2022-23 Ecology, Evolution, and Conservation Biology Worksheet

Major in Biological Sciences

To complete this concentration, Biological Sciences Majors may choose any 3 of the following:	
BIOL_SCI 332-0	Conservation Genetics - Critical issues in the management and understanding of endangered populations. <i>Prereq: BIOL_SCI 203-0 OR 215-0 or ENVR_SCI 202-0.</i>
BIOL_SCI 333-0	Plant-Animal Interactions - Plant-animal interactions, and their consequences for individuals, populations, ecological communities, and ecosystems. <i>Prereq: BIOL_SCI 203-0 OR 215-0 OR 339-0 OR 341-0 OR 342-0 OR ENVR_SCI 202-0</i> .
BIOL_SCI 334-0	Soils and the Environment: The Earth's Critical Zone - Soil development and morphology; physical, chemical, hydrologic, and biological properties of soils. <i>Prereq: BIOL_SCI 203-0 OR 215-0 OR ENVR_SCI 202-0.</i>
BIOL_SCI 336-0	Spring Flora - Life cycles, vegetative and reproductive structures, and adaptations for pollination and fruit and seed dispersal of the wildflowers, trees, and shrubs of oak woodland. <i>Prereq: BIOL_SCI 203-0 OR 215-0 OR 339-0 OR 341-0 OR 342-0 OR ENVR_SCI 202-0</i> .
BIOL_SCI 337-0	Biostatistics - Approaches, methods, and techniques for analyzing datasets in ecology and conservation biology. <i>Prereqs: BIOL_SCI 203-0 OR 215-0 OR ENVR_SCI 202-0, and MATH 218-3 OR 220-2.</i>
BIOL_SCI 339-0	Critical Topics in Ecology and Conservation - Seminar discussing historical and modern publications in the field. <i>Prereq: BIOL_SCI 203-0 OR 215-0 OR 339-0 OR 341-0 OR 342-0 OR ENVR_SCI 202-0.</i>
BIOL_SCI 341-0	Population Genetics - Processes that affect allele frequency change and thus cause evolution. <i>Prereqs: BIOL_SCI 203-0 OR 215-0; BIOL_SCI 202-0 OR 219-0 and a course in statistics</i> .
BIOL_SCI 342-0	Evolutionary Processes - Evolutionary mechanisms (natural selection, genetic drift), evolutionary history (speciation, phylogenetics), and adaptations (sex, cooperation, aging, life history). <i>Prereqs: BIOL_SCI 203-0 OR 215-0, BIOL_SCI 202-0 OR 219-0, and a course in statistics</i> .
BIOL_SCI 344-0	Anatomy of Vertebrates - Vertebrate phylogeny illustrated via comparative morphology; anatomical/ functional and ontogenetic considerations; dissections. <i>Prereqs: BIOL_SCI 103-0 OR 203-0 OR 341-0 OR 342-0.</i>
BIOL_SCI 346-0	Field Ecology - An intensive experience in field ecological research. <i>Prereqs: BIOL_SCI 203-0 OR 215-0, and a course in statistics.</i>
BIOL_SCI 347-0	Conservation Biology - Evolution, ecology, and conservation of patterns of biological diversity. <i>Prereqs: BIOL_SCI 203-0 OR 215-0 OR ENVR_SCI 202-0; a course in statistics.</i>
BIOL_SCI 349-0	Community Ecology - Abundance, distribution, diversity, and scaling in plant communities in space-time. <i>Prereq: BIOL_SCI 203-0 OR 215-0 OR 339-0 OR 341-0 OR 342-0 OR ENVR_SCI 202-0</i> .
BIOL_SCI 350-0	Plant Evolution and Diversity Lab - Introduction to the diversity and evolutionary history of land plants. Introduction to the diversity and evolutionary history of land plants. <i>Prereq: BIOL_SCI 339-0.</i>