

**Departmental expectations of students in the EEB PhD program.**

**I. SKILLS**

By the time they complete their degree, EEB PhD students should be able to:

1. Develop novel research questions and place their significance in the context of the biological sciences.
2. Design and successfully implement a research plan that addresses their research questions, demonstrating mastery of experimental design, quality control, trouble shooting, data management and organizational skills.
3. Write grant proposals, know the primary funding sources for research in EEB, understand how grants are managed, and be able to develop a research budget.
4. Present their research to peers via talks, posters, and in the form of scientific publications.
5. Understand the publication process, including journal selection, paper submission, and how to conduct peer review.
6. Communicate their research beyond their peers to a broader public.
7. Articulate the broader impacts of their research program.
8. Understand and abide by the legal and ethical expectations placed on scientists.
9. Teach undergraduate students within the field of EEB.

**II. KNOWLEDGE**

By the time they complete their degree, EEB PhD students should:

1. Know the fundamentals of ecology, evolutionary biology, and systematics.
2. Have an understanding of the general biology of a broad range of organisms.
3. Know the history of research within their sub-discipline, as determined by the student's committee.
4. Have quantitative skills appropriate to their sub-discipline, as determined by the student's committee.
5. Have depth and breadth of knowledge appropriate to their sub-discipline, as determined by the student's committee.

### III. TIME-LINE AND KEY MILESTONES

Students will complete the following benchmarks by the stated times. Exceptions will be allowed as detailed below; in addition, any leave of absence approved by the Graduate School stops the clock on all items for the duration of the absence. Students also are responsible for ensuring that all Graduate School requirements are met; should discrepancies arise between this document and the graduate catalog then the latter takes precedent. Any such discrepancies should be reported to the Graduate Awards Committee (GAC) so that this document can be updated.

Students should:

**1. Form a provisional committee of at least 3 faculty members, including the major advisor, before the start of the second semester.**

Each student is required to form an advisory committee that will guide them through their degree. Membership of the committee should be determined in consultation with your major advisor. Committee members must be members of the graduate faculty at UConn. If one of your proposed committee members is not at UConn, they can be added to the Graduate Faculty by submitting a form available on the Graduate School web site.

The role of this committee is solely to guide the student's initial course selection and to help them begin planning their research. Committee members may be added or removed at any time, and changes are especially encouraged when they accommodate changes in research direction. Provisional committee members do not need to be on the student's final dissertation committee.

**2. Finalize committee membership and submit a plan of study to the Graduate School before the end of the third semester.**

After committee membership has been formalized, subsequent changes in membership remain possible and are encouraged when they will help the student meet their research goals. Similarly, changes to the plan of study are encouraged when they will improve the student's ability to conduct their planned research. Changes at this stage will require the approval of appropriate paperwork through the Graduate School.

Each student is required to submit a plan of study to the Graduate School. The plan of study should identify any courses that the department or the student's committee requires the student to take in order to complete their degree. The student should consult the graduate catalog to ensure that the plan is compliant with Graduate School requirements.

### **3. Meet with their committee at least annually.**

The student should meet with their provisional committee before the start of their second semester to initiate discussions about their research directions and plan of study. Thereafter, they should meet annually to update their committee on their progress and to discuss future plans.

### **4. Take their general exam before the end of the fourth semester.**

All students must complete an oral general exam. The purpose of this exam is to assess a student's understanding of the fundamentals of their field and the general information necessary to complete their graduate training and dissertation research, as determined by the five members of their examination committee. The exam committee is charged with using the exam to help the student to identify areas of strength and any remaining areas of weakness. Wide-ranging weaknesses will result in failure, but the committee has the option of addressing less serious/more narrowly-defined weaknesses by requiring the student to undertake additional study (e.g., classes, committee-defined assignments, etc.) and/or a follow-up exam in a format that they consider appropriate.

Each student should consult with their committee members well in advance of the exam (at least 3-6 months) for advice on how to prepare, in order to make the exam a productive exercise. The departmental norm for the oral exam is to begin with the student giving a short (maximum of 15 min) overview of their research interests. An initial round of questioning focused on the presentation should also be short. This round of questions should be followed by more general questions from each committee member in turn. Exams should not last longer than 3 hours.

A student may request a one semester extension of the general exam deadline; which can be granted by their committee. For extensions beyond the fifth semester, a student must apply to the Graduate Awards Committee, which will consult with the student's committee in deciding whether to approve the request. Except in cases of emergency, requests for extensions should be submitted by the beginning of the semester in which the exam should be taken. Students should note that unapproved extensions may affect continued departmental funding of the student (e.g., TA support, eligibility for departmental awards).

### **5. Defend in a committee meeting and then submit a dissertation proposal before the end of the fifth semester.**

The dissertation proposal should outline the research that the student plans to conduct, place that work in the context of previous work in their field, and demonstrate how the proposed work will contribute new knowledge in their field. It is recommended that the document

include an introductory literature review, a description of methods, a time-line, a summary of proposed chapters, and a discussion of the work's significance. The proposal should be no more than 10 pages long (excluding references).

Once individual committee members have approved a proposal, the student should arrange a meeting at which the proposed work is presented to the committee and to two outside reviewers (these need not be EEB faculty, but must be approved by the department head). The intent of this meeting is to allow the student to benefit from the synergistic discussions that often emerge from committee members hearing each other's questions and suggestions. Faculty participation via video conference is acceptable, and external reviewers are encouraged. The meeting should begin with the student giving a ~30 min presentation of their research plans, which will be followed by discussion. The prospectus should be distributed at least a week before the meeting date. If two non-committee members are unable to participate in the proposal review, then the proposal must be sent out for additional review in order to meet Graduate School rules. Students should consult the graduate catalog in order to ensure that they meet all Graduate School requirements for the proposal submission.

A student may request a one semester extension of the proposal deadline; which can be granted by their committee. For extensions beyond the sixth semester a student must apply to the Graduate Awards Committee, which will consult with the student's committee in deciding whether to approve the request. Except in cases of emergency, requests for extensions should be submitted by the beginning of the semester in which the proposal is due. Students should note that unapproved extensions may affect continued departmental funding of the student (e.g., TA support, eligibility for departmental awards).

**6. Distribute complete draft dissertation chapters to committee at least three weeks prior to defense exam.**

In order to receive helpful feedback from the advisory committee it is important for a student to consult with them throughout the writing period. Once the student has a final draft of the dissertation, they should distribute it to all committee members and anyone else who will participate in the examination (closed door) portion of the defense.

**7. File Dissertation Tentative Approval Page with Graduate School and announce the oral portion of your defense via the University Events Calendar at least two weeks prior to defense exam.**

These two items are university-wide requirements. Be sure to review the Graduate School web site for details on how to do these things and for any other dissertation-related requirements imposed by the university. Note that the Approval Page indicates that your committee has

tentatively approved the dissertation, which is why it is essential that they receive a complete draft at least 3 weeks before the defense exam (see above).

**8. Complete defense (recommended: before the end of the tenth semester).**

Departmental support for students is guaranteed for up to 5 years from the date of matriculation, subject to the continued availability of funds, satisfactory performance as a graduate assistant, and satisfactory progress towards degree completion. Students should, therefore, plan to complete their dissertation defense/examination within this time frame. Requests for support beyond the 10<sup>th</sup> semester after matriculation should be submitted to the Graduate Awards Committee, along with a written statement of the student's progress, details of work that remains, and a time-line for completion. The GAC will consult with the student's committee in deciding whether to extend support. An initial extension can be granted for up to a year; thereafter extensions will be granted only after additional review and on a semester-by-semester basis.

The defense presentation should be scheduled for a 60 min period in which the student gives a talk and takes questions from a general audience. This presentation will be followed by a closed door session with at least 5 faculty in attendance (i.e., the student's committee plus additional faculty if the committee has less than 5 members). The defense must take place at least two weeks prior to the end of the semester in which the student plans to graduate.

*Questions about this document should be directed to Chris Elphick.*