# Academic Plan for a B.A. in Biochemistry

## Freshman Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>CHEM 151</th>
<th>MATH 122A/B (or 125)</th>
<th>ENGL 101</th>
<th>TIER 1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>4</td>
<td>5 (3)</td>
<td>3</td>
<td>3</td>
<td>13-15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>CHEM 152</td>
<td>MATH 129</td>
<td>ENGL 102</td>
<td>TIER 1</td>
<td>13-16</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3 (or 6)</td>
<td></td>
</tr>
</tbody>
</table>

## Sophomore Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>CHEM 241A/243A</th>
<th>MCB 181 R/L</th>
<th>TIER 1</th>
<th>Second Language</th>
<th>BIOC 296B (or spring)*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>15-16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>CHEM 241B/243B</td>
<td>ECOL 182 R/L</td>
<td>TIER 1/2</td>
<td>Second Language</td>
<td>BIOC 296B (or fall)*</td>
<td>15-16</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

## Junior Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>BIOC 462A</th>
<th>TIER 2</th>
<th>PHYS 102, 140 or 141</th>
<th>Second Language</th>
<th>TIER 2/Elective</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>4</td>
<td>3</td>
<td>3/3/4</td>
<td>4</td>
<td>3</td>
<td>14-18</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>BIOC 462B</td>
<td>BIOC 466 (or Senior year)</td>
<td>PHYS 103, 240 or 241</td>
<td>Second Language</td>
<td>TIER 2</td>
<td>15-19</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
<td>3/3/4</td>
<td>4</td>
<td>3</td>
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</table>

## Senior Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>BIOC 492(H) or 498(H)</th>
<th>Science Elective</th>
<th>TIER 2/Electives</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>1 or 3</td>
<td>3</td>
<td>6-12</td>
<td>13-18</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>BIOC 498(H)</td>
<td>Science Elective</td>
<td>General Electives</td>
<td>12-18</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>6-12</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units Needed: 120**

Classes in bold are only offered in the fall or spring semester as shown.
B.A. Biochemistry
Catalog Year 2015–2016

NAME ___________________________________ SID ___________________ Date__________

FOUNDATION COURSES:

i. Freshman Composition  (Complete one sequence)
   ENGL 101 (3) _____ ENGL 102 (3) _____ or
   ENGL 107 (3) _____ ENGL 108 (3) _____ or
   ENGL 109 (3) _____  MCWA____

ii. Mathematics: Satisfied by math pre-major courses

iii. Second Language  (Fourth Semester Proficiency)

TIER ONE COURSES:

i. Individuals and Societies 150  (6 units)*

ii. Traditions and Cultures 160  (6 units)*

iii. Natural Sciences 170: Requirement met by major

TIER TWO COURSES:

i. Arts  (3 units)

ii. Humanities  (3 units)

iii. Individuals and Societies  (3 units)

iv. Gender/Race/Class/Ethnicity/Non Western: One course must meet this requirement. Can be double-dipped with Tier One or Tier Two course

Note: Honors options (H) are available to substitute for a number of the listed pre-major and major courses. Courses offered only in the fall or spring semesters are labeled with F or S.

* Tier 1 coursework must be uniquely lettered within each category.

PRE-MAJOR COURSES: (28-32 units)

Introductory Biology
MCB 181R and L (4) _____
ECOL 182R and L (4) _____

General Chemistry
CHEM 151 (4) _____ CHEM 152 (4) _____

Mathematics
MATH 122A/B (5) or 125 (3) _____
MATH 129 (3) _____

Physics
PHYS 102 (3), 140 (3) or 141 (4) _____
PHYS 103 (3), 240 (3) or 241 (4) _____

MAJOR COURSES: (28-33 units)

Organic Chemistry
CHEM 241A (3) _____ CHEM 243A (1) _____
CHEM 241B (3) _____ CHEM 243B (1) _____

Biochemistry
BIOC 296B Intro to Biochemical Research (1) _____
BIOC 462A Biochemistry (4; F) _____
BIOC 462B Biochemistry (4; S) _____
BIOC 466 Biochemistry of Nucleic Acids (4; S) _____
BIOC 492(H) Directed Research (1) or _____
BIOC 498(H) Senior Capstone (3/3) _____

Science Electives  (Complete six units of 300-400 level courses from the list below or as preapproved by a CBC advisor)

ECOL 320, 326, 474
MCB 302, 304, 340, 360 410, 411, 480
MIC 328R, 428R
NSC 408
PSIO 420, 431, 484
NROS 307, 310
PHCL 412
PLS 359, 360, 448A

CBC Website       UA Academic       Research
Website           Catalogs         Website

5/26/15