Nebraska Wesleyan University

Catalog 2025-2026

Major:

Biology (B.A.)

The B.A. and the B.S. in biology can both provide students with the experience and knowledge necessary to have a successful career. A B.A. in biology requires 20 approved hours from Math, Physics, or Chemistry department courses. The B.A. has a more flexible supporting area and is a particularly appealing option for students who would like to combine their biology degree with another area of emphasis.

Departments/Programs:

Biology

Biology Major (B.A., 31 hours plus a 20-hour supporting program)

biology major (b.A., 31 flours plus a 20-flour supporting program)	
Biology Core	12 hours
BIO 1400FYW Introduction to Biological Inquiry	4 hours
BIO 2200 Genetics and Cell Biology	4 hours
BIO 2300 Ecology and Evolution	4 hours
Biology Electives	16 hours
Must have two lab courses, with at least one from Area A and one from Area B. Remaining hours from any areas (A, B, C, D, E).	
Capstone	3 hours
BIO 4990 Senior Capstone	3 hours

Biology Electives

Area A. Cellular, Developmental and Molecular Biology	
BIO 3160 Medical Botany	3 hours
BIO 3160 Medical Botany and BIO 3170 Medical Botany Lab (lab course)	4 hours
BIO 3690 Microbiology (lab course)	3 hours
BIO 3800 Molecular Genetics	4 hours
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BIO 4190 Histology (lab course)	4 hours
BIO 4750 Immunology	3 hours
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Area B. Population and Ecological Biology	
BIO 3180 Plant Taxonomy (lab course)	4 hours
BIO 3220 Parasitology (lab course)	4 hours
BIO 3500 Conservation Biology (lab course)	4 hours
BIO 3530 Principles of Marine Biology and Oceanography	3 hours
BIO 3640 Animal Behavior	3 hours
BIO 3640 Animal Behavior and BIO 3650 Laboratory in Animal Behavior (lab course)	4 hours
BIO 4210 Ecology (lab course)	4 hours

Area B. Population and Ecological Biology	
BIO 4480 Vertebrate Zoology (lab course)	4 hours
BIO 4610 Evolution	4 hours
Area C. Applied Biology	
BIO 2940 Biology Assistantship	1 hour
BIO 2970 Internship	1 hour
BIO 2980 Practicum	1 hour
BIO 3000 An Introduction to Biomedical Ethics	2 hours
BIO 3200 Advanced Human Anatomy and Physiology I and BIO 3200L Advanced Human Anatomy and Physiology I Lab (lab course)	4 hours
BIO 3210 Advanced Human Anatomy and Physiology II and BIO 3210L Advanced Human Anatomy and Physiology II Lab (lab course)	4 hours
BIO 3300 Cadaver Dissection	2 hours
BIO 3950/BIO 4950 Independent Study	1-2 hours
BIO 3970 Internship	2-3 hours
BIO 3980 Practicum	2-3 hours
BIO 4700 Pathophysiology	3 hours
Area D. Global Experience in Biology	
BIO 3530 Principles of Marine Biology and Oceanography	3 hours
Area E. Additional Courses	
BIO 3900/BIO 4900 Selected Topics	1-4 hours
BIO 3910 Directed Readings	1-2 hours

BIO 1080 Microbiology, BIO 1090 Introduction to Human Anatomy and Physiology I, and BIO 1100 Introduction to Human Anatomy and Physiology II may not fulfill biology major requirements.

Required Supporting Program

20 hours

An approved supporting program of 20 hours is also required, normally comprised of courses from the Math, Physics, or Chemistry departments. Required Supporting Program Courses:

- CHEM 1110 Chemical Principles I and CHEM 1110L Chemical Principles I Laboratory
- CHEM 2100 Organic Chemistry I and CHEM 2100L Organic Chemistry I Laboratory