

## 2024 - 2025 Major Map

### Biological Sciences (Conservation Biology and Ecology), BS

School/College: [The College of Liberal Arts and Sciences](#)  
LABSCCBS

Term 1 - A 0 - 8 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 ASU 101-LA: The ASU Experience	1		<ul style="list-style-type: none"> <li>ASU 101 or college-specific equivalent</li> <li>First-Year Seminar required of all first-year students</li> </ul>
 BIO 181: General Biology I (SCIT OR SQ)	4	C	
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
Term hours subtotal:	8		

Term 1 - B 8 - 15 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 BIO 182: General Biology II (SCIT OR SG)	4	C	<ul style="list-style-type: none"> <li>View ASU Online first-year student registration information <a href="#">here</a>.</li> <li>Create a resume and <a href="#">Handshake account</a> with the Career &amp; Professional Development Center to explore research or internship opportunities</li> <li>Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.)</li> <li>Join a <a href="#">student organization</a></li> </ul>
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
Term hours subtotal:	7		

Term 2 - A 15 - 22 Credit Hours	Hours	Minimum Grade	Notes
CHM 113: General Chemistry I (SCIT OR SQ)	4	C	<ul style="list-style-type: none"> <li>Select your <a href="#">career interest area</a> and play <a href="mailto:me3@asu">me3@ASU</a>.</li> <li>Students transferring General Statistics (STP 226 or PSY 230) will fulfill STP 231 requirement</li> </ul>
STP 231: Statistics for Life Science (QTRS OR CS)	3	C	
Term hours subtotal:	7		

Term 2 - B 22 - 29 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
CHM 116: General Chemistry II (SCIT OR SQ)	4	C	<ul style="list-style-type: none"> <li>If interested in health-related professional programs, research the <a href="#">timeline</a> for admissions preparation and <a href="#">general admission requirements</a>.</li> <li>Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.)</li> <li>Students transferring Calculus (MAT 270 or MAT 210) will fulfill MAT 251 requirement</li> </ul>
MAT 251: Calculus for Life Sciences (MATH OR MA)	3	C	
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	7		

Term 3 - A 29 - 35 Credit Hours <b>Critical course signified by</b> ⚠	Hours	Minimum Grade	Notes
⚠ BIO 320: Fundamentals of Ecology	3	C	<ul style="list-style-type: none"> <li>It is not recommended to take more than two lab courses in a term.</li> <li>Review the <a href="#">Career Guide for ASU Online students</a> to learn about available career planning resources.</li> </ul>
Physical Science Requirement Course	3-4	C	
Term hours subtotal:	6-7		

Term 3 - B 35 - 41 Credit Hours <b>Critical course signified by</b> ⚠	Hours	Minimum Grade	Notes
Science and Society Elective	3	C	<ul style="list-style-type: none"> <li>Meet with the <a href="#">Career &amp; Professional Development Center</a> to learn how to develop professional skills</li> </ul>
Humanities, Arts and Design (HUAD)	3		
⚠ Complete First-Year Composition requirement.			
⚠ Complete Mathematics (MATH) requirement.			
Term hours subtotal:	6		

Term 4 - A 41 - 47 Credit Hours	Hours	Minimum Grade	Notes
Humanities, Arts and Design (HUAD)	3		<ul style="list-style-type: none"> <li>BIO 322 must be completed by Term 5A; however, students can choose to take it this term</li> <li>Develop your <a href="#">professional online presence</a></li> </ul>
Social and Behavioral Sciences (SOBE)	3		
Term hours subtotal:	6		

Term 4 - B 47 - 54 Credit Hours <b>Critical course signified by</b> ⚠	Hours	Minimum Grade	Notes
⚠ BIO 340: General Genetics	4	C	
Global Communities, Societies and Individuals (GCSI)	3		
Term hours subtotal:	7		

Term 5 - A 54 - 60 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
★ BIO 322: Conservation of Biodiversity	3	C	<ul style="list-style-type: none"> <li>BIO 322 will be used to satisfy the Upper Division Science and Society requirement for The College</li> <li>If interested in health-related professional programs, use <a href="#">ASU's Health Professions Advising</a> to prepare for application.</li> <li>Meet with your advisor to discuss ways to maximize your remaining time at ASU (i.e. pre-health; Accelerated Masters Programs; study abroad)</li> <li>Explore graduate school or full-time <a href="#">career opportunities</a></li> </ul>
★ BIO 345: Evolution	3	C	
Term hours subtotal:	6		

Term 5 - B 60 - 66 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
★ Upper Division Human Dimensions of Conservation and Ecology Course	3	C	<ul style="list-style-type: none"> <li><a href="#">Network</a> in your career interest area.</li> </ul>
Sustainability (SUST)	3		
Term hours subtotal:	6		

Term 6 - A 66 - 72 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
★ Upper Division Conservation Biology and Ecology Field Methods Course	3	C	<ul style="list-style-type: none"> <li>Students wanting to use BIO 484 internship to fulfill the Conservation</li> </ul>

Governance and Civic Engagement (CIVI)	3
Term hours subtotal:	6

Biology and Ecology Field Methods requirement must seek faculty approval first.

- Work with your academic advisor to align your additional major requirements and major elective courses with your career aspirations
- Use **Handshake** to research employment opportunities

Term 6 - B 72 - 78 Credit Hours	Hours	Minimum Grade	Notes
American Institutions (AMIT)	3		
Upper Division Elective	3		
Term hours subtotal:	6		

Term 7 - A 78 - 84 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
★ Upper Division Advanced Ecology Course	3	C	
Elective	3		
Term hours subtotal:	6		

- Meet with your advisor to verify remaining degree requirements have been met prior to Term 8
- Explore or apply for **full-time career opportunities** or **graduate school**

Term 7 - B 84 - 90 Credit Hours	Hours	Minimum Grade	Notes
Upper Division Elective	3		
Elective	3		
Term hours subtotal:	6		

Term 8 - A 90 - 97 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
★ Upper Division Advanced Human Dimensions of Conservation and Ecology Course	3	C	
Upper Division Elective	4		
Term hours subtotal:	7		

- Explore other resources available through ASU's **Career and Professional Development Center**

Term 8 - B 97 - 106 Credit Hours	Hours	Minimum Grade	Notes
Quantitative & Spatial Analysis Course	3-4	C	
Complete 2 courses:			
Elective	6		
Term hours subtotal:	9-10		

- Gather **professional references**

Term 9 - A 106 - 113 Credit Hours	Hours	Minimum Grade	Notes
Complete 2 courses:			
Upper Division Elective	7		
Term hours subtotal:	7		

- Continue to apply for **full-time career opportunities** or **graduate school**

Term 9 - B 113 - 120 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
★ Upper Division Advanced Ecology, Biodiversity, Field or Research Course	3-4	C	
Elective	4		
Term hours subtotal:	7-8		

- All students pursuing a BS or BSP degree in The College of Liberal Arts and Sciences must complete two courses from the Science and Society list found at <https://thecollege.asu.edu/resources/science-society>. At least one of the two courses must be upper-division and students must earn a C or better in the courses. Both Science and Society courses (i.e., all six credits) may count towards any major, minor, related fields, and ASU General Studies requirements.

#### Hide Course List(s)/Track Group(s)

Human Dimensions of Conservation and Ecology	Conservation Biology and Ecology Field Methods	Physical Science Requirement Courses
BIO 304: Plants and Civilization or ENV 302: Plants and Civilization	BIO 407: Novel Ecosystems	CHM 231: Elementary Organic Chemistry (SCIT OR SQ) AND CHM 235: Elementary Organic Chemistry Laboratory (SCIT OR SQ)
BIO 324: Environmental Ethics (SUST OR HU) or PHI 310: Environmental Ethics (SUST OR HU)	BIO 410: Techniques in Conservation Biology and Ecology	GIS 205: Geographic Information Science I (QTRS OR CS)
BIO 363: From Cells to Society: Understanding Complexity	BIO 484: Internship	GIS 211: Geographic Information Science II (QTRS OR CS)
BIO 412: Conservation in Practice	BIO 494: Discovering Biodiversity	GLG 101: Introduction to Geology I (Physical) (SCIT OR SQ) AND GLG 103: Introduction to Geology I: Laboratory (SCIT OR SQ)
SOS 310: Equity, Justice and Sustainability		GLG 327: Earth's Critical Zone or SOS 374: Earth's Critical Zone
SOS 321: Policy and Governance in Sustainable Systems		GPH 111: Introduction to Physical Geography (SCIT OR SQ)
SOS 325: The Economics of Sustainability		PHY 101: Introduction to Physics (SCIT OR SQ) or PHY 111: General Physics (SCIT OR SQ) AND PHY 113: General Physics Laboratory (SCIT OR SQ)
Quantitative & Spatial Analysis Courses	Advanced Ecology	Advanced Human Dimensions of Conservation and Ecology
BIO 415: Statistical Models for Biology (QTRS OR CS)	BIO 331: Animal Behavior	BIO 304: Plants and Civilization or ENV 302: Plants and Civilization
GIS 311: Geographic Information Science III (QTRS OR CS)	BIO 422: Ecosystem Ecology	BIO 324: Environmental Ethics (SUST OR HU) or PHI 310: Environmental Ethics (SUST OR HU)
GIS 470: Advanced Statistics for Geography and Planning (QTRS OR CS)	BIO 423: Population and Community Ecology	BIO 494: Society and Natural Resource Management
GIS 471: Spatial Statistics for Geography and Planning	BIO 425: Marine Conservation Ecology	PRM 370: Public Lands Management
GIS 494: GIS for Climate Change Science	SOS 326: Sustainable Ecosystems	PRM 380: Wilderness and Parks in America (SUST OR SB & H)
GIS 494: GIS Methods for Non-Majors		SOS 310: Equity, Justice and Sustainability
SOS 212: Systems, Dynamics and Sustainability (QTRS)		SOS 321: Policy and Governance in Sustainable Systems
Advanced Ecology, Biodiversity, Field or Research Course		SOS 325: The Economics of Sustainability
ASM 443: Primatology		

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BIO 331: Animal Behavior

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BIO 370: Vertebrate Zoology

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BIO 385: Comparative Invertebrate Zoology

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BIO 430: Plant Geography or GPH 422:  
Plant Geography

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BIO 495: Undergraduate Research

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- **Total Hours:** 120
- **Upper Division Hours:** 45 minimum
- **University Undergraduate Graduation Requirements**

**Notes:**

Mathematics Placement Assessment score determines placement in first mathematics course.

Please keep in mind that the applicability of a specific transfer course toward an ASU degree program depends on the requirements of the department, division, college or school in which you are enrolled at ASU. Transfer agreements that guarantee the completion of university level requirements do not necessarily meet college and major requirements. Please consult with an advisor for more information.

General Studies designations listed next to courses on the major map were valid for the 2024 - 2025 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.