td>PSYCH 251: Childhood &amp; Adolescence</td>
</tr>
<tr>
<td>General Education Course: Social Science</td>
<td>CHEM 211/211L OR CHEM 301/301L</td>
</tr>
<tr>
<td><strong>TOTAL SEMESTER HOURS</strong></td>
<td><strong>TOTAL SEMESTER HOURS</strong></td>
</tr>
<tr>
<td>15</td>
<td>17-18</td>
</tr>
<tr>
<td><strong>Third Year</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 202/L: Principles of Physics II/Lab</td>
<td>BIOL 378: Laboratory in Teaching Biology</td>
</tr>
<tr>
<td>General Education Course: History</td>
<td>BIOL 352: Evolutionary Biology and Ecology</td>
</tr>
<tr>
<td>BIOL 223/223L OR BIOL 224/224L OR BIOL 414/414L</td>
<td>ED 412: Teaching Diverse Learners</td>
</tr>
<tr>
<td>RDG 435: Content Area Literacy</td>
<td>GEOL 101/L: Earth Science/Lab</td>
</tr>
<tr>
<td><strong>TOTAL SEMESTER HOURS</strong></td>
<td>Approved Biology Upper Division Elective/Lab</td>
</tr>
<tr>
<td>15</td>
<td>General Education Course: Humanities</td>
</tr>
<tr>
<td><strong>Fourth Year</strong></td>
<td><strong>TOTAL SEMESTER HOURS</strong></td>
</tr>
<tr>
<td>BIOL 206/206L OR BIOL 301/301L</td>
<td>15/16</td>
</tr>
<tr>
<td>Biology Upper Division Field Elective/Lab</td>
<td><strong>TOTAL SEMESTER HOURS</strong></td>
</tr>
<tr>
<td>BIOL 493: Seminar</td>
<td>13</td>
</tr>
<tr>
<td>ED 444: Teaching Secondary Science</td>
<td>ED 488: Student Teaching Secondary</td>
</tr>
<tr>
<td>General Education Course: Humanities</td>
<td>ED 485: Capstone Seminar in Education</td>
</tr>
</tbody>
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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.
ACADEMIC PLANNING SHEET  
B.S. BIOLOGY  
SECONDARY CERTIFICATION  
COLORADO STATE UNIVERSITY - PUEBLO  
2018-2019 CATALOG

General Education Requirements:  (24 semester hours)
- ENG 101: English Composition I (3)
- ENG 102: English Composition II (3)
- Mathematics Course (3)
  - MATH 221: Applied Calculus (4)
- Humanities Courses (9)
  - COMR 103: Speaking & Listening (3) (grade of B or better required)
- History Course (3)
- Social Sciences Courses (6)
  - PSYCH 151 or PSYCH 251 (3)
- Natural and Physical Sciences Courses (8) (2 courses with labs)
  - BIOL 181/L: College Biology I/Organismal Bio/Lab (4)
  - BIOL 182/L: College Biology II/Cellular Bio/Lab (4)

Transfer Students:
Course Completed elsewhere  
CSU-Pueblo equivalent  
(Ex: English 101)  
(Ex: English 101)

Major Requirements:  (65-68 semester hours)
Biology Secondary Certification Emphasis
- BIOL 181/L: College Biology I/Organismal Bio/Lab (4)
- BIOL 182/L: College Biology II/Cellular Bio/Lab (4)
- BIOL 201/L: Botany/Lab (4)
  OR
- BIOL 202/L: Zoology/Lab (4)
- BIOL 350: Mendelian and Population Genetics (2)
- BIOL 351: Molecular biology and genetics (2)
- BIOL 206/L: Intro to Microbiology/Lab
  OR
- BIOL 301/L: General Microbiology/Lab (4-5)

Major Requirements (cont.):

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
- Student majoring in Biology must receive a grade of C or better in all core biology courses.
- Students must have at least a cumulative GPA of 2.600 in the major area for admission to the teacher education program.
- Students majoring in biology must demonstrate computer literacy. This can be met by CIS 100, CIS 103 and CIS 104 courses.

Additional Minor Graduation Requirements:
- Cumulative grade point average of 2.600.

□ BIOL 223/L: Human Physiology & Anatomy I/Lab 
  OR
□ BIOL 224/L: Human Physiology & Anatomy I/Lab 
  OR
□ BIOL 414/L: Vertebrate Physiology/Lab (4)
□ BIOL 352: Evolutionary Biology and Ecology (3)
□ BIOL 378: Laboratory in Teaching Biology (1)
□ Biology Upper Division Field Elective/Lab (3-4)
□ Approved Biology Upper Division Elective/Lab (3)
□ BIOL 493: Seminar (1)
□ CHEM 121/L: General Chemistry I/Lab (5)
□ CHEM 122/L: General Chemistry II/Lab (5)
□ CHEM 211/L: Intro to Organic Chemistry/Lab
  OR
□ CHEM 301/L: Organic Chemistry I/Lab (4-5)
□ GEOL 101/L: Earth Science/Lab (4)
□ MATH 221: Applied Calculus (4)
□ PHYS 201/L: Principles of Physics I/Lab (4)
□ PHYS 202/L: Principles of Physics II/Lab (4)

Minor Requirements:  (37 semester hours)
*Admission to Education Program required – contact Teacher Education department for admission requirements

□ ED 202: Foundations of Education (3)
□ ED 280: Education Media and Technology (3)
□ ED 301: Frameworks of Teaching (4)
□ ED 412: Teaching Diverse Learners (3)
□ ED 485: Capstone Seminar (1)
□ ED 488: Student Teaching Secondary (12)
□ PSYCH 151 or PSYCH 251 (3)
□ RDG 435: Content Area Literacy (4)
□ ED 444: Teaching Secondary Science (4)

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