

CONSERVATION BIOLOGY, BS

REQUIREMENTS

UNIVERSITY REQUIREMENTS

All undergraduate students must complete both the following Core General Education (Core GenEd) and University Degree and Quality of Work requirements. The requirements below apply to students whose first term at UW-Madison or whose earliest post-high school college attendance at any institution is Summer 2026 or later.

Students whose first term at UW-Madison or whose earliest post-high school college attendance at any institution occurred before Summer 2026 should refer to the archived Guide (<https://guide.wisc.edu/archive/>) for the requirements that apply to them.

CORE GENERAL EDUCATION (CORE GENED) REQUIREMENTS

Civics & Perspectives 3 credits of Civics & Perspectives coursework.

Communication & Literacy 6 credits of Communication & Literacy coursework. This requirement may be partially satisfied by a qualifying placement test score. More information: <https://go.wisc.edu/qualifyingenglishplacement> (<https://go.wisc.edu/qualifyingenglishplacement/>)

Humanities & Arts 6 credits of Humanities & Arts coursework.

Mathematics & Quantitative Reasoning 6 credits of Mathematics & Quantitative Reasoning coursework. This requirement may be partially satisfied by a qualifying placement test score. More information: <https://go.wisc.edu/qualifyingmathplacement> (<https://go.wisc.edu/qualifyingmathplacement/>)

Natural Science & Wellness Complete both:

- 6 credits of Natural Science & Wellness or Natural Science & Wellness + Laboratory coursework.
- one course must be in Natural Science & Wellness + Laboratory coursework.

Social & Behavioral Science 3 credits of Social & Behavioral Science coursework.

Total Credits 30 credits.

For more information see the policy (<https://policy.wisc.edu/library/UW-1095/>).

UNIVERSITY DEGREE AND QUALITY OF WORK REQUIREMENTS

All undergraduate degree recipients must complete the following minimum requirements. Requirements for some programs will exceed these requirements; see program requirements for additional information.

Total Degree 120 degree credits.

Residency Complete 30 credits in residence. A course is considered "in residence" if it is taken when in undergraduate degree-seeking status and:

- is offered by UW-Madison and completed on the UW-Madison campus or at an approved off-site location, or
- is offered by UW-Madison in an online or distance format, or is completed during participation in a UW-Madison study abroad/study away program.

Quality of Work Achieve at least the minimum grade point average specified by the school, college, and/or academic program.

Math Demonstrate minimal mathematics competence by:

- placing above MATH 96, or
- successfully completing MATH 96, or
- successfully completing a more advanced mathematics course such as MATH 112, MATH 113, MATH 114, MATH 141, MATH 211, or MATH 221.

English Language If required to take the UW-Madison English as a Second Language Assessment Test (MSN-ESLAT), demonstrate minimal English language competence by:

- earning credit for ESL 118, or
- achieving a qualifying MSN-ESLAT placement test score.

Language Complete one:

- 2 high school units of a single language other than English, or
- one course with the second semester Language designation.

Major Declaration Declare and complete the requirements for at least one major.

COLLEGE OF LETTERS & SCIENCE DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (BS)

Students pursuing a Bachelor of Science degree in the College of Letters & Science must complete all of the requirements below. Some courses satisfy more than one L&S degree requirement (visit College of Letters & Science: Requirements (<https://guide.wisc.edu/undergraduate/letters-science/#requirementstext>) for details).

This major can be paired with either the Bachelor of Arts or the Bachelor of Science degree requirements.

BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Communication Complete both:

- Part A: one course with the Communication A designation or eligible UW Placement Score; and
- Part B: one course with the Communication B designation

Quantitative Reasoning	Complete both: <ul style="list-style-type: none"> Part A: one course with the Quantitative Reasoning A designation or eligible UW Placement Score; and Part B: one course with the Quantitative Reasoning B designation
Ethnic Studies	one 3+ credit course with the Ethnic Studies designation
Language	the third unit of a language other than English
Mathematics	Complete two courses of 3+ credits at the Intermediate or Advanced level in MATH, COMP SCI, or STAT subjects. A maximum of one course in each of COMP SCI and STAT subjects counts toward this requirement.
L&S Breadth: Humanities	Complete 12 credits with the Humanities or Literature designation, which must include at least 6 credits with the Literature designation.
L&S Breadth: Social Sciences	Complete 12 credits with the Social Science designation.
L&S Breadth: Natural Sciences	Complete 12 credits, which must include both: <ul style="list-style-type: none"> 6 credits with the Biological Science designation, and 6 credits with the Physical Science designation.
Liberal Arts and Science (LAS) Coursework	at least 108 credits
Depth of Intermediate/Advanced Coursework	at least 60 credits at the Intermediate or Advanced level
Major	Declare and complete at least one major.
Total Credits	at least 120 credits
UW-Madison Experience	<ul style="list-style-type: none"> 30 credits in residence, overall, and 30 credits in residence after the 86th credit
Quality of Work	<ul style="list-style-type: none"> 2.000 in all coursework at UW-Madison 2.000 in Intermediate/Advanced level coursework at UW-Madison

NON-L&S STUDENTS PURSUING AN L&S MAJOR

Non-L&S students who have permission from their School/College to pursue an additional major within L&S only need to fulfill the major requirements. They do not need to complete the L&S Degree Requirements above.

REQUIREMENTS FOR THE MAJOR

Conservation biology majors must take at least **50 credits** in the major. When selecting courses to meet major requirements, students are encouraged to meet with their Academic Advising Manager to discuss courses that align with their areas of academic interest.

INTRODUCTORY COURSES

Code	Title	Credits
	Introductory Biology	10
Complete one of the following options:		

Option 1:

BIOLOGY/ ZOOLOGY 101	Animal Biology
BIOLOGY/ ZOOLOGY 102	Animal Biology Laboratory
BIOLOGY/ BOTANY 130	General Botany

Option 2:

BIOLOGY/ BOTANY/ ZOOLOGY 151	Introductory Biology
BIOLOGY/ BOTANY/ ZOOLOGY 152	Introductory Biology

Option 3:

Complete at least 10 credits from the following:	
BIOCORE 381	Evolution, Ecology, and Genetics
BIOCORE 382	Evolution, Ecology, and Genetics Laboratory
BIOCORE 383	Cellular Biology
BIOCORE 384	Cellular Biology Laboratory
BIOCORE 485	Principles of Physiology
BIOCORE 486	Principles of Physiology Laboratory

Chemistry 4-5

Complete one of the following:

CHEM 103	General Chemistry I
CHEM 108	Chemistry in Our World
CHEM 109	Advanced General Chemistry (for those who might take more chemistry)

Physical Environment 3-5

Complete one of the following:

ATM OCN/ GEOSCI 105	Survey of Oceanography
ENVIR ST/ GEOSCI 106	Environmental Geology
ENVIR ST/ GEOG 120	Introduction to the Earth System
ENVIR ST/ GEOG 127	Physical Systems of the Environment
GEOSCI 100	Introductory Geology: How the Earth Works
GEOSCI 109	Three billion years beneath your feet: Geology of the National Parks

Ecology and Evolution 6-7

Complete two of the following, each from a different category (students are encouraged to take courses in all three areas):

Ecology:

BOTANY/ ZOOLOGY 460	General Ecology
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Evolution:

GEOSCI 110	Evolution and Extinction
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or ANTHRO/ BOTANY/ ZOOLOGY 410	Evolutionary Biology
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Extinction:

ENVIR ST/F&W ECOL/ZOOLOGY 360	Extinction of Species
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Statistics 3

Complete one of the following:

STAT 240	Data Science Modeling I
STAT 301	Introduction to Statistical Methods
STAT 371	Introductory Applied Statistics for the Life Sciences

SPECIES & FIELD BIOLOGY

Code	Title	Credits
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Complete 12 credits from:

AGROECOL 370	Grassland Ecology	
ANTHRO 391	Bones for the Archaeologist	
ANTHRO 420	Introduction to Primatological Research	
ANTHRO 458	Primate Behavioral Ecology	
ANTHRO 668	Primate Conservation	
BOTANY 330	Algae	
BOTANY/ PL PATH 332	Fungi	
BOTANY/ PL PATH 333	Biology of the Fungi	
BOTANY 400	Plant Systematics	
BOTANY 401	Vascular Flora of Wisconsin	
BOTANY/ F&W ECOL 402	Dendrology: Woody Plant Identification and Ecology	
BOTANY 422	Plant Geography	
BOTANY 455	The Vegetation of Wisconsin	
BOTANY/ ENTOM/ ZOOLOGY 473	Plant-Insect Interactions	
ENTOM/ ZOOLOGY 302	Introduction to Entomology	
ENTOM 432	Taxonomy and Bionomics of Immature Insects	
ENVIR ST/ ZOOLOGY 315	Limnology-Conservation of Aquatic Resources	
ENVIR ST 375	Field Ecology Workshop	
ENVIR ST/ ZOOLOGY 510	Ecology of Fishes	
ENVIR ST/ ZOOLOGY 511	Ecology of Fishes Lab	
F&W ECOL 306	Terrestrial Vertebrates: Life History and Ecology	
F&W ECOL/ ZOOLOGY 520	Ornithology	
F&W ECOL/ ZOOLOGY 521	Birds of Southern Wisconsin	

F&W ECOL/ SURG SCI 548	Diseases of Wildlife
F&W ECOL 655	Animal Population Dynamics
GEOSCI/ ZOOLOGY 542	Invertebrate Paleontology
LAND ARC/ ENVIR ST 361	Wetlands Ecology
LAND ARC/ ENVIR ST 581	Prescribed Fire: Ecology and Implementation
MICROBIO 303	Biology of Microorganisms
MICROBIO 304	Biology of Microorganisms Laboratory
M M & I/ENTOM/ PATH-BIO/ ZOOLOGY 350	Parasitology
PSYCH 449	Animal Behavior ¹
or ZOOLOGY 422	Behavioral Ecology
PSYCH 450	Primate Psychology: Insights into Human Behavior
ZOOLOGY 303	Aquatic Invertebrate Biology
ZOOLOGY 304	Marine Biology
ZOOLOGY 320	Field Marine Biology
ZOOLOGY/ ENVIR ST 315	Limnology-Conservation of Aquatic Resources
ZOOLOGY 316	Laboratory for Limnology-Conservation of Aquatic Resources
ZOOLOGY 430	Comparative Anatomy of Vertebrates

CONSERVATION BIOLOGY CLASS REQUIREMENT

BOTANY/ENVIR ST/F&W ECOL/ZOOLOGY 516 Conservation Biology

ELECTIVES

Code	Title	Credits
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Social Science Electives

Complete at least one 3 credit course from Social Science elective list:

A A E 101	Introduction to Agricultural and Applied Economics	
A A E/ ENVIR ST 244	The Environment and the Global Economy	
BOTANY/ AMER IND/ ANTHRO 474	Ethnobotany	
C&E SOC/ SOC 140	Introduction to Community and Environmental Sociology	
C&E SOC/ F&W ECOL/ SOC 248	Environment, Natural Resources, and Society	
ECON 101	Principles of Microeconomics	
ENVIR ST/ GEOG 139	Global Environmental Issues	
ENVIR ST/ AMER IND 306	Indigenous Peoples and the Environment	

ENVIR ST 308	Outdoors For All: Inequities in Environmentalism
ENVIR ST/ GEOG 339	Conservation and Climate Change - Local to International Strategies
ENVIR ST/ PHILOS 441	Environmental Ethics
ENVIR ST/GEOG/ HISTORY 460	American Environmental History
GEOG 344	Changing Landscapes of the American West
GEOG 359	Australia: Environment and Society
GEOG 538	The Humid Tropics: Ecology, Subsistence, and Development
LAND ARC 363	Earth Partnership: Restoration Education for Equity and Resilience
Electives to attain 50 credits in the major	
ANTHRO 405	Introduction to Museum Studies in Anthropology
ATM OCN 100	Weather and Climate
BOTANY/ PL PATH 123	Plants, Parasites, and People
BOTANY/ ENVIR ST/ ZOOLOGY 260	Introductory Ecology
BOTANY 300	Plant Anatomy
BOTANY 305	Plant Morphology and Evolution
BOTANY/ ZOOLOGY 450	Midwestern Ecological Issues: A Case Study Approach
ENTOM/ ENVIR ST 201	Insects and Human Culture-a Survey Course in Entomology
ENTOM/ ZOOLOGY 540	Theoretical Ecology
ENVIR ST/ILS 126	Principles of Environmental Science
ENVIR ST/GEOG/ SOIL SCI 230	Soil: Ecosystem and Resource
ENVIR ST 307	Literature of the Environment: Speaking for Nature
ENVIR ST/ SOIL SCI 324	Soils and Environmental Quality
ENVIR ST/ CIV ENGR/ GEOG 377	An Introduction to Geographic Information Systems
ENVIR ST/ POP HLTH 471	Introduction to Environmental Health
ENVIR ST/ F&W ECOL 515	Natural Resources Policy
ENVIR ST/ GEOG 537	Culture and Environment
ENVIR ST/ SOIL SCI 575	Assessment of Environmental Impact
F&W ECOL 375	Special Topics (Freshwater Conservation)
F&W ECOL 395	Data and GIS Tools for Ecology
F&W ECOL 448	Disturbance Ecology
F&W ECOL 449	Disturbance Ecology Lab (I): Herbivores and Fire

F&W ECOL 458	Environmental Data Science
F&W ECOL 561	Wildlife Management Techniques
F&W ECOL/ LAND ARC/ ZOOLOGY 565	Principles of Landscape Ecology
GENETICS 466	Principles of Genetics
GENETICS 467	General Genetics 1
GENETICS 527	Developmental Genetics for Conservation and Regeneration
GEOG/ GEOSCI 420	Glacial and Pleistocene Geology
LAND ARC 211	Shaping the Built Environment
MICROBIO 101	General Microbiology
MICROBIO 102	General Microbiology Laboratory
PL PATH 300	Introduction to Plant Pathology
PL PATH 315	Plant Microbiomes
SOIL SCI 301	General Soil Science
ZOOLOGY 333	Marine Ecology
ZOOLOGY 335	Human/Animal Relationships: Biological and Philosophical Issues
ZOOLOGY 405	Introduction to Museum Studies in the Natural Sciences

RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all major courses
- 2.000 GPA on 15 upper-level major credits, taken in residence ²
- 15 credits in the major, taken on the UW-Madison campus

HONORS IN THE MAJOR

Students may declare Honors in the Conservation Biology Major in consultation with the Conservation Biology undergraduate advisor.

HONORS IN THE CONSERVATION BIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Conservation Biology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Complete at least 16 credits, taken for Honors, with a grade of B or better, in the conservation biology major, to include a two-semester Senior Honors Thesis in an appropriate department ³

FOOTNOTES

- ¹ Students may NOT apply both ZOOLOGY 425 Behavioral Ecology and PSYCH 449 Animal Behavior in the conservation biology program.
- ² Courses in the major numbered 300 through 699 are considered upper level.
- ³ Examples include Botany, Zoology, Environmental Studies; see the Conservation Biology advisor to verify that your thesis department will be acceptable.