## **Doctor of Philosophy (Ph.D.) in Ecology and Evolutionary Biology**

#### **Admissions**

Prospective students may apply to the Interdisciplinary Graduate Program in Ecology & Evolutionary Biology through the TAMU Office of Graduate Studies. The overall graduate admission criteria are based on the entire record of the applicant and availability of departmental resources. Admission to the Interdisciplinary Graduate Program in EEB will be based upon the following criteria:

- 1) Hold a four-year baccalaureate degree from a college or university of recognized standing (i.e., a degree recognized as equivalent to a baccalaureate degree from an accredited institution in the U.S.),
- **2)** Show promise of intellectual and academic ability, as evidenced by a minimum of three letters of recommendation from persons capable of judging the applicant's capabilities, a Statement of Purpose essay, an overall evaluation of the student's transcript, and the grade point average in the last 60 hours of coursework.
- 3) Submit, with application, scores on the General Test of the Graduate Record Examination (GRE), which will be evaluated in a manner that complies with House Bill 1641.
- **4)** Demonstrate research aptitude in the form of prior research experience, presentations at professional meetings, and/or publications in the scientific literature.
- 5) an applicant from another country seeking admission to graduate studies must demonstrate the ability to read, write, speak, and understand the English language. Prospective students whose native language is not English must take the Test of English as a Foreign Language (TOEFL), which is administered by the Educational Testing Service in over 200 centers around the world. All applicants from non-English-speaking countries must present a computer-based TOEFL score of at least 213 to be admitted to graduate studies at the University.
- 6) Importantly, each EEB applicant must identify a prospective faculty sponsor who must provide a letter of support. Students will only be admitted if an EEB core faculty member agrees to serve as committee chair for the student.

EEB at TAMU is structured to attract and train top students who otherwise would enroll in EEB programs at other elite institutions. Accordingly, **admissions standards will be more stringent** than those for existing departmental programs. The EEB GRAC (Graduate Recruiting and Admissions Committee) will evaluate each application. Funding will be allocated to invite the top 10 candidates each year for in-person interviews on campus. The GRAC will also evaluate transfer students from other graduate programs according to the criteria outlined above.

## **Degree Requirements**

The doctoral program provides a broad foundation in EEB through a first-year core sequence, as well as training in the quantitative skills required to conduct cutting-edge research. The program is distinctive in that students will be exposed to an interdisciplinary array of approaches to thinking about ecology and evolution, from faculty and students associated with different scientific emphases and a range of connections to real-world applications. Students entering with Master's and with undergraduate degrees will both be required to follow the first-year core course sequence; students entering with a Master's will be required to take fewer seminar hours and fewer electives.

Students entering with an undergraduate degree:

Category	Semester Credit Hours
Required Courses	15
Prescribed Electives	16
Free Electives	17
Dissertation	48
Other	0
TOTAL	96

Students entering with a Master's degree or equivalent:

Category	Semester Credit Hours
Required Courses	12
Prescribed Electives	12
Free Electives	8
Dissertation	32
Other	0
TOTAL	64

# Curriculum

Required Courses	SCH
	8
EEB mini-courses (Appendix IV.A)*	
First-year Graduate Orientation Seminar	1
•	
	6 (entering with
EEB Colloquium Seminar	BS/BA); 3
-	(entering with
	MS/MA)

Prescribed Elective Courses (students	CCII
entering from BS/BA)	SCH
-	9
Minimum of 9 credits total in at least two	
different departments from the following	
categories (complete list in Appendix IV.A):	
Quantitative, Ecology, and Evolution	
Journal clubs	6
Prescribed Elective Courses (students	CCII
entering from MS/MA)	SCH
	6
Minimum of 6 credits total in at least two	
different departments from two of the three	
following categories (complete list in	
Appendix IV.A): Quantitative, Ecology, and	
Evolution	
Journal clubs	6

Free Elective Courses	SCH
	17 (entering with BS/BA);
Students will choose free electives in	8 (entering with MS/MA)
conjunction with their committee chair and	
subject to approval of dissertation	
committee; free electives may include formal	
courses or dissertation hours.	

## Candidacy/Dissertation Schedule and Requirements.

EEB students will be expected to fulfill the following requirements:

- 1) Successfully complete the two-semester *EEB Core Course* sequence in the first year.
- 2) Successfully complete a *Graduate Research Seminar* in the first year.
- 3) Pass the EEB Qualifying Examination at the end of the first academic year.
- 4) Establish a *Dissertation Advisory Committee* and file a graduate degree plan by the end of the third semester.
- 5) Pass the *Preliminary Exam* to be administered by the advisory committee plus an EEB "*rover*" by the end of the fifth semester. (This is an exam of knowledge as well as a formal defense of the proposed PhD dissertation research).
- 6) Register for a journal club or the weekly EEB seminar while in residence in College Station.
- 7) Continued participation in EEB seminars and related events (e.g., EIS) throughout the student's tenure on campus.
- 8) Submission of annual progress reports and annual meeting with Dissertation Advisory Committee.

Qualifying Examination. At the end of their first year, after completing the Core Course and Graduate Research Seminar, all EEB students will be required to participate in a Qualifying Examination. The Qualifying Examination is intended to: 1. Determine whether a student has the preparation, intellectual capacity, and professional attitude to complete a Ph.D. program successfully; 2. Explore deficiencies in the student's background and training in order to plan additional course work that may be needed; 3. Assess the student's verbal and written English competency. The examination will consist of written and oral components to be evaluated by a committee to be assigned by the EEB curriculum committee representing a cross-section of departments. The committee can mandate additional coursework that must be completed before the student can defend the dissertation proposal.

<u>Dissertation Advisory Committee</u>. The dissertation advisory committee should conform to the general requirements of Texas A&M University (page 163 of the 2010-2011 TAMU Graduate Catalog). At least one half of a student's committee must be EEB faculty or associates.

<u>Proposal defense</u>. The Preliminary Examination should conform to the general requirements of Texas A&M University (page 165 of the 2010-2011 TAMU Graduate Catalog). The Preliminary Exam is administered after the student has essentially completed his/her course work and after successfully passing the Qualifying Exam. The exam will include both a defense of the proposed PhD research and questioning that enables the committee to assess the student's mastery of the field. The examination of knowledge is intended to determine the student's understanding of his/her chosen field of specialization ("depth") as well as general knowledge across Ecology and Evolutionary Biology ("breadth").

The exam shall be composed of a written thesis proposal and an oral exam. Student preparation of proposals can and should be guided by their committee members, and the

proposal's content should be discussed in earlier committee meetings. The proposal should be in a standard format (i.e., appropriate for submission to a funding agency) ~5-15 pages of text, abstract, references, and figures. Students will submit their proposal to committee members five working days prior to the oral exam, and one copy of the proposal will reside in the official student file. Individual members of the advisory committee may request that the student prepare answers to written questions; such written questions should be administered through the student's primary advisor in accordance with instructions from the committee member (open versus closed book, time limit, etc.). Written questions should be provided to the primary advisor no less than ten working days before the scheduled oral exam and answers should be returned to the committee member no less than five working days before the scheduled oral exam. Committee members opting not to apply a written question should inform the student's primary advisor.

The oral exam will include both a defense of the proposal and questioning that enables the committee to assess the student's mastery of their field and EEB breadth. At the discretion of the advisor and committee members, students may present the key elements of their thesis proposal in a short (10- 15 minute) oral presentation.

Annual Progress Report. All EEB students are required to submit an annual progress report at the end of the spring semester. The report should consist of course taken (and grades earned), papers published, talks presented, proposals submitted and funded (including both scholarships and research), courses taught or TA'd, and any other activities relevant to good standing in the EEB program (e.g., serving on the organizing committee of the annual TAMU Ecological Integration Symposium). The report will be filed as part of the student's record and used to track progress as well as serve as a basis for information for scholarships and other such opportunities. Failure to submit a report will result in dismissal from the EEB program. After a student's Dissertation Advisory Committee has been approved by the University, the student is required to meet with that committee to present progress at least once per year. The Preliminary Exam may be counted as the annual meeting.