

B.S. DEGREE in BIOLOGY -- Terrestrial and Freshwater Conservation Option -- Catalog 2020-2021 (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 Biology can be declared after completing 24 credit hours and BIO 201 and BIO 202, or equivalent courses, with a grade of 'C' (2.00) or better in both courses.

Core Requirements: (24 hours total)

- _____ 201 Principles of Biology: Cells (4)
 _____ 202 Principles of Biology: Biodiversity (4)

*****BIO 201 and 202 are the prerequisite courses for all biology courses numbered 300 and above*****

- _____ 335 Genetics with lab (3) (1), prerequisites: BIO 201 and BIO 202
 _____ Physiology, chosen from one of the following bullets:
- 325 Molecular Biology of the Cell with lab (3) (1), prerequisites: BIO 201, BIO 202, and CHM 211/CHML 211
 - 340 Plant Physiology (4), prerequisites: BIO 201, BIO 202, and CHM 102
 - 345 Animal Physiology with lab (3) (1), prerequisites: BIO 201, BIO 202, and CHM 102
 - 240 – 241 Human Anatomy and Physiology (4) (4), prerequisites: 240=BIO 201 and CHM 101; 241=BIO 240
- _____ 366 Ecology with lab (3) (1), prerequisite: BIO 201 and BIO 202
 _____ 466 Conservation Biology (3), prerequisite: BIO 366 and junior or senior status
 _____ 495 Seminar (1), prerequisites: BIO or MBY major; BIO 201, 202, 335, 366, and a physiology course
- _____ Applied Learning -- To satisfy the applied learning requirement for the B.S. in marine biology a student must successfully complete one of the following: honors in any science department (BIO 499, CHM 499, EVS 499, GLY 499, MAT 499, PSY 499, PHY 499); directed individual study involving hands-on experience in any science department (BIO 491, CHM 491, EVS 491, GLY 491, MAT 491, PSY 491, PHY 491); BIO 498 Internship, BIO 493 Teaching Practicum; formal student teaching experience taken for UNCW credit (e.g. EDNL 406, EDN 409, EDN 411); BIO 480 Field Studies; BIO 495 Senior Seminar.

Biology Electives: a minimum of 16 hours chosen from the courses listed below and not used to satisfy other requirements.

No more than 10 hours may be counted from BIO 480, 491 (6 hr. max), 493 (2 hr. max), 498 (3 hr. max), and 499 (6 hr. max)

	311 Plant Morphology	452 Mammalogy	482 Wildlife Ecology
	314 Mycology	454 Herpetology	484 Methods in Biological Research
	318 Invertebrate Zoology	456 Ornithology	487 Intro to Coastal Management
	356 Vertebrate Natural History	458 Fisheries Biology	491 Directed Independent Study
	357 Ichthyology	460 Limnology	498 Internship in Biological Sciences
	367 Antarctic Ecology	475 Plant Systematics	499 Honors work in Biology
	368 Behavioral Ecology	478 Global Environ. Problems	
	430 Evolutionary Biology	480 Field Studies in Biology	
_____ Total elective hours			

Environmental Science Requirement: a minimum of 3 hours chosen from the following courses:

EVS 195 Introduction to Environmental Studies (3)
 EVS 330 Natural Resource Economics (3), prerequisite: ECN 125 or ECN 221
 EVS 360 Human Dimensions of Natl. Resource Management, prerequisite: EVS 195
 EVS 364 Natural Resource Policy (3)
 EVS 430 Tropical Environmental Ecology (3), prerequisite: EVS 195

Collateral Requirements: (30 hours minimum)

- _____ Chemistry 101 (4)
 _____ Chemistry 102 (4)
 _____ Chemistry 211 and CHML 211 (3, 1), prerequisite: CHM 102
 _____ Chemistry 212 and CHML 212 (3, 1), prerequisite: CHM 211/CHML 211 **or**
 _____ BIO 465 Biochemistry with lab (3, 1), prerequisite: BIO 201, BIO 202, and CHM 211/CHML 211
 _____ Physics 101 (co-requisite MAT 111) or 201 (co-requisite MAT 161) (4)
 _____ Physics 102 (co-requisite MAT 111) or 202 (co-requisite MAT 162) (4)
 _____ Mathematics 151 (3) or 161 (4)
 _____ Statistics 215 (3)

A "C" (2.00 GPA) or better average in Biology courses numbered above 299 and an overall 2.00 GPA in all courses are required for graduation.