# Academic Planning Sheet

## B.S. Biology

**Cellular & Molecular Biosciences Emphasis**

**Colorado State University – Pueblo**

Dr. Moussa Diawara, Professor and Department Chair  
PHONE: (719) 549-2270  
EMAIL: moussa.diawara@csupueblo.edu

Ms. Theresa Jiminez, Administrative Assistant  
PHONE: (719) 549-2743  
EMAIL: theresa.jiminez@csupueblo.edu

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.

<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>ENG 101: English Composition I</td>
<td>ENG 102: English Composition II</td>
</tr>
<tr>
<td>BIOL 171: First Year Seminar</td>
<td>BIOL 182/L: College Biology II/Cellular Bio/Lab</td>
</tr>
<tr>
<td>BIOL 181/L: College Biology I /Organismal Bio/Lab</td>
<td>CHEM 122/122L: General Chemistry/Lab</td>
</tr>
<tr>
<td>CHEM 121/121L: General Chemistry I/Lab</td>
<td>MATH 221: Applied Calculus</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>Total Semester Hours</strong></td>
</tr>
<tr>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td><strong>Second Year</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 201/201L: Botany/Lab (Spring) OR BIOL 202/202L: Zoology/Lab (Fall)</td>
<td>BIOL 350: Mendelian and Pop. Genetics</td>
</tr>
<tr>
<td>CHEM 301/301L: Organic Chemistry I/Lab</td>
<td>CHEM 302/302L: Organic Chemistry II/Lab</td>
</tr>
<tr>
<td>PHYS 201/201L: Principles of Physics I/Lab OR PHYS 221/221L: General Physics I/Lab (Spring)</td>
<td>PHYS 222/222L: General Physics II/Lab (Fall)</td>
</tr>
<tr>
<td>MATH 156: Introduction to Statistics</td>
<td>COMR 103: Speaking and Listening</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>Total Semester Hours</strong></td>
</tr>
<tr>
<td>16-17</td>
<td>17-18</td>
</tr>
<tr>
<td><strong>Third Year</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 301/301L: General Microbiology/Lab OR CHEM 311: Survey of Biochemistry</td>
<td>BIOL 351: Molecular Biology and Genetics</td>
</tr>
<tr>
<td>General Education Course: Humanities</td>
<td>BIOL 352: Evolutionary Biology and Ecology</td>
</tr>
<tr>
<td>General Education Course: Social Science</td>
<td>General Education Course: Social Science</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>Total Semester Hours</strong></td>
</tr>
<tr>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td><strong>Fourth Year</strong></td>
<td></td>
</tr>
<tr>
<td>Advisor Approved Upper Div. Biology Electives General Electives</td>
<td>BIOL 412/L Cellular Biology</td>
</tr>
<tr>
<td></td>
<td>BIOL 493: Senior Seminar</td>
</tr>
<tr>
<td></td>
<td>Advisor Approved Upper Division Biology Elective General Electives</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>Total Semester Hours</strong></td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>
**ACADEMIC PLANNING SHEET**

**B.S. BIOLOGY**

**CELLULAR & MOLECULAR BIOSCIENCES EMPHASIS**

**COLORADO STATE UNIVERSITY – PUEBLO**

2018-2019 CATALOG

---

**General Education Requirements:** 21 semester hours

- ENG 101: English Composition I (3)
- ENG 102: English Composition II (3)
- Mathematics Course (3)
  - MATH 156: Introduction to Statistics (3)
- Humanities Courses (9)
- History Course (3)
- Social Sciences Courses (6)
- 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)
- COMR 103: Speaking and Listening (3)

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

---

**Major Requirements:**

**Core Requirements for Major to include BIOL 412/L:** 30 semester hours

- BIOL 171: First Year Seminar (1)
- BIOL 181/L: College Biology I/Organismal Bio/Lab (4)
- BIOL182/L: College Biology II/Cellular Bio/Lab (4)
- BIOL 201/L: Botany/Lab (4)
  
OR
- BIOL 202/L: Zoology/Lab (4)
- BIOL 301/L: General Microbiology/Lab (5)
- BIOL 350: Mendelian & Population Genetics (2)
- BIOL 351: Molecular Biology and Genetics (2)
- BIOL 352: Evolutionary Biology and Ecology (3)
- BIOL 412/L: Cellular Biology/Lab (4)
- BIOL 493: Seminar (1)

**Basic Cellular & Molecular Biosciences:** 15 semester hours

- BIOL 351L: Adv. Genetics & Molecular Biology Lab (2)
- CHEM 311: Survey of Biochemistry (3)
  
OR
- CHEM 411: Biochemistry I (3)
- Advisor approved Upper Division Biology Electives (10)  
  (Listed as “Advisor Approved Upper Division Biology Elective” on the first page)

**Required Support Courses:** 38-40 semester hours

- CHEM 121/L: General Chemistry I/Lab I (5)
- CHEM 122/L: General Chemistry II/Lab II (5)
- CHEM 301/L: Organic Chemistry I/Lab I (5)
- CHEM 302/L: Organic Chemistry II/Lab II (5)
- MATH 156: Introduction to Statistics (3)
- MATH 221: Applied Calculus (4)
- PHYS 201/L: Principles of Physics I/Lab I (4)
  
AND
- PHYS 202/L: Principles of Physics II/Lab II (4)
  
OR
- PHYS 221/L: General Physics I/Lab (5)
  
AND
- PHYS 222/L: General Physics II/Lab (5)
- COMR 103: Speaking and Listening (3)

(Courses italicized meet General Education requirements)

**General Electives:** 16 semester hours

- BIOL 352: Evolutionary Biology and Ecology (3)
- BIOL 412/L: Cellular Biology/Lab (4)
- BIOL 493: Seminar (1)

---

**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 2.000 in the major area.
- Students majoring in biology must demonstrate computer literacy.

---

**DISCLAIMER:** 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 CSU-Pueblo.

08/09/18