INTERDISCIPLINARY ECOLOGY

Program Information

Director of Academic Programs and Graduate Coordinator: K. R. Reddy

Graduate students are advised by one of the 340 members of the School's affiliate faculty and have a supervisory committee with interdisciplinary composition. For the list of Graduate Faculty, see https://snre.ifas.ufl.edu/people/affiliate-faculty/. Graduate students are hosted in one of 50 participating academic units.

The School offers a program of study leading to the Master of Science (thesis and non-thesis options), and Doctor of Philosophy degrees in interdisciplinary ecology. Minimum requirements for these degrees are given in the Graduate Degrees (http://gradcatalog.ufl.edu/graduate/degrees/) section of this catalog. The course work requirements and curriculum are described in more detail at http://snre.ifas.ufl.edu/academics/graduate/courses-syllabi-and-curriculum/. Choices among 450 courses are custom-fitted by the student and the supervisory committee to meet the student's specific needs and interests.

The Interdisciplinary Ecology program views the social-ecological system as the proper framework for addressing the full scope of complex, adaptive systems comprising humans in the natural world. The degree program challenges students to understand both natural and human dynamics to obtain a holistic view and to foster integration of human activities with natural resources and the environment. The learning outcomes of the program are to develop a thorough understanding of the components, processes, and interactions of the social-ecological system, competence in scientific research methodologies, and experience in professional interaction with peers.

The degree programs combine

1. course work in the science of ecology and additional natural and social sciences; and
2. competence in a recognized discipline in one of these fields of study.

The former is achieved with a core-course and distribution requirement and the latter by extra course work for the master's and a concentration for the doctoral degree. A thesis or dissertation provides first-hand experience creating scientific knowledge. The non-thesis master's option provides rapid, advanced preparation for the job market in 3 to 4 semesters, without research experience. Course requirements are 30 semester hours for the thesis option, 30 hours for the non-thesis option, and 60 hours beyond the master's degree for the doctoral degree.

Combination programs: The School offers a combination bachelor's/master's degree program, which allows qualified students to earn both a bachelor's degree and a master's degree with a savings of 1 semester.

Degrees Offered

Degrees Offered with a Major in Interdisciplinary Ecology

- Doctor of Philosophy
  - without a concentration
  - concentration in Agricultural and Biological Engineering
  - concentration in Agricultural Education and Communication
  - concentration in Agronomy
  - concentration in Anthropology
  - concentration in Architecture
  - concentration in Biochemistry and Molecular Biology
  - concentration in Botany
  - concentration in Business Administration
  - concentration in Chemistry
  - concentration in Civil Engineering
  - concentration in Climate Science
  - concentration in Coastal and Oceanographic Engineering
  - concentration in Economics
  - concentration in English
  - concentration in Entomology and Nematology
  - concentration in Environmental Engineering Sciences
  - concentration in Family, Youth and Community Sciences
  - concentration in Farming Systems
  - concentration in Fisheries and Aquatic Sciences
  - concentration in Food and Resource Economics
  - concentration in Food Science
  - concentration in Forest Resources and Conservation
  - concentration in Foundations of Education
  - concentration in Geographic Information Systems
  - concentration in Geography
  - concentration in Geology
  - concentration in Global Systems Agroecology
  - concentration in Health and Human Performance
  - concentration in Horticultural Sciences
  - concentration in Hydrologic Sciences
  - concentration in Landscape Architecture
  - concentration in Mathematics
  - concentration in Microbiology and Cell Science
  - concentration in Nuclear and Radiological Engineering
  - concentration in Philosophy
  - concentration in Political Science
  - concentration in Religion
  - concentration in Sociology
  - concentration in Soil and Water Science
  - concentration in Statistics
  - concentration in Tropical Conservation and Development
  - concentration in Urban and Regional Planning
  - concentration in Veterinary Medical Sciences
  - concentration in Wetland Sciences
  - concentration in Wildlife Ecology And Conservation
  - concentration in Women's/Gender Studies
  - concentration in Zoology
- Master of Science
  - without a concentration
  - concentration in Agricultural and Biological Engineering
  - concentration in Agricultural Education and Communication
  - concentration in Agronomy
  - concentration in Anthropology
  - concentration in Architecture

- concentration in Biochemistry and Molecular Biology
- concentration in Botany
- concentration in Business Administration
- concentration in Chemistry
- concentration in Civil Engineering
- concentration in Climate Science
- concentration in Coastal and Oceanographic Engineering
- concentration in Economics
- concentration in English
- concentration in Entomology and Nematology
- concentration in Environmental Engineering Sciences
- concentration in Family, Youth and Community Sciences
- concentration in Farming Systems
- concentration in Fisheries and Aquatic Sciences
- concentration in Food and Resource Economics
- concentration in Food Science
- concentration in Forest Resources and Conservation
- concentration in Foundations of Education
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- concentration in Hydrologic Sciences
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- concentration in Microbiology and Cell Science
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- concentration in Philosophy
- concentration in Political Science
- concentration in Religion
- concentration in Sociology
- concentration in Soil and Water Science
- concentration in Statistics
- concentration in Tropical Conservation and Development
- concentration in Urban and Regional Planning
- concentration in Veterinary Medical Sciences
- concentration in Wetland Sciences
- concentration in Wildlife Ecology And Conservation
- concentration in Women's/Gender Studies
- concentration in Zoology

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Courses

http://snre.ifas.ufl.edu/academics/graduate/courses-syllabi-and-curriculum/

INTERDISCIPLINARY ECOLOGY COURSES

Code	Title	Credits
EVR 5705	Natural Resources and Innovation Systems	3
EVR 6933	Seminar	1
PCB 6971	Research for Master's Thesis	1-15
PCB 7979	Advanced Research	1-12
PCB 7980	Research for Doctoral Dissertation	1-15

College of Agricultural and Life Sciences Courses

Code	Title	Credits
ALS 5156	Agricultural Ecology Principles and Applications	3
ALS 5905	Individual Study	1-4
ALS 5932	Special Topics	1-4
ALS 6046	Grant Writing	2
ALS 6166	Exotic Species and Biosecurity Issues	3
ALS 6921	Colloquium on Plant Pests of Regulatory Significance	1
ALS 6925	Integrated Plant Medicine	4
ALS 6931	Plant Medicine Program Seminar	1
ALS 6935	Topics in Biological Invasions	3
ALS 6942	Principles of Plant Pest Risk Assessment and Management	3
ALS 6943	Internship in Plant Pest Risk Assessment and Management	1-10
ANS 6936	Graduate Seminar in Animal Molecular and Cell Biology	1-2
BCH 5045	Graduate Survey of Biochemistry	4
FNR 6933	Seminar	1
STA 6093	Introduction to Applied Statistics for Agricultural and Life Sciences	3
STA 6329	Matrix Algebra and Statistical Computing	3

Student Learning Outcomes

INTERDISCIPLINARY ECOLOGY (PH.D.)

SLO 1 Knowledge
Describe and explain the components, processes, and interactions of the social-ecological system

SLO 2 Skills
Apply the scientific method to generate new knowledge

SLO 3 Professional Behavior
Interact with professional peers with honesty, ethical behavior, cultural sensitivity, teamwork, and effective communication

Interdisciplinary ecology (M.S.)

SLO 1 Knowledge
Describe and explain the components, processes, and interactions of the social-ecological system

SLO 2 Skills
Apply the scientific method to generate new knowledge

SLO 3 Professional Behavior
Interact with professional peers with honesty, ethical behavior, cultural sensitivity, teamwork, and effective communication