2021 - 2022 Major Map  
Applied Biological Sciences (Sustainable Horticulture), BS

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

<table>
<thead>
<tr>
<th>Term 1 0 - 14 Credit Hours Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO 181: General Biology I (SQ)</strong></td>
<td>4</td>
<td>C</td>
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</tr>
<tr>
<td>ASU 101-CLS: The ASU Experience</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENG 101 or ENG 102: First-Year Composition OR</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>ENG 105: Advanced First-Year Composition OR</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>ENG 107 or ENG 108: First-Year Composition</strong></td>
<td>3</td>
<td>C</td>
<td></td>
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<tr>
<td><strong>MAT 251: Calculus for Life Sciences (MA)</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Social-Behavioral Sciences (SB) AND Global Awareness (G)</td>
<td>3</td>
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Term hours subtotal: 14

<table>
<thead>
<tr>
<th>Term 2 14 - 28 Credit Hours Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td><strong>BIO 182: General Biology II (SQ)</strong></td>
<td>4</td>
<td>C</td>
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<tr>
<td><strong>ENG 101 or ENG 102: First-Year Composition OR</strong></td>
<td>3</td>
<td>C</td>
<td></td>
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<tr>
<td><strong>ENG 105: Advanced First-Year Composition OR</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>ENG 107 or ENG 108: First-Year Composition</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>PHY 101: Introduction to Physics (SQ) OR PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)</strong></td>
<td>4</td>
<td>C</td>
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<tr>
<td>Humanities, Arts and Design (HU)</td>
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<tr>
<td>Complete ENG 101 OR ENG 105 OR ENG 107 course(s).</td>
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Term hours subtotal: 14

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<thead>
<tr>
<th>Term 3 28 - 44 Credit Hours Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
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<tbody>
<tr>
<td><strong>CHM 113: General Chemistry I (SQ)</strong></td>
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<tr>
<td>Historical Awareness (H)</td>
<td>3</td>
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<tr>
<td>Literacy and Critical Inquiry (L)</td>
<td>3</td>
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<td></td>
</tr>
<tr>
<td>Social-Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C)</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>Elective</td>
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<tr>
<td>Complete Mathematics (MA) requirement.</td>
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Term hours subtotal: 16

<table>
<thead>
<tr>
<th>Term 4 44 - 58 Credit Hours Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ABS 260: Fundamentals of Sustainable Horticulture (SG)</strong></td>
<td>4</td>
<td>C</td>
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</tr>
<tr>
<td><strong>CHM 116: General Chemistry II (SQ)</strong></td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Sustainable Horticulture Elective</td>
<td>3</td>
<td>C</td>
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<table>
<thead>
<tr>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>• ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students</td>
</tr>
<tr>
<td>• Select your Career Interest Communities and play me3@ASU.</td>
</tr>
<tr>
<td>• Students considering graduate school or health professions should complete the PHY 111/113 and PHY 112/114 sequence, using PHY 112/114 in place of electives. All other students will complete PHY 101.</td>
</tr>
<tr>
<td>• Join a student club or professional organization.</td>
</tr>
<tr>
<td>• Secure a part-time job or volunteer experience.</td>
</tr>
<tr>
<td>• Sustainable Horticulture Elective chosen from list below.</td>
</tr>
</tbody>
</table>

Page 1
<table>
<thead>
<tr>
<th>Term 5 58 - 75 Credit Hours</th>
<th>Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS 363: Sustainable Landscape Practice</td>
<td>4</td>
<td>C</td>
<td></td>
<td>Students considering graduate school or health professions should complete the Organic Chemistry Sequence of both CHM 233/237 and CHM 234/238 sequence, using CHM 234/238 in place of electives. All other students will complete CHM 231/235.</td>
</tr>
<tr>
<td>ABS 370: Ecology</td>
<td>3</td>
<td>C</td>
<td></td>
<td>Build your professional connections -- join the ASU Mentor Network.</td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td>3</td>
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<tr>
<td>Elective</td>
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<td>Term hours subtotal:</td>
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<table>
<thead>
<tr>
<th>Term 6 75 - 89 Credit Hours</th>
<th>Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS 368: Plant Propagation</td>
<td>3</td>
<td>C</td>
<td></td>
<td>Use Handshake to research employment opportunities.</td>
</tr>
<tr>
<td>BIO 340: General Genetics</td>
<td>4</td>
<td>C</td>
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</tr>
<tr>
<td>ABS 362: Landscape Plants</td>
<td>4</td>
<td>C</td>
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<td></td>
</tr>
<tr>
<td>Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)</td>
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</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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<tr>
<td>Term hours subtotal:</td>
<td>14</td>
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<table>
<thead>
<tr>
<th>Term 7 89 - 104 Credit Hours</th>
<th>Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS 350: Applied Statistics (CS)</td>
<td>3</td>
<td>C</td>
<td></td>
<td>Apply for full-time career opportunities.</td>
</tr>
<tr>
<td>ABS 464: Desert Horticulture</td>
<td>3</td>
<td>C</td>
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<tr>
<td>Elective</td>
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<tr>
<td>Term hours subtotal:</td>
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<thead>
<tr>
<th>Term 8 104 - 120 Credit Hours</th>
<th>Necessary course signified by ⭐</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>
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Notes:

- First-Year Composition: All students are placed in ENG 101 unless submission of SAT, ACT, Accuplacer, IELTS, or TOEFL score, or college-level transfer credit or test credit equivalent to ASU's first-year composition course(s), determine otherwise. Students on Polytechnic, Downtown Phoenix and West Campuses are encouraged to complete the Directed Self-Placement survey to choose the first-year composition option they believe best suits their needs. Visit: https://cisa.asu.edu/DSP
- Mathematics Placement Assessment score determines placement in first mathematics course.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ABS 225</td>
<td>Soils (SQ)</td>
</tr>
<tr>
<td>ABS 318</td>
<td>Unseen Life on Earth</td>
</tr>
<tr>
<td>ABS 364</td>
<td>Urban Forestry</td>
</tr>
<tr>
<td>ABS 394</td>
<td>Future of Agriculture: Vertical Farming</td>
</tr>
<tr>
<td>ABS 460</td>
<td>Organic Gardening</td>
</tr>
<tr>
<td>ABS 462</td>
<td>Greenhouse/Nursery Management</td>
</tr>
<tr>
<td>ABS 484</td>
<td>Internship</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 2021 - 2022 academic year.