







2024 - 2025 Major Map



Biological Sciences (Conservation Biology and Ecology), BS



School/College: The College of Liberal Arts and Sciences
LABSCCBS

Term 1 0 - 15 Credit Hours Critical course signified by !	Hours	Minimum Grade	Notes
! BIO 181: General Biology I (SCIT OR SQ)	4	C	<ul style="list-style-type: none"> LIA 101, ASU 101, or other First-Year Seminar required of all first-year students Students transferring General Statistics (STP 226 or PSY 230) will fulfill STP 231 requirement Select your career interest area and play me3@ASU.
! LIA 101: Student Success in The College of Liberal Arts and Sciences	1		
CHM 113: General Chemistry 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	
STP 231: Statistics for Life Science (QTRS OR CS)	3	C	
Term hours subtotal:	15		
Term 2 15 - 30 Credit Hours Critical course signified by !	Hours	Minimum Grade	Notes
! BIO 182: General Biology II (SCIT OR SG)	4	C	<ul style="list-style-type: none"> Join a student organization Create a resume and Handshake account with the Career & Professional Development Center Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.) Attend a Pre-Health 101 Session Students transferring Calculus (MAT 270 or MAT 210) will fulfill MAT 251 requirement
CHM 116: General Chemistry II (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	
MAT 251: Calculus for Life Sciences (MATH OR MA)	3	C	
Elective	1		
! Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	15		
Term 3 30 - 45 Credit Hours Critical course signified by !	Hours	Minimum Grade	Notes
! BIO 320: Fundamentals of Ecology	3	C	<ul style="list-style-type: none"> Some pre-health students may need CHM 233 and CHM 237 as their Physical Science requirement course this term. See the pre-health website for more information If CHM 233 and 237 are taken, then CHM 234 and 238 must be taken the following semester It is not recommended to take more than two lab courses in a term. Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.) Attend a Study Abroad 101 Session Explore minors or certificates
Physical Science Requirement Course	3-4	C	
Science and Society Elective	3	C	
Humanities, Arts and Design (HUAD)	3		
Social and Behavioral Sciences (SOBE)	3		
! Complete First-Year Composition requirement.			
! Complete Mathematics (MATH) requirement.			
Term hours subtotal:	15-16		
		Minimum	

Term 4 45 - 61 Credit Hours Critical course signified by 	Hours	Grade	Notes
 BIO 340: General Genetics	4	C	<ul style="list-style-type: none"> • Meet with the Career & Professional Development Center to learn how to develop professional skills • Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.) • Some pre-health students may need CHM 234 and CHM 238 this term instead of an elective. See the pre-health website for more information • If CHM 233 and 237 are taken, then CHM 234 and 238 must be taken the following semester
Humanities, Arts and Design (HUAD)	3		
Sustainability (SUST)	3		
Complete 2 courses:			
Elective	6		
Term hours subtotal:	16		

Term 5 61 - 76 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 BIO 322: Conservation of Biodiversity	3	C	<ul style="list-style-type: none"> • BIO 322 will be used to satisfy the upper-division Science and Society requirement for The College • Some pre-health students may need PHY 111 and 113 instead of an elective this term. See the pre-health website for more information • Meet with your advisor to discuss ways to maximize your remaining time at ASU (i.e. pre-health; Accelerated Masters Programs; study abroad)
 BIO 345: Evolution	3	C	
 Upper Division Human Dimensions of Conservation and Ecology Course	3	C	
Global Communities, Societies and Individuals (GCSI)	3		
Upper Division Elective	3		
Term hours subtotal:	15		

Term 6 76 - 91 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 Upper Division Conservation Biology and Ecology Field Methods Course	3	C	<ul style="list-style-type: none"> • Conservation Biology and Ecology courses teach students field (outdoor) and laboratory methods that are commonly used in conservation biology and ecology. • Some pre-health students may need PHY 112 and 114 instead of an elective this term. See the pre-health website for more information • Use Handshake to research employment opportunities
Complete 3 courses:			
Upper Division Elective	9		
Elective	3		
Term hours subtotal:	15		

Term 7 91 - 106 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 Upper Division Advanced Ecology Course	3	C	<ul style="list-style-type: none"> • Explore or apply for full-time career opportunities or graduate school • Meet with your advisor to verify remaining degree requirements have been met prior to Term 8.
Quantitative & Spatial Analysis Course	3-4	C	
Governance and Civic Engagement (CIVI)	3		
Complete 2 courses:			
Elective	6		
Term hours subtotal:	15-16		

Term 8 106 - 120 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 Upper Division Advanced Ecology, Biodiversity, Field or Research Course	3-4	C	<ul style="list-style-type: none"> • Continue to apply for full-time career opportunities or graduate school.

★ Upper Division Advanced Human Dimensions of Conservation and Ecology Course	3	C
American Institutions (AMIT)	3	
Complete 2 courses:	5	
Upper Division Elective		
Term hours subtotal:	14-15	

- 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 386: General Entomology	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 405: Sonoran Desert Field Botany	GIS 205: Geographic Information Science I (QTRS OR CS)
BIO 363: From Cells to Society: Understanding Complexity	BIO 407: Novel Ecosystems	GIS 211: Geographic Information Science II (QTRS OR CS)
BIO 412: Conservation in Practice	BIO 410: Techniques in Conservation Biology and Ecology	GLG 101: Introduction to Geology I (Physical) (SCIT OR SQ) AND GLG 103: Introduction to Geology I: Laboratory (SCIT OR SQ)
JUS 444: Environment and Justice (L & C) or FIS 444: Environment and Justice (L & C)	BIO 472: Mammalogy	GLG 327: Earth's Critical Zone or SOS 374: Earth's Critical Zone
SOS 310: Equity, Justice and Sustainability	BIO 484: Internship	GPH 111: Introduction to Physical Geography (SCIT OR SQ)
SOS 321: Policy and Governance in Sustainable Systems	BIO 494: Discovering Biodiversity	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)
SOS 325: The Economics of Sustainability	BIO 494: Lichenology	
SOS 349: Nature, Sustainability and Religion (SUST) or REL 349: Nature, Sustainability and Religion (SUST) or JST 349: Nature, Sustainability and Religion (SUST)		
Quantitative & Spatial Analysis Courses	Advanced Ecology	Advanced Human Dimensions of Conservation and Ecology
BIO 411: Quantitative Methods in Conservation and Ecology	BIO 331: Animal Behavior	BIO 304: Plants and Civilization or ENV 302: Plants and Civilization
BIO 415: Statistical Models for Biology (QTRS OR CS)	BIO 421: Landscape Ecology or SOS 421: Landscape Ecology	BIO 324: Environmental Ethics (SUST OR HU) or PHI 310: Environmental Ethics (SUST OR HU)
GIS 311: Geographic Information Science III (QTRS OR CS)	BIO 422: Ecosystem Ecology	BIO 412: Conservation in Practice
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	JUS 444: Environment and Justice (L & C) or FIS 444: Environment and Justice (L & C)
GIS 494: GIS for Climate Change Science	SOS 326: Sustainable Ecosystems	

GIS 494: GIS Methods for Non-Majors

SOS 212: Systems, Dynamics and
Sustainability (QTRS)

Advanced Ecology, Biodiversity, Field or
Research Course

ABS 376: Wildlife Ecology

ABS 380: Restoration and Wildlife Plants

ABS 470: Life History of Mammals

ABS 476: Large Mammal Habitat Ecology

ABS 481: Riparian and Wetland Restoration

ASM 443: Primatology

BIO 303: Plant Diversity and Evolution (L or
SG)

BIO 313: The Flora of Arizona

BIO 325: Oceanography

BIO 331: Animal Behavior

BIO 370: Vertebrate Zoology

BIO 385: Comparative Invertebrate Zoology

BIO 386: General Entomology

BIO 405: Sonoran Desert Field Botany

BIO 410: Techniques in Conservation
Biology and Ecology

BIO 419: Physiological Plant Ecology

BIO 421: Landscape Ecology

BIO 430: Plant Geography or GPH 422:
Plant Geography

BIO 436: Sociobiology and Behavioral
Ecology

BIO 461: Comparative Animal Physiology

BIO 492: Honors Directed Study

BIO 495: Undergraduate Research

SOS 424: Dynamic Modeling in Social and
Ecological Systems

PRM 370: Public Lands Management

PRM 380: Wilderness and Parks in America
(SUST OR SB & H)

REL 349: Nature, Sustainability and
Religion (SUST) or JST 349: Nature,
Sustainability and Religion (SUST) or SOS
349: Nature, Sustainability and Religion
(SUST)

SOS 310: Equity, Justice and Sustainability

SOS 321: Policy and Governance in
Sustainable Systems

SOS 325: The Economics of Sustainability

- **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.