ANIMAL ECOLOGY CORE CURRICULUM, 2021-2022

University Requirements

US Diversity 3cr  https://tinyurl.com/y78jf6va
Int'l Perspective 3cr  https://tinyurl.com/yayxa4gn
LIB 160 1cr  Information Literacy

CALS Requirements

ENGL 150* 3cr  Critical Thinking & Comm.
ENGL 250* 3cr  Composition
SP CM 212* 3cr  Fund. Of Public Speaking
Ethics 3cr  https://tinyurl.com/ycr44mut
Humanities 3cr  https://tinyurl.com/ydxb9yu
Social Science 3cr  https://tinyurl.com/vas2b3xa

*For these courses a C grade or higher is required

Additional Communications

6 Credits of additional communications from the following:
AGEDS 311, 327, NREM 330, P R 305, SP CM 312,
SP CM 313, ENGL 207, 275, 302, 303, 304, 305,
306, 309, 310, 312, or 314

Math & Physical Science

MATH 140 3cr  College Algebra
STAT 101 or 104 3-4cr  Introduction to Statistics
CHEM 163+Lab* 5cr  Chemistry
CHEM 231+Lab* 4cr  Organic Chemistry
PHYS 115+Lab* 5cr  Physics

*If Vet School bound, students will instead take:
CHEM 177+Lab and CHEM 178 (+Optional Lab)
CHEM 331+Lab (+Optional CHEM 332+Lab)
PHYS 131+Lab (+Optional PHYS 132+Lab)

Animal Ecology Foundation

NREM 110 1cr  Orientation to NREM
NREM 211 1cr  Careers in NREM
NREM 120 3cr  Intro to Renewable Res.
BIOL 211+Lab 4cr  Biology I
BIOL 212+Lab 4cr  Biology II
A ECL 231 3cr  Wildlife & Fisheries Conserv.
A ECL 312 (NREM 311) 4cr  Ecology
A ECL 365 4cr  Vertebrate Biology

Core Requirements (above coursework) + Option Electives (4 emphases to choose from) + Free Electives (additional courses of choice)

75 Credits + 33-45 Credits + 10-30 Credits

128 credits required to earn a degree (must include all of the required courses for the major)

For descriptions of courses, visit the ISU Course Catalog at https://catalog.iastate.edu/azcourses/
PRACTICAL WORK EXPERIENCE
Not a class but required in order to graduate; students must complete 400 hours of career-related experience (paid, volunteer, intern, etc.) Potential opportunities should be approved by the academic advisor to ensure they will count. This requirement allows for students to:
* Develop their resume
* Network within their field
* Learn if their chosen field is right for them
* Experience the application process
* And more!
Resources include, but is not limited to, the NREM job board https://www.nrem.iastate.edu/employment/
Experiences and hours are recorded and submitted using the form found at http://www.nrem.iastate.edu/workexperience

Fisheries & Aquatic Sciences Option
In the Fisheries & Aquatic Sciences option, students learn about the physical, chemical and biological characteristics of aquatic ecosystems. Coursework may include fish biology, aquatic ecology, aquaculture, fishery management, and natural resource policy.
Careers include: Fisheries Biologist, Marine Biologist, Hatchery Manager, Aquaculture Specialist, Lake Manager, Aquatic Biologist, Wetland Scientist, Restoration Ecologist

Interpretation of Natural Resources Option
Those in the Interpretation option often have the goal of teaching others about the importance of natural resources. Students study a wide variety of topics related to natural history, earth science, and communication techniques.
Careers include: Park Ranger/Conservation Law Enforcement Officer, Environmental Educator, Naturalist, Natural Resource Policy, Public Relations, and Law

Wildlife Option
Students in this option learn about wildlife populations, habitats, and management. In addition, courses in policy, administration and law prepare students for the public decision-making process necessary in most areas of wildlife management.
Careers Include: Conservation Law Enforcement Officer, Ornithologist, Park Ranger, Wildlife Biologist, Habitat Manager, Ecologist

Pre-Vet & Wildlife Care
This option is for those interested in becoming a Vet, with many vet school admission requirements built into the program. However, this option is also for those interested in the hands-on care of wildlife. Coursework includes animal physiology, wildlife diseases, and behavior.
Careers include: Zoo Keeper, Wildlife Rehabilitator, Veterinarian, Animal Trainer