Nebraska Wesleyan University

Biology (B.S.)

Catalog

2012-2013

Departments

1. Biology

Biology Major (B.S., 34 hours)

Courses	
BIO 050 General Biology of Plants	4 hours
BIO 060 General Biology of Animals	4 hours
BIO 160 Cell Biology	4 hours
BIO 170 Genetics	4 hours
Electives	**16 hours**
One course in each of areas A, B, and C. Three lab courses drawn from at least two areas (A, B, C); additional hours from any areas (A, B, C, D, E).	16 hours
Senior Comprehensive	
BIO 298 Senior Thesis or BIO 299 Senior Research	2 hours

Biology Electives

Area A. Molecular and Cellular Biology	
BIO 219 Histology	4 hours
BIO 269 Microbiology	4 hours
BIO 275 Immunology	3 hours
BIO 276 Laboratory in Immunology	1 hours
BIO 281 Biochemistry or CHEM 255 Biochemistry	3 hours
BIO 281 Biochemistry with BIO 282 Biochemistry Laboratory or CHEM 255 Biochemistry with CHEM 258 Biochemical Methods	4 hours
BIO 283 Molecular Biology	4 hours
Area B. Organismal Biology	
BIO 212 Behavioral Neuroscience	4 hours
BIO 212 Behavioral Neuroscience and BIO 213 Laboratory in Behavioral Neuroscience	4 hours

Area B. Organismal Biology	
BIO 222 Parasitology	4 hours
BIO 225 Plant Form and Function	4 hours
BIO 244 Developmental Biology	4 hours
BIO 246 Human and Comparative Anatomy	4 hours
BIO 262 Human and Comparative Physiology	4 hours
BIO 270 Pathophysiology	3 hours
Area C. Ecological, Evolutionary, and Taxonomic Biology	
BIO 216 Medical Botany	3 hours
BIO 216 Medical Botany and BIO 217 Medical Botany Lab	4 hours
BIO 218 Plant Taxonomy	4 hours
BIO 221 Ecology	4 hours
BIO 250 Conservation Biology	4 hours
BIO 261 Evolution	3 hours
BIO 264 Animal Behavior	3 hours
BIO 264 Animal Behavior with BIO 265 Laboratory in Animal Behavior	4 hours
Area D. Global Experience in Biology	
BIO 251 Tropical Biology of Costa Rica	3 hours
BIO 252 Tropical Biology of Belize	3 hours
BIO 253 Principles of Marine Biology	1 hours
BIO 254 Applied Marine Biology	3 hours
Area E. Additional Courses	
BIO 190 Selected Topics	1 hours
BIO 200 An Introduction to Biomedical Ethics	2 hours
BIO 290 Selected Topics	1-5 hours
BIO 291 Directed Readings	1-6 hours
BIO 295 Independent Study	1-2 hours

BIO 008 Microbiology, BIO 009 Human Anatomy and Physiology, and BIO 010 Human Anatomy and Physiology may not be taken by biology majors to fulfill biology degree requirements.

An approved supporting area of 28 hours in the Natural Sciences Division is also required. This will include CHEM 051 Chemical Principles/CHEM 051L Chemical Principles Laboratory, CHEM 120 Organic Chemistry I /CHEM 120L Organic Chemistry I Laboratory, CHEM 121 Organic Chemistry II: Synthesis and Mechanisms/CHEM 121L Organic Chemistry II Laboratory, CHEM 122 Analytical and Inorganic Chemistry/CHEM 122L Analytical and Inorganic Chemistry Laboratory; PHYS 101 Principles of Physics I or PHYS 111 General Physics I, PHYS 102 Principles of Physics II or PHYS 112 General Physics II; and MATH 105 Calculus I, MATH 065 Calculus for Biologists or MATH 060 Calculus for Management, Biological, and Social Sciences. Competency in a modern language other than English is strongly encouraged.