## 2018 - 2019 Major Map

**Biology (Pharmacology/Toxicology), BS**

**School/College:** New College of Interdisciplinary Arts and Sciences  
**Location:** West campus

### Term 1 - 15 Credit Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 181</td>
<td>General Biology I (SQ)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>CHM 113</td>
<td>General Chemistry I (SQ)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>First-Year Composition OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 105</td>
<td>Advanced First-Year Composition OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 107</td>
<td>First-Year Composition</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>MAT 210</td>
<td>Brief Calculus (MA) OR STP 226: Elements of Statistics (CS)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>NEW 101</td>
<td>The ASU New College Experience</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 15

- An SAT, ACT, Accuplacer, IELTS, or TOEFL score determines placement into first-year composition courses.
- Mathematics Placement Assessment score determines placement in mathematics course.
- ASU 101 or college-specific equivalent First-Year Seminar required of all freshman students. NEW 101 satisfies this requirement.
- Students considering medical school, graduate school, or research are encouraged to enroll in MAT 270 (and 271 the following semester) in place of MAT 210 so that they have a full year of calculus. This may require more than 120 hours to complete the degree.
- IAS 300 (3 credit hours) is required for all transfer students in place of NEW 101.
- Select your career interest area.

### Term 2 - 15 - 30 Credit Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 182</td>
<td>General Biology II (SG)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>CHM 116</td>
<td>General Chemistry II (SQ)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>First-Year Composition OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 105</td>
<td>Advanced First-Year Composition OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 107</td>
<td>First-Year Composition</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>MAT 210</td>
<td>Brief Calculus (MA) OR STP 226: Elements of Statistics (CS)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Complete ENG 101 OR ENG 105 OR ENG 107 course(s).**

**Term hours subtotal:** 15

- Students taking MAT 270 AND MAT 271 in place of MAT 210 still must complete a Statistics course. Students wishing to take STP 226 can take MAT 271 in place of STP 226 in term 2, and then take STP 226 in a later term.
- Students considering medical school, graduate school, or research are encouraged to enroll in STP 280 (and 281 the following semester) in place of STP 226 so that they have a full year of statistics. Note that MAT 270 and 271 are pre-reqs for STP 280 and 281 respectively. This may require more than 120 hours to complete the degree.

### Term 3 - 30 - 45 Credit Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 111</td>
<td>General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>BIO 201</td>
<td>Human Anatomy and Physiology I (SG)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>CHM 233</td>
<td>General Organic Chemistry I AND CHM 237: General Organic Chemistry Laboratory I</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Literacy and Critical Inquiry (L)</td>
<td>3</td>
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<td></td>
</tr>
</tbody>
</table>

**Complete CHM 113, CHM 116 course(s).**

**Complete First-Year Composition requirement.**

- Develop your research skills.
Complete Mathematics (MA) requirement.

Complete BIO 181, BIO 182 course(s).

<table>
<thead>
<tr>
<th>Term hours subtotal:</th>
<th>15</th>
</tr>
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</table>

### Term 4 45 - 60 Credit Hours

<table>
<thead>
<tr>
<th>Critical course signified by ⚫</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ)</td>
<td>4</td>
<td>C</td>
<td>• Explore an internship or IGLE international experience.</td>
</tr>
<tr>
<td>BIO 202: Human Anatomy and Physiology II (SG)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>CHM 234: General Organic Chemistry II AND CHM 238: General Organic Chemistry Laboratory II</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Humanities, Arts and Design (HU)</td>
<td>3</td>
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</table>

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<tr>
<th>Term hours subtotal:</th>
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</table>

### Term 5 60 - 76 Credit Hours

<table>
<thead>
<tr>
<th>Necessary course signified by ⚫</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSC 347: Fundamentals of Genetics AND LSC 348: Fundamentals of Genetics Laboratory</td>
<td>4</td>
<td>C</td>
<td>• IAS 300 (3 credit hours) is required for all transfer students.</td>
</tr>
<tr>
<td>LSC 362: The Human Environment</td>
<td>3</td>
<td>C</td>
<td>• Develop your professional online presence.</td>
</tr>
<tr>
<td>Upper Division Literacy and Critical Inquiry (L) OR IAS 300: Adult Career Development (L or SB)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Diversity in the U.S. (C)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social-Behavioral Sciences (SB)</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Term hours subtotal:</th>
<th>16</th>
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</table>

### Term 6 76 - 90 Credit Hours

<table>
<thead>
<tr>
<th>Necessary course signified by ⚫</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 353: Cell Biology AND BIO 354: Cell Biology Laboratory</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical Awareness (H)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social-Behavioral Sciences (SB)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Term hours subtotal:</th>
<th>14</th>
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</table>

### Term 7 90 - 104 Credit Hours

<table>
<thead>
<tr>
<th>Necessary course signified by ⚫</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCH 371: Modern Concepts in Biochemistry AND BCH 372: Modern Concepts in Biochemistry Laboratory</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>PTX 432: Fundamentals of Pharmacology OR LSC 432: Fundamentals of Pharmacology</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>MIC 443: The Microbial Universe AND MIC 444: The Microbial Universe Laboratory</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Upper Division Language and Cultures: Requirement satisfied through the following: * Completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the University General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term hours subtotal:</th>
<th>14</th>
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</thead>
</table>
Term 8 104 - 120 Credit Hours Necessary course signified by ⭐️

<table>
<thead>
<tr>
<th>Course or Requirement</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTX 475: Principles of Toxicology OR LSC 475: Principles of Toxicology</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 360: Animal Physiology AND LSC 359: Animal Physiology Laboratory</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Upper Division Humanities, Arts and Design (HU) AND Global Awareness (G) OR Upper Division Social-Behavioral Sciences (SB) AND Global Awareness (G) (ASB 353 recommended)</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>Upper Division Language and Cultures: Requirement satisfied through the following:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the University General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Humanities, Arts and Design (HU)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term hours subtotal:</td>
<td>16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General University Requirements Legend

General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2018 - 2019 academic year.