Biology: Wildlife and Conservation Concentration Bismarck State College (AS) and University of Mary

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|--------------------|--|-------|------------------|
| Freshman: | Fall | | UMary Equivalent |
| BIOL 150/150L | General Biology 1 and Lab (Math/Sci/Tech) | 3/1 | BIO 103/L |
| CHEM 121/121L | General Chemistry I/Lab (Math/Sci/Tech) | 4/1 | CHE 111/L |
| POLS 115 | American Government (Soc Sci) | 3 | POL 101 |
| ENGL 110 | College Comp I (Comm) | 3 | ENG 111 |
| BSC | Enrichment Elective | 2 | |
| | Fall Credits | 17 | |
| | Spring | | |
| ENGL 120 | College Comp II (Comm) | 3 | ENG 121 |
| ANT 170 or SOC 110 | Intro. to Cultural Anthropology or Intro. to Sociology or | | Core Elective |
| or SOC 115 or HIST | Social Problems or World Civ. I or World Civ. II (Soc Sci or | | |
| 211 or HIST 212 | Arts & Humanities; Diversity) | 3 | |
| COMM 110 | Fundamentals of Public Speaking (Comm) | 3 | COM 110 |
| BIOL 151/151L | General Biology II/Lab (Math/Sci/Tech) | 3/1 | BIO 106/L |
| CHEM 122/122L | General Chemistry II/Lab (Math/Sci/Tech) | 4/1 | CHE 112/L |
| | Spring Credits | 18 | |
| | Total Freshman Credits | 35 | |
| Sophomore: | Fall | - 55 | |
| PHIL 210 | Ethics (Arts & Humanities) | 3 | PHI 208 |
| FIIIL 210 | Fundamentals of Geographic Information Systems (or other | J | CRS |
| GIS 105 | elective) | 3 | CNS |
| CHEM 241/241L | Organic Chemistry I/Lab | 4/1 | CHE 217/L |
| MAT 165 | Calculus 1 (Math/Sci/Tech) | 3 | MAT 209 |
| | Fall Credits | 14 | |
| | Spring | | |
| Elective | Behavioral & Social Sciences Elective | 3 | Elective |
| GIS 107 | GIS Applications (or other elective) | 4 | CRS |
| RELS | RELS Course (Arts & Humanities) | 3 | THE 120 |
| CHEM 242/242L | Organic Chemistry II/Lab | 4/1 | CHE 318/L (LL) |
| | Spring Credits | 15 | , |
| | Total Sophomore Credits | 29 | |
| | Total BSC Credits | 64 | (62→UMary) |
| lunior | | 04 | |
| Junior: | Fall | 1 | |
| HUM 322 | Transfer Seminar | 1 | |
| BIO 311 | Genetics | 4 | |
| PHY 203 | Physics | 4 | |
| BIO 312 or 309 | Parasitology or Microbiology | 4 | |
| BIO 422 or 432 | Ecology or Wildlife Ecology and Management | 4 | |
| | Fall Credits | 17 | |
| | Spring | | |
| PHY 304 | Intermediate Physics | 4 | |
| BIO 354 | Botany | 4 | |
| BIO 415 or 433 | Conservation Biology or Range Management | 4 | |
| MAT Elective | MAT 204, 206, or 210 | 4 | |
| | Spring Credits | 16 | |
| | Total Junior Credits | 33 | |
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| Senior: | Fall | | |
|----------------|--|-----|--|
| BIO 312 or 309 | Parasitology or Microbiology | 4 | |
| BIO 422 or 432 | Ecology or Wildlife Ecology and Management | 4 | |
| BIO 333 or 339 | Ornithology or Mammalogy | 4 | |
| Elective | Elective | 3 | |
| | Fall Credits | 15 | |
| | Summer | | |
| Internship | Wildlife/Conservation Biology Internship | | |
| | Spring | | |
| BIO 450 | Evolution and the Integration of Knowledge | 3 | |
| CHE 310 | Biochemistry | 4 | |
| BIO 415 or 433 | Conservation Biology or Range Management | 4 | |
| Elective | Elective | 3 | |
| HUM 499 | Senior Competences Assessment | 0 | |
| | Spring Credits | 14 | |
| | Total Senior Credits | 29 | |
| | Total UMary Credits | 62 | |
| | Total Bachelor's Degree Credits | 124 | |

Note: Because some biology courses (e.g. Microbiology) are offered every other year, it is important for students to consider the rotation of courses in planning their programs of study to ensure they take these courses in the appropriate year.

Biology Electives: Students must take five biology electives selected from three major areas of study. Of the five, at least one course must be taken from each of the three areas. These electives are in addition to the required biology courses.

Organismal & Systematics Area

| BIO 207 | Human Anatomy and Physiology I | (Bio 207 & 208 |
|-------------------------|--|--|
| BIO 208 | Human Anatomy and Physiology II | together count |
| BIO 312 | Parasitology | as 1 elective) |
| BIO 330 | Zoology | |
| BIO 421 | Advanced Physiology | |
| BIO 339 | Mammalogy | |
| BIO 333 | Ornithology | |
| Cell and Molecular Area | | |
| BIO 309 | Microbiology | |
| BIO 310 | Cell and Molecular Biology | |
| BIO 314 | Histology | |
| BIO 318 | Immunology and Serology | |
| BIO 319 and 320 | Hematology and Hematology Lab | |
| BIO 417 | Developmental Biology | |
| Environmental Area | | |
| BIO 326 | Environmental Biology | |
| BIO 415 | Conservation Biology | |
| BIO 422 | Principles of Ecology | |
| BIO 423 | Animal Behavior | |
| BIO 433 | Range Management | |
| BIO 432 | Wildlife Management | |
| | BIO 208 BIO 312 BIO 330 BIO 421 BIO 339 BIO 333 Cell and Molecular Area BIO 309 BIO 310 BIO 314 BIO 318 BIO 319 and 320 BIO 417 Environmental Area BIO 326 BIO 422 BIO 423 BIO 433 | BIO 208 Human Anatomy and Physiology II BIO 312 Parasitology BIO 330 Zoology BIO 421 Advanced Physiology BIO 339 Mammalogy BIO 333 Ornithology Cell and Molecular Area BIO 309 Microbiology BIO 310 Cell and Molecular Biology BIO 314 Histology BIO 318 Immunology and Serology BIO 319 and 320 Hematology and Hematology Lab BIO 417 Developmental Biology Environmental Area BIO 326 Environmental Biology BIO 422 Principles of Ecology BIO 423 Animal Behavior BIO 433 Range Management |