**Nebraska Wesleyan University**

# Biology (B.A.)

## Catalog

2012-2013

## Departments

1. Biology

### Biology Major (B.A., 30 hours)

| Courses | 16 hours |
|---|---|
| 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** | **12 hours** |
| Bio electives<br>Two lab courses drawn from at least two areas (A, B, C); additional hours from any areas (A, B, C, D, E). | 12 hours |
| **Senior Comprehensive** | **2 hours** |
| BIO 298 Senior Thesis or<br>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<br>BIO 213 Laboratory in Behavioral Neuroscience | 4 hours |
| BIO 222 Parasitology | 4 hours |
| BIO 225 Plant Form and Function | 4 hours |

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| **Area B. Organismal Biology** | |
| 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<br>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<br>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 20 hours is also required, normally composed of courses from the Natural Sciences Division.