**Biology, B.S., Cell and Molecular Concentration**  
303-556-3213 Science 213

This sheet applies to the 2009-2010 catalog only. It does not replace the full catalog or departmental advising sheets as official statements of requirements. Students with declared majors must work with a faculty advisor on course selection and sequencing to ensure a timely graduation.

<table>
<thead>
<tr>
<th>General Studies</th>
<th>41-42</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major courses</td>
<td>35</td>
</tr>
<tr>
<td>CCA courses</td>
<td>8</td>
</tr>
<tr>
<td>Minor/second major in Chemistry</td>
<td>26</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td>Total to graduate (min. 40 hrs upper division)</td>
<td>120</td>
</tr>
</tbody>
</table>

Students who have reached junior standing (60 hrs) should request a CAPP (graduation compliance report) and review it with a faculty advisor.

### GENERAL STUDIES

**Composition**

- **ENG1010-3** Freshman Comp: The Essay
- **ENG1020-3** Freshman Comp: Anal., Rsrch & Docum.

**Mathematics**

- **MTH1110-4** College Algebra or higher level math
- **MTH-3-4**

**Communications**

- **-3**

**Historical**

- **-3**

**Arts & Letters**

- **-3**
- **-3**

**Social Sciences**

- **-3**
- **-3**

**Natural Sciences**

- **CHE1800-4** General Chemistry I
- **CHE1810-4** General Chemistry II
- **CHE1850-2** General Chemistry Lab

**Multicultural Requirement**

*(may be satisfied within General Studies, major, minor or electives)*

- **-3**

Required MINOR/SECOND MAJOR in CHEMISTRY

(See the department and catalog for hours and policies.)

### MAJOR COURSES

- **BIO 1080-3** General Biology I
- **BIO 1090-1** General Biology Lab I
- **BIO 1081-3** General Biology II
- **BIO 1091-1** General Biology Lab II
- **BIO 2400-5** General Microbiology
- **BIO 3050-4** Cell and Molecular Biology
- **BIO 3600-4** General Genetics (check catalog for prerequisites)
- **BIO 4510-4** Microbial Ecology (Senior Experience)

Required Community College of Aurora courses:

- **BIO 273-4** Methods in Cell Biology and Immunology
- **BIO 274-4** Nucleic Acid Techniques and Molecular Cloning

Select 10 hours of the following in consultation with a faculty advisor:

- **BIO 3210-4** Histology
- **BIO 3270-4** Parasitology
- **BIO 3340-3** Endocrinology
- **BIO 3350-4** Immunology
- **BIO 4050-4** Advanced Cell and Molecular Biology
- **BIO 4060-2** Advanced Cell and Molecular Biology Lab
- **BIO 4440-3** Virology
- **BIO 4450-5** Pathogenic Microbiology
- **BIO 4470-4** Microbial Genetics
- **BIO 3980/4980-2** Internship/Independent Study

Required Non-Biology courses

One year of math starting with MTH 1110 or higher (see General Studies)

CHEMISTRY MINOR REQUIRED or second major in Chemistry.