2025-2026 Major in Biological Sciences

Ecology, Evolution, and Conservation Biology Worksheet

Any three of the following courses:

- **BIOL_SCI 332-0** Conservation Genetics Critical issues in the management and understanding of endangered populations. *Prereqs: BIOL_SCI 203-0 or ENVR_SCI 202-0.*
- **BIOL_SCI 333-0 Plant-Animal Interactions** Plant-animal interactions, and their consequences for individuals, populations, ecological communities, and ecosystems. Examination of how these interactions are responding to ongoing global factors such as anthropogenic habitat destruction and climate change. *Prereqs: BIOL_SCI 203-0, or BIOL_SCI 339-0, or BIOL_SCI 341-0, or BIOL_SCI 342-0, or ENVR_SCI 202-0.*
- **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. *Prereqs: BIOL_SCI 203-0, BIOL_SCI 241-0, or BIOL_SCI 339-0, or BIOL_SCI 341-0, or BIOL_SCI 342-0, or ENVR_SCI 202-0.*
- **BIOL_SCI 337-0 Biostatistics** Approaches, methods, and techniques for analyzing datasets in ecology and conservation biology. *Prereqs: BIOL_SCI 201-0*, or *BIOL_SCI 239-0*, or *ENVR_SCI 202-0*, and MATH 218-3 or MATH 220-2.
- **BIOL_SCI 339-0 Critical Topics in Ecology and Conservation** Seminar discussing historical and modern publications in the field. *Prereqs: BIOL_SCI 203-0, or BIOL_SCI 241-0, or BIOL_SCI 341-0, or BIOL_SCI 342-0, or ENVR_SCI 202-0.*
- **BIOL_SCI 341-0 Population Genetics** Processes that affect allele frequency change and thus cause evolution. *Prereqs: BIOL_SCI 203-0 or BIOL_SCI 241-0, and BIOL_SCI 337-0 or another course in statistics.*
- **BIOL_SCI 342-0 Evolutionary Processes** Evolutionary mechanisms (natural selection, genetic drift), evolutionary history (speciation, phylogenetics), and adaptations (sex, cooperation, aging, life history). *Prereqs: BIOL_SCI 203-0 or BIOL_SCI 241-0, and BIOL_SCI 337-0 or another course in statistics*.
- **BIOL_SCI 346-0 Field Ecology** An intensive experience in field ecological research. Prereqs: BIOL_SCI 203-0 or BIOL_SCI 241-0, and BIOL_SCI 337-0 or another course in statistics.
- **BIOL_SCI 347-0 Conservation Biology** Evolution, ecology, and conservation of patterns of biological diversity. Prereqs: BIOL_SCI 203-0, or BIOL_SCI 241-0, or ENVR_SCI 202-0, and BIOL_SCI 337-0 or another course in statistics.

BIOL_SCI 349-0 Community & Population Ecology - Abundance, distribution, diversity, and scaling in plant communities in space-time. *Prereqs: BIOL_SCI 203-0, or BIOL_SCI 241-0, or BIOL_SCI 339-0, or BIOL_SCI 341-0, or BIOL_SCI 342-0, or ENVR_SCI 202-0.*

BIOL_SCI 350-0 Plant Evolution and Diversity Lab - Introduction to the diversity and evolutionary history of land plants. *Prereqs: BIOL_SCI 203-0, or BIOL_SCI 241-0, or BIOL_SCI 349-0, or BIOL_SCI 341-0, or BIOL_SCI 342-0, or ENVR_SCI 202-0.*

**BIOL_SCI 345-0 is also eligible to be applied to this concentration when the topic is 'Forerunners of Mammals'.