

Department of Biological Sciences ECOLOGY Track

This sequence of courses focuses on either plant or animal ecology, terrestrial or aquatic ecosystems, invertebrate or vertebrate natural histories or any combination of the above. An undergraduate following this track will be prepared for admission to graduate degree programs or a diversity of professional careers such as wildlife biology, environmental consulting, or technical and management positions in federal and state environmental agencies.

Required Courses

BIOL 200: Biology Today (1)

BIOL 204: Concepts in Biology I (5)

BIOL 205: Concepts in Biology II (5)

BIOL 350: General Genetics (4)

CHEM 125, 127 & 128 or *135, 137 & 138*: General Chemistry (10)

CHEM 306 or *341, 344 & (345 or 346)*: Organic Chemistry (4-10)

MATH 131 or *134 & 135*: Calculus (5-6)

PHYS 201: College Physics (5)

Statistics strongly recommended

In addition to completion of the required courses, a minimum of 17 hours of Biology electives must be completed. At least one course from each Group (I, II, III) must be completed as part of the 17 hours, and 10 of those hours must be 400 level.

Recommended Courses

Group I. Biology of Organisms

BIOL 313: Microbiology (4)

BIOL 343: General Botany (4)

BIOL 427: Invertebrate Zoology (4)

Group II. Ecology, Evolution & Behavior

BIOL 354: Population and Community Ecology (3)

BIOL 409: Conservation Biology (3)

BIOL 451: Evolution (3)

Group III. Cellular, Molecular & Regulatory Biology

BIOL 407: Cell Biology (4)

BIOL 408: Molecular Biology (3)

Biology Electives

BIOL 301: Field Biology of the Vertebrates (3)

BIOL 401: Independent Research (1-4)

The following courses are also good choices to fulfill Biology elective requirements.

Group I: Marine Biology (374), General Parasitology (405), Plant Systematics (414), Agology (424), Entomology (435), Ichthyology (472), Mammology (473), Herpetology (476), Ornithology (477)

Group II: Field Experience (412), Neuroethology (419), Animal Behavior (420), Plant Ecology (422), Limnology (425), Chemical Ecology (441), Microbial Ecology (445), Epidemiology (449)

Group III: Animal Physiology (411), Plant Physiology (417), Microbial Physiology (443)

Biology Electives: Topics in Biology (400), Microbial Physiology Lab (444), Internship (489), Seminar (490)

