

Master of Arts in Ecology and Evolutionary Biology

Ecology and Evolutionary Biology Graduate Programs

The department comprises a large number of biologists with a variety of research interests. Three broad overlapping themes capture the interests and activities in EEB — biodiversity and macroevolution, ecology and global change biology, and evolutionary mechanisms. The department offers graduate study leading to Master of Arts and Doctor of Philosophy degrees in ecology and evolutionary biology. General information about the department and its faculty, current graduate students, admission, and financial support may be found on the EEB website (<https://eeb.ku.edu/>).

B.A. and B.S. degree programs in biology are listed under Biology Undergraduate Programs (<https://catalog.ku.edu/liberal-arts-sciences/biology/>).

Admission to Graduate Studies

Admission Requirements

- All applicants must meet the requirements outlined in the Admission to Graduate Study (<https://policy.ku.edu/graduate-studies/admission-to-graduate-study/>) policy.
- Bachelor's degree: A copy of official transcripts showing proof of a bachelor's degree (and any post-bachelor's coursework or degrees) from a regionally accredited institution, or a foreign university with equivalent bachelor's degree requirements is required.
- English proficiency: Proof of English proficiency (<https://gradapply.ku.edu/english-requirements/>) for non-native or non-native-like English speakers is required. There are two bands of English proficiency, including Admission and Full proficiency. For applicants to online programs, Full proficiency is required.

Graduate Admissions

The departmental graduate admissions committee reviews the record of each applicant. Admission is based on background, preparation, test scores, and academic performance. The committee considers each candidate's overall academic record in the context of the institution(s) from which the record was received. A graduate student should have a broad undergraduate background in natural science and math, including calculus, physics, chemistry, organismal biology, genetics, ecology, and evolutionary biology. Faculty recommendations, honors, awards, undergraduate research experience, publications, and professional experience also are considered. Enthusiasm, scientific expertise, and clarity of writing as evidenced by the applicant's essay are particularly important.

Non-native speakers of English must meet English proficiency requirements as described on the English Proficiency Requirements policy (<https://policy.ku.edu/graduate-studies/english-proficiency-international-students/>). For more details on admission requirements, visit the EEB website (<https://eeb.ku.edu/>).

Applicants are encouraged to seek a faculty sponsor through correspondence with one or more faculty members prior or during the application process. For a list of EEB faculty, please see the EEB Faculty (<https://eeb.ku.edu/faculty/>) page. Interested students are encouraged to visit campus to meet faculty members and graduate students. Graduate school is critically important in beginning a career, and the choice of a program in which to enroll should be made carefully.

The number of students admitted is limited. Qualified candidates may be denied admission because of lack of a faculty sponsor, financial support, or research facilities.

Applications and supplemental materials may be submitted online. For a detailed description of the application process, visit the EEB website (<https://eeb.ku.edu/>). All application requirements, including the deadline for application receipt, can be found on the EEB Admissions (<https://eeb.ku.edu/how-apply/>) page. Only complete applications are considered.

M.A. Degree Requirements:

The Master of Arts in Ecology and Evolutionary Biology allows for the following 2 degree completion options:

1. Master's Thesis Final Defense Option
2. Final Exam with Research Report Option

For each option, the advisory committee must have at least 3 Graduate Faculty members, 2 of whom must be in EEB. No faculty member outside the department is required. A faculty member from a different department with a courtesy appointment in the student's home department may serve in fulfillment of the committee majority.

Required Course Work

Most course work requirements are identified during the student's preliminary advisory meeting at the beginning of their first semester. Students are expected to take graduate-level courses (or have equivalent knowledge) in ecology, evolution, and systematics. A student's advisory committee may add course requirements during annual meetings. Listed below are specific course requirements for all master's students in the EEB department:

The Master's Thesis Final Defense requires a total of 30 hours, and the Coursework option requires a total of 36 hours

Code	Title	Hours
Required Courses		
BIOL 805	Scientific Integrity in Ecology and Evolutionary Biology	1
BIOL 801	Topics in: _____ (Core Topics in Current EEB Research Seminar)	1
BIOL 841	Biometry I	5
Completion Options		23-29
Students select one of the following degree complete options		
Thesis Option: BIOL 899 (1 to 14 hours), Remaining coursework determined by advisor and committee (23 hours).		
OR		
Final Exam Option: Coursework is determined with their advisor and committee. (29 hours)		
Total Hours		30-36

*At least 50% of the coursework required for the master's degree must be taken at the 700 level or above.

Master's students must meet a credit-hour-completion requirement. Those in the thesis program must complete a minimum of 30 graduate-level credit hours with at least one credit enrollment in thesis hours and no more than 14 of the 30 from enrollment in thesis or advanced study hours. Coursework Option master's students may take up to 16 hours of enrollment in thesis or advanced study hours or a combination of the two to fulfill the 36-hour requirement.

Completion Options

The master's program allows students to choose between two culminating effort options for completing the program, a thesis option and a final exam with research project option.

Thesis option

During the final semester of enrollment, students pursuing the Master's Thesis Option must present an oral presentation and defense of a thesis showing results of original research to a faculty committee in a public forum. The master's thesis defense also consists of a substantive test of the student's knowledge of the field and the thesis topic, with approximately 50 percent of the time devoted to questions in the general examination realm, covering the full breadth of the candidate's field of study (i.e., general knowledge of ecology and evolutionary biology).

final exam Option

During the final semester of enrollment when activities are nearing completion, students pursuing this completion option must successfully complete a general oral examination held by their committee. The examination's structure is similar to that of the doctoral oral comprehensive examination; however, the examination is shorter, and depth and breadth of knowledge required of the student are less comprehensive than expected of a successful doctoral aspirant.

Students in the final exam option must also conduct research with 1 or more faculty members involving work on a research problem that requires use of literature, and laboratory or field techniques. The students must submit a comprehensive written report to the advisory committee. Examples of research problems that could be the basis of the written report include a literature review of a critical issue in a scientific discipline, original research, or other creative activity approved by the advisory committee.

At the completion of this program, students will be able to:

- Demonstrate an understanding of ecology and evolutionary biology.
- Demonstrate an understanding of best research practices & ethics in EEB.
- Demonstrate the ability to perform independent research in ecology and/or evolutionary biology.
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