

**B.S. BIOLOGY**  
**Terrestrial and Freshwater Conservation Option**  
**Catalog 2011-2012**  
**(73 hours)**

The B.S. Biology Terrestrial and Freshwater Conservation option provides a B.S. Biology degree plan that is designed for students primarily interested in the biological aspects of conservation science (e.g. community ecology, population biology, biogeography, conservation genetics and assessment of threatened or endangered species and habitats).

A major in the this option can be declared after completing BIO 201 and BIO 202, or equivalent courses, with a grade of 'C' (2.00) or better in both courses, and completion of 24 semester hours of credit.

**BIOLOGY CORE REQUIREMENTS (4 Hours minimum)**

\_\_\_201 Principles of Biology: Cells (4 credit hours)

\_\_\_202 Principles of Biology: Biodiversity (4 credit hours)

\*\*\*\*\*BIO 201 and 202 are the pre-requisite courses for biology courses numbered above 300\*\*\*\*\*

**BIOLOGY REQUIREMENTS (17 -21 Hours)**

\_\_\_335 Genetics lecture and lab (3, 1 credit hours each) pre-requisites: BIO 201 & 201

\_\_\_366 Ecology lecture and lab (3, 1 credit hours each) pre-requisites: BIO 201 & 201

\_\_\_Physiology requirement (4 or 8 hours):

- 240-241 Human Anatomy and Physiology lectures and labs (3, 1 credit hours each for 8 total hours) pre-requisite for BIO 240: BIO 201 and CHM 101; for BIO 241: BIO 240
- 325 Molecular Biology of the Cell lecture and lab (3, 1 credit hours each) pre-requisites: BIO 201, 202 and CHM 211
- 340 Plant Physiology (4 credit hours) pre-requisites: BIO 201, 202 and CHM 102
- 345 Animal Physiology lecture and lab (3, 1 credit hours each) pre-requisites: BIO 201, 202 and CHM 102

\_\_\_466 Conservation Biology (3 credit hours) pre-requisites: BIO 366 and junior or senior status

\_\_\_495 or 495L Seminar (1-3 credit hours) 3 hours limit. Pre-requisites: full BIO or MBY major; BIO 201, 202, 335, 366, and a physiology course

**BIOLOGY ELECTIVES: a minimum of 19 hours** chosen from the courses listed below. **No more than 10 hours may be counted from BIO 480, 491, 493, and 499.** >500 level courses may be chosen with permission of the instructor

311	Plant Morphology	460	Limnology w/ or w/o lab
314	Mycology	475	Plant Taxonomy
318	Invertebrate Biology	478	Global Environmental Problems
356	Vertebrate Natural History	480	Field Studies in Biology
357	Ichthyology	482	Wildlife Ecology
368	Behavioral Ecology	484	Methods in Biological Research
430	Evolutionary Biology	487	Introduction to Coastal Management
452	Mammalogy	491	Directed Individual Study
456	Ornithology	499	Honors Work in Biology
458	Fisheries Biology w/ or w/o lab	498	Internship in Biological Sciences

**ENVIRONMENTAL SCIENCE REQUIREMENT: a minimum of 3 hours** chosen from the following courses:

- EVS 195 Introduction to Environmental Studies (3 credit hours)
- EVS 330 Natural Resource Economics, prerequisite ECN 125 or ECN 221 (3 credit hours)
- EVS 360 Human Dimensions of Natural Resources Management, prerequisite EVS 195 (3 credit hours)
- EVS 384 Natural Resource Policy (3 credit hours)
- EVS 430 Tropical Environmental Ecology, prerequisite EVS 195 (3 credit hours)

**COLLATERAL REQUIREMENTS: (30 hours minimum)**

\_\_\_ Chemistry 101 (4 credit hours)

\_\_\_ Chemistry 102 (4 credit hours)

\_\_\_ Chemistry 211 and CHML 211 (3, 1 credit hours), prerequisite CHM 102

\_\_\_ Chemistry 212 and CHML 212 (3, 1 credit hours), prerequisite CHM 211/CHML 211

\_\_\_ BIO 465 Biochemistry with lab (3, 1 credit hours), prerequisite BIO 201, BIO 202, and CHM 211/CHML 211

\_\_\_ Physics 101 (corequisite MAT 111) or 201 (corequisite MAT 161) (4 credit hours)

\_\_\_ Physics 102 (corequisite MAT 111) or 202 (corequisite MAT 162) (4 credit hours)

\_\_\_ Mathematics 151 (3 credit hours) or 161 (4 credit hours)

\_\_\_ Statistics 215 (3 credit hours)

A "C" (2.00 GPA) or better average on Biology courses numbered above 299 is required for graduation.