ECOLOGY AND EVOLUTIONARY BIOLOGY (PHD)

The Ph.D. in Ecology and Evolutionary Biology prepares students for research and teaching careers in ecology and evolutionary biology, including research and leadership positions with non-profit organizations, private foundations, and state, local, or federal government agencies.

Location

- Storrs Campus

Modality

- In Person

Requirements

The PhD requirements in Ecology and Evolutionary Biology conform to the Graduate School requirements. PhD degrees in EEB require completion of the two core graduate courses listed below with a grade of "B" or better. The core course sequence must be completed by the end of the student's third semester, unless an exception is granted by the Departmental Graduate Admissions and Advisory Committee (GAAC). An incoming student with strong, documented graduate-level training may appeal to GAAC to opt out of either class. All students must also complete the 1-credit course EEB 5100 Preparing for a Career in Ecology and Evolutionary Biology and at least one graduate level quantitative course of 3 or more credits. EEB courses that meet the quantitative requirement are listed below. Other courses not listed may also be deemed to satisfy this requirement with approval from the GAAC.

Beyond these course requirements, coursework is individualized to a student's research and career interests and determined by the student's Advisory Committee consistent with the minimum requirements specified by the Graduate School. The PhD in Ecology and Evolutionary Biology does not have a related area or foreign language requirement, unless one is specified by the Advisory Committee.

In EEB, the general exam has both written and oral components. After completing the EEB core courses, each cohort of PhD students will take a written exam covering this material. This exam is typically administered once a year in January and is overseen by a departmental examining committee. After passing the written component of the general exam, each student will complete the oral component. The oral component consists of an individualized oral exam, conducted by a minimum of five faculty members including their full Advisory Committee. The oral exam will typically take place by late spring of the student's second year.

Students are expected to write and defend their dissertation proposal to their Advisory Committee before the end of their fifth semester. After the Advisory Committee has approved the dissertation proposal, the Department Head will appoint two reviewers from outside the Advisory Committee to conduct a critical evaluation of the Dissertation Proposal.

PhD Required Courses

Course	Title	Credits
EEB 5449	Evolution	3
EEB 5301	Population and Community Ecology	3
EEB 5100	Preparing for a Career in Ecology and Evolutionary Biology	1

Approved Quantitative Courses in EEB

Course	Title	Credits
EEB 5050	Fundamentals of Ecological Modeling	4
EEB 5150	Modeling Ecological and Evolutionary Processes	3
EEB 5300	Practical Genomics in Ecology and Evolution	3
EEB 5348	Population Genetics	4
EEB 5349	Phylogenetics	4

Learning Objectives

1. Knowledge: Demonstrate appropriate breadth and depth of disciplinary knowledge and comprehension of the major topics, theories, and issues of the discipline, including demonstration of specialized knowledge of a sub-field sufficient to carry out substantive independent research or creative pursuits.
2. Research/applied skills: Use disciplinary methods and techniques ethically and professionally to apply knowledge, critically analyze, and, as appropriate to the degree, create new knowledge or achieve advanced creative accomplishments.
3. Communication: Communicate proficiently and effectively to a specialist or non-specialist audience, verbally and in writing, a structured, coherent academic presentation, representation, or argument that cogently summarizes their research or creative pursuit, relevant literature, and its significance at the level appropriate to discipline.