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**Ecology & Organismal**

**60 credit min**

**Effective for Spring 2013**

**Biology Core Courses (11-12 Credits)**

|  |  |  |  |
| --- | --- | --- | --- |
| BIO 105 | Biological Concepts(NS)(XL) | B | (4) \_\_\_\_ |
| **OR** |  |  |  |
| BIO 108 | Honors: Concepts in Bio(NS)(XL) | F | (5) \_\_\_\_ |
| BIO 323 | Intro Molecular & Cell Bio  (Bio 105, Chem 105 and/or C/Chem 106, or Chem 101,102 w/B) | B | (3) \_\_\_\_ |
| BIO 343 | Genetics (NS)(Bio 323) | B | (3) \_\_\_\_ |
| BIO 491 | Senior Survey\*\*\* | B | (0) \_\_\_\_ |

**Required Chemistry Courses (10 Credits)**

|  |  |  |  |
| --- | --- | --- | --- |
| CHEM 105 | General Chemistry I (NS)(XL) | B | (5) \_\_\_\_ |
| CHEM 106 | General Chemistry II (NS)(XL) | B | (5) \_\_\_\_ |

**Math Courses (3-4 Credits)**

|  |  |  |  |
| --- | --- | --- | --- |
| MATH 171 | Calculus I (MA(XM)(Math 108 or 104, 106 w/C) | B | (4) \_\_\_\_ |
| **OR** |  |  |  |
| MATH 175 | Honors: Calculus I (MA)(XM) |  | (4) \_\_\_\_ |
| **OR** |  |  |  |
| MATH 201 | Applied Statistics (MA)(XM)(Math 104 or 108 w/C) | B | (3) \_\_\_\_ |
| **OR** |  |  |  |
| PSYCH 203 | Elementary Psychological Statistics  (Psych 101,104 or 110 and PBIS 187,188,189, Math 104 w/C) |  | (3) \_\_\_\_ |
| **OR** |  |  |  |
| GEOG 385 | Quant Methods in Geography & Environmental Science (Math 104) |  | (3) \_\_\_\_ |

**Required Biology Courses (25 Credits)**

|  |  |  |  |
| --- | --- | --- | --- |
| BIO 230 | Biology of Animals (NS)(XL)(Bio 105) | B | (4) \_\_\_\_ |
| BIO 231 | Biology of Plants and Microbes (NS)(XL)(Bio 105) | B | (4) \_\_\_\_ |
| BIO 325 | Field Ecology (NS)(Bio 105 and Bio 349/549) | F | (3) \_\_\_\_ |
| BIO 349 | Ecology and Evolution (1 term general Bio) | B | (3) \_\_\_\_ |
| BIO 319 | General Animal Physiology (NS)(1 year Chem and Bio 323) | B | (5) \_\_\_\_ |
| **OR** |  |  |  |
| BIO 345 | Plant Physiology (NS)(1 term general Bio, 1 year general Chem and Bio 231) | S | (5) \_\_\_\_ |
| **OR** |  |  |  |
| BIO 450 | Microbial Physiology (NS)(Bio 309) | F | (5) \_\_\_\_ |
| **AND** | **Two of the following courses (6 Credits)** |  |  |
| BIO 326 | Introductory Limnology (NS)(1 term general Bio, 1 year general Chem) | ^F | (3) \_\_\_\_ |
| BIO 376 | Populations and Community Ecology (NS)(Bio 349) | F | (3) \_\_\_\_ |
| BIO 386 | Ecosystems Ecology (NS)(Bio 349) | S | (3) \_\_\_\_ |

**Biology Electives (14 Credits from these courses if not used to fill preceding requirements)**

|  |  |  |  |
| --- | --- | --- | --- |
| BIO 300 | Internship in Biology\* | B | (1-6) \_\_\_\_ |
| BIO 304 | Plant Taxonomy (NS)(1 term general Bio) | F | (3) \_\_\_\_ |
| BIO 308 | Comparative Anatomy (NS)(1 term general Bio) | S | (5) \_\_\_\_ |
| BIO 316 | Developmental Biology (Bio 323) | S | (3) \_\_\_\_ |
| BIO 318 | Wildlife Behavior and Conservation (Bio 105 or 260) |  | (3) \_\_\_\_ |
| BIO 321 | Mycology (NS)(1 term general Bio) | F | (3) \_\_\_\_ |
| BIO 326 | Introductory Limnology (NS)(1 term gen Bio, 1 year gen Chem) | ^F | (3) \_\_\_\_ |
| BIO 327 | Microbial Ecology & Diversity (Bio 231 or 233 or 309) | F | (3) \_\_\_\_ |
| BIO 328 | Ornithology (NS)(Bio 230) | S | (3) \_\_\_\_ |
| BIO 330 | Ichthyology (NS)(Bio 230 and 1 year gen Chem) | S | (3) \_\_\_\_ |
| BIO 332 | Entomology (NS)(Bio 230 and 1 term gen Bio) | S | (3) \_\_\_\_ |
| BIO 336 | Fresh Water Algae (NS)(Bio 231,233 or 309) | \*F | (3) \_\_\_\_ |
| BIO 338 | Environmental Toxicology (Bio 105) | S | (2) \_\_\_\_ |
| BIO 354 | Parasitology (NS)(1 term gen Bio and Bio 230) | S | (3) \_\_\_\_ |
| BIO 355 | Field Parasitology (Bio 105) |  | (3) \_\_\_\_ |
| BIO 367 | Field Ornithology |  | (2) \_\_\_\_ |
| BIO 376 | Population and Community Ecology (NS)(Bio 349) | F | (3) \_\_\_\_ |
| BIO 386 | Ecosystems Ecology (NS)(Bio 349) | S | (3) \_\_\_\_ |

Pre-requisites are in parentheses

S = Spring

^S = Spring, Odd years

F = Fall

^F = Fall, Odd years

\*F = Fall, Even years

B = Both Fall & Spring

C/ = Concurrent enrollment

\*A maximum of six credits from Biology 300 and/or 301 can be counted towards degree.

\*\*\*During their last semester senior students will take the senior survey course assessment exam and fill out a survey regarding their experience in the program. This will be taken in the Testing Center at the student’s convenience (during normal Testing Center hours). Completion is a graduation requirement.

**Must meet General Education and Degree Requirements to earn BS Degree**

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