Ph.D. in Ecology and Evolutionary Biology

The EEB doctoral program provides a training environment in ecological and evolutionary science for future scientists and societal leaders that focuses on research that challenges and/or improves current theory and knowledge and has the capacity to be relevant to society. Faculty in the EEB program work on scales ranging from molecules to global change, in terrestrial and aquatic systems both regionally and around the world. In particular, our research focuses in two key areas: Biodiversity and Global Change Ecology.

Admission Requirements

1. Bachelor's degree from an accredited institution in the United States or proof of equivalent education in a foreign institution
2. Three letters of recommendation indicating endorsement of the applicant for doctoral study
3. Statement of purpose
4. Applicants whose degrees are from non-English speaking institutions are required to demonstrate English proficiency. Please consult the Graduate School (https://www.utep.edu/graduate/future-students/applicant-timelines.html) website for required scores.

Degree Requirements

With departmental approval, students entering the program with a master's degree can count up to 24 semester hours of graduate coursework towards advanced standing in the PhD degree. Students with deficiencies in Cell Biology, Genetics, Ecology, or Evolutionary Theory will be required to take additional coursework to remove the deficiencies.

Admission to Candidacy

The student must pass a qualifying oral examination to advance to candidacy for the doctorate. This exam is designed to assess the candidate's knowledge and understanding of the material covered in the core courses as well as the candidate's ability to rationally discuss the design, implementation, and analysis of a research problem of the student's and the committee's choosing. The Preliminary Examination Committee will determine whether the student displays sufficient breadth of knowledge and understanding of basic principles to undertake original research.

Dissertation

A dissertation demonstrating both the ability to do original independent research and competence in scholarly exposition will be required of all students. The dissertation must present original research and should provide the basis for one or more publishable contributions to the research literature. The dissertation will be supervised by the Dissertation Advisor, in consultation with a Dissertation Committee consisting of at least three additional members, at least one of whom must be a graduate faculty member from outside the Department of Biological Sciences. The candidate will present a dissertation proposal for approval by the Dissertation Committee.

Final Oral Examination

Upon completion of the dissertation, the student must defend, in public, his or her work. The Dissertation Committee will be responsible for administering the final public oral defense and will have the responsibility of determining whether the written dissertation and its oral presentation and defense are acceptable.

Degree Plan

Required Credits: 60

Code	Title	Hours
PhD in Ecology and Evolutionary Biology (All courses require a grade of C or better)		
Required Courses:		
BIOL 6129	Seminar in Ecology Evolution (Complete three semesters)	3
BIOL 6208	Prof Skills Devel Eco Evo	2
BIOL 6209	Rsrch Proposals in Eco Evo	2
BIOL 6328	Biostatistics	3
BIOL 6331	Advances in Eco/Evo Theory	3
Free Electives:		
Select fourteen hours from the following:		14
BIOL 6301	Basic Principles of Toxicology	
BIOL 6304	Physiological Regulatory Mech	
BIOL 6305	Cell Physiology	
BIOL 6310	Adv Research Techniques	
BIOL 6312	Biodiversity	

BIOL 6313	Biogeography	
BIOL 6316	Biosystematics	
BIOL 6329	Physiology of Bacterial Cell	
BIOL 6340	Structure/Funct Macromolecules	
BIOL 6344	Molecular Pathogenesis	
BIOL 6351	Intro Bio I:Basic Seq. Comp.	
BIOL 6352	Intro Bio II: Gene Find/Compar	
BIOL 6360	Limnology	
ESE 6301	Environmental Law and Policy	
ESE 6307	Interdisciplin Envir Prob Solv	
ESE 6402	Environmental Chemistry	
GEOP 6336	Digital Image Processing	
GEOP 6361	Plate Tectonics	
MATH 6388	Multivariate Data Analysis	
MATH 6391	Time Series Analysis	
Select twenty-seven hours from the following:		27
BIOL 6190	Independent Research	
BIOL 6290	Independent Research	
BIOL 6390	Independent Research	
BIOL 6490	Independent Research	
BIOL 6590	Independent Research	
BIOL 6690	Independent Research	
Thesis:		
BIOL 6398 & BIOL 6399	Dissertation and Dissertation	6
Total Hours		**60**