B.A. in Biochemistry & Cell Biology
Degree requirements starting fall 2010

Total hours required
This degree requires a minimum number of 123 credit hours (122 hours if Phys 101 is taken in place of Phys 125). This total includes 60 credit hours taken outside the major. The additional 60 hours may include course work in BIOC or other Natural Sciences or Engineering departments provided that the credit is not specifically applied toward the major. More than 123 hours may be required depending on course selection. For example, substituting 3 credit hours of Bios or Bioc 310 for a 1 credit hour laboratory course increases the required total by 2 credit hours. If Bioc 401/402/412 is taken for a total of 11 credit hours and then used to satisfy requirements for a 1 credit elective lab and a single 400 level elective Bioc course, the total hours required increases by 7.

Required courses by department

<table>
<thead>
<tr>
<th>MATH</th>
<th>CHEM</th>
<th>BIOC (formerly BIOS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>101 or 111/112</td>
<td>121 or 151</td>
<td>Bios or Bioc 201</td>
</tr>
<tr>
<td>102</td>
<td>122 or 152</td>
<td>Bios or Bioc 211</td>
</tr>
<tr>
<td>211</td>
<td>123 or 153</td>
<td>Bios or Bioc 301</td>
</tr>
<tr>
<td></td>
<td>214 or 154</td>
<td>Bios or Bioc 311</td>
</tr>
<tr>
<td></td>
<td>211 or 251</td>
<td>Bios or Bioc 341</td>
</tr>
<tr>
<td>125, 101, or 111</td>
<td>212 or 252</td>
<td></td>
</tr>
<tr>
<td>126, 102, or 112</td>
<td>215</td>
<td></td>
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</tbody>
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Elective courses

Two courses from the following list:
- Bios or Bioc 302, 344, 352

Two elective laboratory courses:
- All biochemistry & cell biology majors must take at least two additional laboratory courses, at least one of which must be from the following list:
  - Bios or Bioc 313, 318, 320 (Bioe 342), 393, 413, 415, 530, 532, 533, 535.
  - If taken for 3 or more credits, Bioc 310, or Hons 470/471, or Bioc 401/402/412 may be used to satisfy the second elective lab requirement. The research supervisor must be from the Biochemistry & Cell Biology Dept. or approved by the Dept. Chair.

One Bioc 400 level course ≥ 3 credit hours*

Two additional courses in Natural Sciences or Engineering, 300 level or above and ≥ 3 credit hours**

*Only a course listed at the 400 level since academic year 2010-2011 can be used to fill this requirement

**Natural Sciences/Engineering includes any 300-level or greater course of at least 3 credit hours from any department in the Wiess School of Natural Sciences (including Biochemistry and Cell Biology) or George R. Brown School of Engineering except independent research courses such as Bioc 310 or Bioe 400/401, which cannot be used to fulfill this requirement.

Substitutions
(1) The combined courses Bioc 401/402/412 are considered a single Bioc 400 level course AND a single lab at 300 level or higher. To count toward the major all three courses must be completed.
(2) Chem 310 or Chem 311 and 312 may be substituted for BIOC 352.

Additional notes
Students may receive credit toward the major of a maximum of 3 credits of Bioc 390 (Transfer Credit in Biochemistry & Cell Biology) A student may graduate under the requirements that were in place at the time of matriculation or in the year of graduation; requirements cannot be "mixed," however.
A double major including a B.S. and a B.A. is considered a dual degree; to earn a dual degree a student must complete 30 credit hours in addition to the hours required for the primary major.