# 2019 - 2020 Major Map

Applied Biological Sciences (Preveterinary Medicine), BS

**School/College:** College of Integrative Sciences and Arts  
**Location:** Polytechnic campus  
**LSABSPMBS**

## Term 1  - 14 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 181: General Biology I (SQ)</td>
<td>4</td>
<td>C</td>
<td>- Critical course signified by ☀</td>
</tr>
<tr>
<td>ASU 101-UC: The ASU Experience</td>
<td>1</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>ENG 101 or ENG 102: First-Year Composition OR</td>
<td>3</td>
<td>C</td>
<td>- Mathematics Placement Assessment score determines placement in mathematics course</td>
</tr>
<tr>
<td>ENG 105: Advanced First-Year Composition OR</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>ENG 107 or ENG 108: First-Year Composition</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>MAT 210: Brief Calculus (MA) OR MAT 251: Calculus for Life Sciences (MA)</td>
<td>3</td>
<td>C</td>
<td>-</td>
</tr>
<tr>
<td>Social-Behavioral Sciences (SB)</td>
<td>3</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

Term hours subtotal: 14

## Term 2  - 14 - 31 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 182: General Biology II (SG)</td>
<td>4</td>
<td>C</td>
<td>- Critical course signified by ☀</td>
</tr>
<tr>
<td>CHM 113: General Chemistry I (SQ)</td>
<td>4</td>
<td>C</td>
<td>-</td>
</tr>
<tr>
<td>ENG 101 or ENG 102: First-Year Composition OR</td>
<td>3</td>
<td>C</td>
<td>-</td>
</tr>
<tr>
<td>ENG 105: Advanced First-Year Composition OR</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>ENG 107 or ENG 108: First-Year Composition</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Historical Awareness (H)</td>
<td>3</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Humanities, Arts and Design (HU)</td>
<td>3</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Complete ENG 101 OR ENG 105 OR ENG 107 course(s).</td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

Term hours subtotal: 17

## Term 3  - 31 - 48 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS 271: Veterinary Medicine Today</td>
<td>3</td>
<td>C</td>
<td>- Critical course signified by ☀</td>
</tr>
<tr>
<td>CHM 116: General Chemistry II (SQ)</td>
<td>4</td>
<td>C</td>
<td>-</td>
</tr>
<tr>
<td>PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)</td>
<td>4</td>
<td>C</td>
<td>-</td>
</tr>
<tr>
<td>Cultural Diversity in the U.S. (C)</td>
<td>3</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Global Awareness (G)</td>
<td>3</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Complete Mathematics (MA) requirement.</td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

Term hours subtotal: 17

## Term 4  - 48 - 62 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG)</td>
<td>4</td>
<td>C</td>
<td>- Critical course signified by ☀</td>
</tr>
<tr>
<td>PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ)</td>
<td>4</td>
<td>C</td>
<td>-</td>
</tr>
<tr>
<td>Literacy and Critical Inquiry (L)</td>
<td>3</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

- 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
- Select your Career Interest Communities and play me3@ASU.
### Term 5 62 - 78 Credit Hours

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>● ABS 370: Ecology</td>
<td>3</td>
<td>C</td>
<td>* Build your professional connections -- join the ASU Mentor Network</td>
</tr>
<tr>
<td>● BIO 360: Animal Physiology OR ABS 314: Applied Plant Physiology OR ABS 311: Molecular and Cellular Biology</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>● CHM 233: General Organic Chemistry I AND CHM 237: General Organic Chemistry Laboratory I</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Upper Division Pre-Veterinary Elective</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>
</tbody>
</table>

**Term hours subtotal:** 14

### Term 6 78 - 92 Credit Hours

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>● ABS 355: Ecology and Adaptations of Vertebrates</td>
<td>3</td>
<td>C</td>
<td>* Use Handshake to research employment opportunities.</td>
</tr>
<tr>
<td>● BIO 340: General Genetics</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>Upper Division Pre-Veterinary Elective</td>
<td>3</td>
<td>C</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>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 16

### Term 7 92 - 106 Credit Hours

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>● ABS 490: Applied Biological Sciences Seminar</td>
<td>1</td>
<td>C</td>
<td>* Gather professional references.</td>
</tr>
<tr>
<td>● BCH 361: Advanced Principles of Biochemistry</td>
<td>3</td>
<td>C</td>
<td>* Apply for full-time career opportunities.</td>
</tr>
<tr>
<td>● BCH 367: Elementary Biochemistry Laboratory</td>
<td>1</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>● ABS 350: Applied Statistics (CS) OR STP 420: Introductory Applied Statistics (CS)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Complete 2 courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Literacy and Critical Inquiry (L)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 14

### Term 8 106 - 120 Credit Hours

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>● ABS 378: Animal Nutrition</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Complete 2 courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Pre-Veterinary Elective</td>
<td>6</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Upper Division Elective OR ABS 484: Internship</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 14

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**Pre-Veterinary Electives (12 Hours Required)**
ABS 302: Ethical and Policy Issues in Biology
ABS 312: Structure and Function
ABS 318: Unseen Life on Earth
ABS 372: Captive Animal Behavior Management
ABS 376: Wildlife Ecology
ABS 394: Introduction to Equine Science
ABS 417: Comparative Immunology
ABS 470: Life History of Mammals
ABS 472: Applied Herpetology
ABS 473: Applied Ornithology
ABS 484: Internship
ABS 494: Anatomy Practicum
ABS 494: Emerging Infections & Epidemics

Notes:
- Students must complete a minimum of 12 credit hours of science courses offered by the College of Integrative Sciences and Arts. Select from ABS, CHM, BIO, PHY, and MIC prefixes.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

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 2019 - 2020 academic year.