

Yale GRADUATE SCHOOL OF ARTS AND SCIENCES

Department of Ecology & Evolutionary Biology

Advising Guidelines

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Contents

Introduction.....	2
Diversity Statement.....	2
Advising Structure.....	3
Funding Structure.....	4
Timeline to Degree.....	5
Entry Committee.....	6
Graduate Mentors.....	6
Research Rotations.....	6
Join a lab	6
Coursework.....	7
Teaching	8
Grad Student Department Service.....	8
Applying for Fellowships.....	9
Assembling Your Dissertation Committee.....	10
Preprospectus Exam	10
Prospectus Exam	10
Guidelines for the Preprospectus and Prospectus Written Documents.....	11
Advancement to Candidacy.....	13
MS degree requirements.....	13
Dissertation Research & Committee Meetings.....	13
Dissertation Defense & Submission.....	14
Individual Responsibilities	15
Appendix A: Suggested Questions for Advisors and Students.....	19
Appendix B: Additional Advising Resources.....	19
Appendix C: <i>Core Values and Guidelines for Success in the Social Perception & Communication Lab*</i>	20
Appendix D: Mental Health and Title IX Resources.....	23

Introduction

Greetings to the Ph.D. students in Ecology & Evolutionary Biology! We are delighted to welcome you into our community and look forward to working with you for the years to come. Our department is home to broad, interdisciplinary, and highly collaborative research with particular expertise in population, community, ecosystem, and macroecology; in evolutionary genetics, developmental evolution, behavioral evolution, and evolutionary medicine; and in phylogenetics, systematics, and biodiversity.

Our department has a long tradition of training exceptional ecologists & evolutionary biologists. The graduate program offers students an integrated training program with coursework, teaching, and research components. Students will develop their understanding of study systems and scientific approaches, enabling them to generate and test questions fundamental to 21st century advances in ecology & evolutionary biology. Students will be joining a department with faculty whose research interest span numerous areas of ecology & evolution and whose systems encompass multiple levels of biological organization.

We welcome students into our program with diverse identities, [from varied backgrounds and prior experiences](#). As a department, we are committed to fostering diversity and a welcoming environment for all. The graduate program provides students with five years of guaranteed funding and the intellectual support they need to reach their potential and become world-class scientists, educators, and professionals.

This document will address:

- o The advising structures and resources available to you
- o The advising relationships you will form at each stage of their time at Yale
- o The responsibilities of graduate students and their advisors
- o The responsibilities of the DGS and the department at-large
- o What to do when you have concerns either about academic or personal matters, or about your advising relationship
- o Other resources available to students and advisors

Please also take the time to familiarize yourself with the GSAS [Guide to Advising Processes for Faculty and Students](#).

Diversity Statement

The mission of academia is to better understand the world and to communicate this knowledge to others. The voices of academia in general, including the fields of Science, Technology, Engineering, and Math (STEM), have long lacked diversity, reflecting a deep history of exclusion and discrimination. Our disciplines of Ecology and Evolutionary Biology are no exception; we must acknowledge and reckon with this past. Addressing inequity is a moral imperative, and a diversity of perspectives and intellects increases the excellence and creativity of our science. We affirm our responsibility to reverse historic patterns of exclusion, and improve the atmosphere in our department through education, training, and outreach.

We affirm the following core values:

1. All individuals are respected and accepted into our community, regardless of race, ethnicity, culture, socioeconomic status, gender, sexual orientation, religion, disability, or any other identities.

2. Combating systemic problems like bias (both implicit and explicit) and prejudice requires training, and represents a collective responsibility that requires individual engagement.
3. Barriers to access, retention, and advancement in academia must be removed; equitable outcomes require active work.
4. Open dialogue and respectful communication, while maintaining a safe environment for all, is essential.

Both the EEB Department and the Graduate School are committed to creating an inclusive environment. Resources available to help reach that objective can be found in the appendices. Should you have any concerns about inclusivity, discrimination, or accommodations that are not being addressed, please contact the DGS, the Chair, the Dean for Graduate Academic Support, the Dean for Graduate Student Development & Diversity, or the University Title IX coordinators.

Furthermore, we urge all members of the department to recognize each other holistically, as people with complete lives and non-academic responsibilities.

Advising Structure

1. **Entry Committee.** Upon arrival in the fall, the department's entry committee will meet individually with and review the academic records of the new students, and make recommendations for course work, rotations, and teaching. Course recommendations will include a) courses to be taken (and passed) to address gaps in your previous scientific education, and b) courses that will help student development in their chosen area of research.
2. **Graduate Mentor.** Upon admission, each incoming student will be assigned a faculty mentor. In most cases, the mentor will be a prospective advisor. If the student's prospective advisor is on leave, another faculty member will be assigned mentor that student. The graduate mentor is responsible for providing space & support for the first year and supervising the academic recommendations of the entry committee.
3. **Advisor of Record.** Most students come into the department with an advisor (or two) with whom they want to work. However, students do not designate the *advisor of record* for their dissertation research until (at the earliest) the end of their first year. During their first year, students complete research rotations in the lab(s) they are considering joining. At the end of a student's first year, they choose one of the labs they completed a rotation project in to join for their dissertation research. If students do not wish to join one of the labs they rotated in, it is possible to do a 3rd (or even 4th) rotation during the summer. Note that unlike other programs in the biological sciences, it is extremely rare for an advisor to be unable to accept a graduate student to join the lab, because funding for our graduate students is provided at the department level.

In rare cases, students can be co-advised by 2 PIs, although they should consider whether co-advising is necessary or if it would be sufficient to simply have one of the PIs as a committee member or close collaborator.

4. **Advisor Selection.** When selecting your advisor, please consider the following factors:
 - a. Interactions before & after admission
 - b. Personal meetings
 - c. Courses
 - d. Lab rotations

5. **Changing Advisors.** While changing advisors is not common, the need may arise due to various circumstances (advisor's departure, irreconcilable differences between advisor and student, change of a student's focus, addition of new faculty, etc.) If a student wishes to switch advisors, the change should be discussed carefully with the DGS and with the proposed new advisor, and with the current advisor if appropriate.
6. **Dissertation Committee Selection.** By the end of their 3rd semester, each student is expected to form a Dissertation Advisory Committee. This committee will serve on your pre-prospectus meeting and prospectus exam, meet with you regularly for dissertation committee meetings, oversee your dissertation research, act as a valuable resource for your research, and evaluate your progression to candidacy and eventual dissertation defense. Students should consult with their advisor to determine who to ask to serve on their committee.
7. **Other Departmental Advising Roles.**
 - a. **Director of Graduate Studies (DGS):** The first point of contact for questions from graduate students. The DGS manages course registrations, teaching assignments, rotations, selecting or changing advisors, department-specific and university requirements, and student funding.
 - b. **Department Chair:** The Chair acts as the chief academic officer for the department. The Chair handles issues related to departmental policies and acts on public-facing matters relevant to the department.
 - c. **Operations Manager:** In addition to coordinating departmental facilities, access, and support staff, the Operations Manager serves as an expert concerning Federal, University, and Departmental policies & procedures.
 - d. **Departmental Registrar:** The Registrar coordinates curriculum, academic schedules, teaching fellowships, degree requirements, and all other student matters pertaining to registration and recordkeeping. The Registrar is also responsible for scheduling departmental classrooms.

Funding Structure

All EEB Ph.D. students are guaranteed a minimum five years of funding to cover their tuition, health coverage, and a living stipend. Though each student's sources of financial aid may differ, typical funding types include University Fellowships, Teaching Fellowships, Training Grants, Research Assistantships, and External Fellowships.

University Fellowship (UF). Students receive three years of UF funding provided through the Graduate School. UFs typically must be used during your first 5 years in the program to avoid additional teaching obligations.

Teaching Fellowship (TF). EEB students are expected to teach a minimum of three semesters while at Yale, typically during their first two years of study.

Training Grants (TG). Institutional training grants provide funding to support selected pre-doctoral candidates in a coordinated training program. In addition to funding stipends and tuition, they often support training related expenses.

Research Assistantships (RA). Students in later years may be supported solely by funds assigned to their advisor/principal investigator. It is understood that the work performed not only is part of the PI's research project but also is the student's dissertation research.

External Fellowships (EX). Students are strongly encouraged to compete for external fellowships. In addition to the honor of winning such an award, an external fellowship may offer you added flexibility in your program.

Timeline to Degree

1st year

- [Fall] [Entry Committee](#)
- [Coursework](#)
- [Teaching](#)
- [Graduate Mentors](#)
- [Research rotations](#)
- [Join a lab](#)
- [Department activities](#)
- [Apply for fellowships](#) (optional)

2nd year

- [Teaching](#)
- [Coursework](#) (as needed/desired)
- [Grad student department service](#)
- [Winter] [Assemble your dissertation committee](#)
- [by March] [Pre-prospectus](#)
- [Spring/Summer] [Prospectus](#) & [Advancement to candidacy](#)
- [MS degree](#)
- [Department activities](#)
- [Apply for fellowships](#) (optional)

3rd year

- [Dissertation research & committee meeting\(s\)](#)
- [Grad student department service](#)
- [MS degree](#)
- [Department activities](#)
- [Apply for fellowships](#) (optional)

4th year

- [Dissertation research & committee meeting\(s\)](#)
- [Department activities](#)
- [Apply for fellowships](#) (optional)
- [Teaching](#) (if required/desired)

5th (6th) year

- [Dissertation research & committee meeting\(s\)](#)
- [Department activities](#)
- [Teaching](#) (if required/desired)
- [Dissertation defense & submission](#)

Entry Committee

Upon arrival in the fall, the entry committee will meet individually with and review the academic records of the new students, and make recommendations for course work, rotations and teaching. Course recommendations will include a) courses to be taken (and passed) to address gaps in your previous scientific education, and b) courses that will help student development in their chosen area of research.

Graduate Mentors

Upon admission, each incoming student will be assigned a faculty mentor. In most cases, the mentor will be a prospective advisor. If the student's prospective advisor is on leave, then another faculty member will be assigned to be the graduate mentor for that student. The graduate mentor is responsible for providing space and support for the first year, and supervising the academic recommendations of the entry committee.

Research Rotations

All students carry out two research rotations before advancing to candidacy. Each rotation lasts one semester. Both rotations are typically conducted in the first year, but when it is a better fit for the student's research objectives one rotation may be completed in the second year. The format of the rotation will be decided between each student and their rotation supervisor, but should involve a scientific project. Students should write a report on their rotation at the end of the rotation. While rotating in a lab, students typically meet regularly with their rotation advisor, participate in lab meetings, and have a desk in the lab office space. Students should contact faculty with whom they are interested in rotating as soon as they arrive in the fall.

The primary purpose of the rotations is to provide the student with opportunities to expand their conceptual and analytical toolkits, improving the student's eventual dissertation research. One of the rotations should be in the lab(s) that you are thinking of joining for your dissertation research. Rotations serve to introduce students to new techniques, gain a broader background in EEB, and develop close connections with EEB faculty. If there is a good reason to do so, students may rotate outside the department following discussion with your main supervisor and/or the DGS.

When students begin a research rotation, they register for EEB 901 for their first rotation and EEB 902 for their second rotation. At the end of each rotation, the rotation supervisor grades the course Satisfactory/Unsatisfactory and submits the [Lab Rotation Evaluation](#) (link is external) of the student's progress to the Director of Graduate Studies (DGS). This assists the DGS in evaluating each student's progress and in identifying any student who may require special guidance.

Join a Lab

Most students come into the department with an advisor (or two) with whom they want to work. However, students do not commit to working with an advisor for their dissertation research until (at the earliest) the end of their first year. During their first year, students complete research rotations in the lab(s) they are considering joining. At the end of a student's first year, they choose one of the labs they completed a rotation project in to join for their dissertation research. If students do not wish to join one of the labs they rotated in, it is possible to do a 3rd (or even 4th) rotation during the summer. Note that,

unlike other programs in the biological sciences, it is extremely rare for an advisor to be unable to accept a graduate student to join the lab, because funding for our graduate students is provided at the department level.

In rare cases, students can be co-advised by 2 PIs, although they should consider whether co-advising is necessary or if it would be sufficient to simply have one of the PIs as a committee member or close collaborator.

Once students join a lab, they should pursue a program of exploratory research and reading aimed at eventually identifying topic(s) and project(s) for dissertation research.

Coursework

Course work requirements are kept to a minimum for graduate students in EEB so students can focus on research. The following are the minimum requirements for course work.

There are several EEB courses that all students take in their first year:

- EEB 500 (fall) / EEB 501 (spring), Advanced Topics in Ecology and Evolutionary Biology (graded Satisfactory/Unsatisfactory). This course introduces first-year students to the research programs of professors in the department, as well as other topics like science writing and proposal preparation.
- EEB 545 (spring), Responsible Conduct of Research (graded Satisfactory/Unsatisfactory). This course provides first-year students with training in research ethics and professionalism.
- EEB 901 Research Rotation I / EEB 902 Research Rotation II (graded Satisfactory/Unsatisfactory). This is simply a course students register for while completing their research rotations. If rotations are conducted in a later year, these courses should also be enrolled in then.

EEB PhD students must take three additional graduate courses (level 500 and above) for a grade. Students must earn a grade of Honors (equivalent to an “A”) in at least two of those courses.

These requirements must be completed before students advance to candidacy. Students must maintain a High Pass (equivalent to a “B”) average.

Beyond those requirements, students may take as many courses as they would like to, both within and beyond the department. You can find all the courses on offer to graduate students (level 500 and above) on [Yale Course Search](#). Students should check with their advisor, the DGS, or other students in the department to determine which classes are relevant to their research interests and useful to their training. Note that students can take these non-required courses for a grade, or they may audit them. Auditors typically attend lectures and discussion sections, and have access to all course materials, but may not be able to have their assignments and exams graded.

Students must register for a class every term for the duration of their graduate studies. If a student is not registered for another course (or are just auditing one or more courses) in a given semester, they need to register for Preparing for Advance to Candidacy (CAND 999) (if they have not yet passed to candidacy), or Dissertation Research – in Residence (DISR 999) (if they have passed to candidacy).

To drop or change a course after the deadline, contact the DGS and/or Registrar.

Teaching

Teaching is a fundamental part of our professional training. Teaching also provides a common intellectual experience for our graduate students. Generally, there are two levels of graduate student teaching commitments at Yale: TF10, which is ~10 hours/week of effort, and TF20, which is ~20 hours/week of effort. Teaching Fellow responsibilities differ from class to class, but can include: attending lectures, setting up labs, preparing and running discussion sections, grading papers and assignments, writing exams, and grading exams. The [Center for Teaching and Learning](#)([link is external](#)) also provides extensive support for graduate students who would like to learn how to teach.

Graduate students in EEB are expected to teach a minimum of three semesters while at Yale: all students teach BIOL 104, which is a TF10, and two other courses at a TF20 level. Required teaching is typically done during their first two years of study, although this requirement can be spread out if needed (e.g. for fieldwork). If students are supported by a University Fellowship in their later years (fourth and fifth years) rather than on external grants, additional teaching will be required.

The DGS works with each student to provide a teaching experience that is both diverse and matches the academic goals of the student. Students are encouraged to teach a mixture of introductory and intermediate courses in ecology and evolution, organismal and biodiversity courses, and laboratory and lecture courses.

In the late spring of each year, graduate students in EEB are sent a survey asking them a) if they expect to teach in the following year and, if they plan to teach, b) to rank by preference the courses they would like to teach. The DGS also talks to faculty teaching courses that require TFs with specialized background (e.g., Ornithology, Terrestrial Arthropods, and Field Ecology) about which students would be qualified to teach those courses. Then, the DGS matches student preferences and faculty needs across the entire department, also trying to balance opportunities for students to teach with their advisor and in high demand courses at least once. For example, there are typically more students requesting to teach General Ecology (EEB220) and Evolutionary Biology (EEB225) than there are TF slots available. Typically, 80-90% of students end up teaching their preferred course, and only very rarely have to teach anything beyond their 2nd choice.

Grad Student Department Service

Graduate students contribute to the department by organizing and running a number of activities and events. At the end of each year, all current students meet to delegate these responsibilities among the 2nd and 3rd year students-to-be. Roles include (but are not limited to): organizing speaker lunches, organizing the speakeasy, organizing the graduate student symposium, maintaining snacks and drinks for department seminars and speakeasy, organizing prospective students' interviews, inviting graduate student-nominated speakers, acting as graduate student admissions liaisons, or serving as the EEB representative on the Graduate Student Assembly. These positions are often shared among more than one person.

Department Activities

In addition to formal academic requirements, students are expected to participate in the weekly department seminar and graduate student and postdoctoral colloquium (known as the Speakeasy), and the annual department retreat.

Ecology & Evolutionary Biology Department Seminar. The Department Seminar is held weekly throughout the academic year. These seminars cover a wide range of topics that reflect the breadth of research interests within the Department. Invited speakers from other institutions give presentations suitable for a multi-disciplinary audience. Graduate students must attend the Seminars throughout their years of graduate study to ensure that students maintain a broad perspective on contemporary biological sciences.

Invited Speaker Individual and Lunch Meetings. Invited speakers for the seminar series typically meet with members of the department on the day of or days surrounding the seminar. Graduate students often have the opportunity to meet individually or in small groups with visiting speakers. In addition, invited speakers typically have a large group lunch with all graduate students midday on the day of the seminar.

Ecology & Evolutionary Biology Speakeasy. The EEB Postdoc and Grad Student Speakeasy is held throughout the academic year. This colloquium occurs in an informal setting, and allows postdocs and graduate students to provide each other with feedback on their ongoing research projects. Typically, every student in the program presents on their research at least once a year.

Department Retreat. Each fall the faculty, graduate students, post-docs, and staff participate in a retreat. It occurs away from the main campus in an informal setting that encourages a dynamic exchange of diverse scientific perspectives during a program of informal research presentations. Graduate student retreat coordinators and the Department Chair organize the retreat, and 1st year students typically plan some entertaining activity for the whole department (talk to senior grad students for examples of past activities).

Department Symposium. Each spring the faculty, students, and post-docs participate in a day-long department symposium which showcases student research over the previous year. Typically, pre-candidacy graduate students present their work as posters, and can present on research they completed prior to joining the program, research done during rotation projects, or ideas for research going forward. Their poster is not expected to be a 'finished story.' Post-candidacy graduate students typically present talks on their ongoing dissertation research. Additionally, invited speakers from outside the department or Yale present on a range of scientific topics.

Applying for Fellowships

All students are strongly encouraged to apply for graduate fellowships they may be eligible for. Notably, many students apply for the NSF GRFP, Ford Foundation fellowships, and Hertz Foundation fellowship. Many of these fellowships have deadlines in early- to mid-fall, so students should begin working on them over the summer. Receiving fellowships like these allow the department to expand the number of graduate students we can accept, and individually reduce your teaching obligations in the later years of your graduate training.

For the NSF GRFP, students are eligible if they are a US citizen with less than two full years of graduate school (i.e. do not have a Masters). Students can apply the fall when they are applying to graduate school, and either their first or second year during graduate school. Requirements for other fellowships may differ somewhat from these.

Assembling Your Dissertation Committee

By the end of their 3rd semester, each student is expected to form a Dissertation Advisory Committee. This committee will serve on your pre-prospectus meeting and prospectus exam, meet with you regularly for dissertation committee meetings, oversee your dissertation research, act as a valuable resource for your research, and evaluate your progression to candidacy and eventual dissertation defense. Students should consult with their advisor to determine who to ask to serve on their committee.

The Dissertation Advisory Committee must consist of at least four members. These are (1) the thesis advisor, (2) a faculty member with a primary appointment in EEB, (3) a faculty member with a primary or secondary appointment in EEB, and (4) an outside member who does not have a primary or secondary appointment in EEB. Deviations from this composition are possible with permission from the DGS.

After each meeting, your advisor in consultation with other committee members will complete an assessment of your research's progress, strengths, and weaknesses. Your committee will also recommend a time frame for the next meeting or milestone – usually 3, 6, 9, or 12 months. The [assessment form](#) is found on the department's website. The completed form will be shared with the DGS and filed with the departmental Registrar.

Preprospectus Exam

The preprospectus is your first meeting with your dissertation committee, and should be completed by March of your second year. In preparation for this meeting, you should prepare a document (see length requirements below) and a presentation (15-20 slides) preliminarily outlining what you plan to do for your dissertation research. See [Guidelines for Preprospectus and Prospectus](#). At the preprospectus meeting, you should give a presentation summarizing any preliminary results you have and outlining your proposed research. Your committee will assess the feasibility of what you are considering and provide suggestions and feedback. Immediately after the preprospectus meeting, the committee informs the student and the DGS, in writing, of the committee's specific requirements in preparation for the prospectus exam. This includes a list of required readings and may also include data to gather. We suggest setting up a Google Docs directly after the pre-prospectus where committee members can list their reading assignments for the student. You should also remind your advisor that the [Student Committee Meeting Progress Report form](#) should be completed by your committee immediately following the meeting.

The preprospectus is your opportunity to get helpful feedback from your committee members before the prospectus exam. In particular, you should seek their feedback on: 1) your level of background knowledge in both your specific area of interest and the broader fields of ecology and evolutionary biology, 2) the specific research questions that you are proposing to answer, 3) the research plan you propose to follow to answer those questions. Most students propose at least three sets of experiments ('chapters'), which are typically thematically linked (although that is not required). An eventual successful dissertation consists of at least three 'publishable units,' although very frequently many of the chapters in the dissertation are different from those proposed in the preprospectus and prospectus. You do not need preliminary data for your preprospectus, but are welcome to include any you have.

Prospectus Exam

The prospectus is the exam that will allow you to advance to candidacy, meaning that you transition from being a PhD student to becoming a PhD candidate, **and should be completed before beginning your**

third year, typically in May or June of your second year. At the prospectus exam, the student is examined regarding: 1) their broad understanding of general principles of ecology and evolution, 2) their deeper understanding of their chosen sub-disciplines, and 3) the scientific validity and feasibility of their proposed research. Prior to the exam, the student prepares a research proposal and presentation that: 1) articulates a research question and places it within the greater context of their field of study, 2) outlines their approach for data collection and analysis, 3) presents any preliminary data thus far gathered, and 4) demonstrates the feasibility of their plan to be executed successfully in a 3-year timeframe. See [Guidelines for Preprospectus and Prospectus](#).

The exam itself consists of a two- to three-hour oral examination by Committee members. Always schedule for three hours so there is plenty of time. The format is as follows: the student first gives a 20-25 minute presentation describing their thesis proposal (with minimal interruption by faculty). Afterward there are two rounds of questioning by the faculty. During each round, each faculty is given 15 minutes to ask whatever questions they feel are relevant, though the rounds are distinguished broadly by their focus. In the first round, faculty should focus on more general questions relating to knowledge of the discipline(s) relevant to the student's proposed work. These questions should mostly derive from the reading assignments each faculty assigned to the student after the pre-prospectus meeting. The second round of questions should pertain more specifically to the student's research proposal. Faculty do not need to use up their 15 minutes during each round, but they may not exceed it. Faculty who are not the questioner at the time are encouraged to be quiet. After the rounds of questioning, there of course can be some additional discussion, etc – but the exam should typically last around two hours, and never go beyond three.

You should also remind your advisor that the [Student Committee Meeting Progress Report form \(link is external\)](#) should be completed by your committee immediately following the meeting. After the meeting, email your Prospectus to the Registrar as soon as possible. If a student's performance at the Prospectus Exam is considered unsatisfactory, remedial action is taken. Depending on the nature and magnitude of the problem, the student may be required to write a paper on a specific topic, take additional courses, retake the prospectus exam, or (in extremely rare cases) leave the graduate program. The student provides a report to the department registrar that records when the meeting took place, who was in attendance, and the outcome.

Best practices for the prospectus:

When preparing for your prospectus, take into account the feedback you received from your committee members during the preprospectus meeting. If your committee was happy with your ideas in the preprospectus, they do not need to change substantially for the prospectus. If your committee suggested or required that you collect preliminary data or better cover particular points, you should make sure to do so. If your committee is unsatisfied with aspects of your performance during the prospectus exam, you may be given a conditional pass. This is relatively common.

Guidelines for the Preprospectus and Prospectus Written Documents

Specified page limits do not include figures or references. Documents should be single spaced, with text no smaller than 11 point. The documents are to be provided to your committee at least a week before your preprospectus and prospectus meetings.

Preprospectus

The preprospectus document length is 4 to 5 pages. This document describes the student's main research topic and questions to be studied for the thesis, their relevance within EEB, and the approaches (e.g., methods) used to address the topic/questions. The preprospectus may contain similar elements as the prospectus, as described in detail below. However, the preprospectus is expected to be a less-detailed document, especially because no preliminary data may exist at the time a student writes the preprospectus.

Prospectus

PROJECT SUMMARY: A brief (half to one page) summary should describe the objectives, methods and significance of the proposed research. This may include a brief description of the general research topic and its importance, a statement regarding the novelty and general relevance of the study (i.e., the intellectual merits), the general methods or approach to be used and a list of the key objectives of the proposed study.

PROJECT DESCRIPTION: The description is 8 to 10 pages. The project description should address the following general issues: What is the general topic and specific problem being addressed? Why is the problem important and interesting? How will you address the problem? If you complete the plan, how will that bring us closer to an answer to the problem? Is the proposed plan feasible and likely to be successful? The following are suggestions for sections that may be included in your proposal, and possible issues you may want to address. These are merely suggestions that should be adapted to the details of each individual project and the requirements of your dissertation advisor and thesis committee. Note: It is often useful to use headings and subheadings to create logical structure in your proposal.

Introduction

- Introduce the general topic
- Explain why the topic is generally important and interesting (within the context of EEB)
- Establish why the proposed research is novel and of general relevance within EEB
- Briefly describe how you will address your question and state your hypotheses if appropriate.

Statement of key research objectives: Describe the key research objectives as outlined in your proposal

Background on the study system and methods to be used: Describe the necessary background information on your study system that is relevant to your proposed research. In particular, review the theory and background knowledge relevant to the study, describe what is known on this topic about your species/system (and why it is a good choice), and describe how the general question can be addressed by the proposed study. In this section, be certain to connect the general relevance and objectives back to the specifics. If appropriate also detail the methods to be used in your proposed research. You may find some of this fits better within the section on proposed research.

Description of proposed research and progress to date: This section should give detail on each of the proposed components, their connection to the listed research objectives, the methods to be used, the data that will be obtained and the possible specific and general inferences that can be made from possible outcomes. It is often useful to give examples of how the data could be graphed or analyzed. Review progress and preliminary results accomplished to date on the proposed research. Ideally show that the

proposed research is feasible and likely to yield results based on what you (and others) have done so far. Explain possible outcomes and how you would interpret them both specifically and generally. The description of proposed research should not only identify the specific questions to be addressed and the methods to be used, but it must also connect the proposed research and the possible outcomes back to the key objectives and how these will inform the general study topic.

Timeline for the proposed work: Give a realistic timeline for its completion. It is often useful to list possible papers/chapters that will arise from the proposed research.

FIGURES and TABLES: It is often useful to use figures or tables to aid in conveying experimental design, characteristics of the study organisms, or possible experimental outcomes.

REFERENCES

Advancement to Candidacy

Students advance to candidacy after successfully passing their Prospectus Exam. Students are expected to advance to candidacy before the beginning of their third year. Extensions are possible with the written recommendation of the advisor to the DGS and with the written permission of the DGS. Students that fail to advance to candidacy, but meet all other requirements for a MS degree en route to a PhD, may petition the Graduate School for a terminal MS degree.

MS Degree Requirements

En route to a Ph.D., students will receive a MS degree in Ecology & Evolutionary Biology. To do so, students must satisfy the course requirements specified above for the PhD. No Master's thesis is required, and students do not need to advance to candidacy to receive the Master's degree. Continuing students will be automatically petitioned for the MS after the term in which they advance to candidacy.

Dissertation Research & Committee Meetings

After advancing to candidacy, a student is free to devote nearly full-time effort to dissertation research. Many students continue to take some courses. All continue to participate in seminars, journal clubs and lab meetings.

Each student is required to meet at least annually with their Dissertation Committee (before April 1st). The student or committee can request to meet more frequently than that. The Dissertation Advisory Committee must consist of at least four members. These are (1) the thesis advisor, (2) a faculty member with a primary appointment in EEB, (3) a faculty member with a primary or secondary appointment in EEB, and (4) an outside member who does not have a primary or secondary appointment in EEB. Deviations from this composition are possible with permission from the DGS.

There is no formal structure for dissertation committee meetings (e.g. no written document like the prospectus). Instead, students typically present the progress they have made on dissertation chapters and research projects. Components of the dissertation nearly always evolve from the form proposed during the prospectus, and so the members of the committee may change if your research has taken new directions. You should also remind your advisor that the [Student Committee Meeting Progress Report form](#)(link is external) should be completed by your committee immediately following the meeting.

Each spring, students fill out a formal summary of their progress: the Dissertation Progress Report. This summary is then signed by the student, thesis advisor, and DGS. The EEB faculty also meet annually to assess the progress of all graduate students in the program (during the April faculty meeting), where the Dissertation Progress Report is used.

Dissertation Defense & Submission

As a student approaches the end of their dissertation work and prepares to submit and defend their dissertation, there are a number of steps that must be taken:

1. The student emails the Department Registrar with their intent to submit and defend their dissertation. If they would like to have their degree awarded in the spring, this must be done by February 15th. If they would like to have their degree awarded in the fall, this must be done by September 1st.
2. With approval of their advisor, the student chooses a date and time to hold their defense when their dissertation committee members are available. The student also reserves a location, if needed.
3. The student's dissertation is made available to the faculty 1-2 weeks prior to the defense.
2. The student supplies the Registrar with a poster for their dissertation defense, which the Registrar will distribute.
3. The student and the advisor, in consultation with the Dissertation Committee, select Readers.
 - Each dissertation must be formally read by at least three Readers, at least two of whom must be members of the Yale Graduate School Faculty (this includes all tenured or tenure track positions in the Faculty of Arts and Science and most, but not all, faculty in the professional schools). At least one of the readers must be from outside the EEB department. Each reader must hold the Ph.D. degree as well as a faculty position or be considered otherwise qualified to evaluate the dissertation. Readers are typically members of the Dissertation Committee but may not include the dissertation advisor. The readers will submit a formal Report judging the quality of the dissertation.
4. Via the Dissertation Progress Report portal, the student fills out the Notification of Readers (NOR)
5. The DGS approves the Notification of Readers (NOR)
6. The student defends their dissertation, giving a public seminar on their research, which is immediately followed by a private period of questioning by members of the defense committee.
 - A dissertation generally consists of at least 3 publishable units, and must be formatted following University [guidelines](#).

- Note: there is no limit on the amount of time between the dissertation defense and submission, and students do not need to be actively registered students to submit.
 - Note: graduate student funding end-date is determined by their PI, not by their dissertation submission date.
7. If any minor changes are needed, the student submits them to the DGS, who approves them and submits them to the dissertation clerk.
 8. Once student is approved by their defense committee, including their outside Reader, the student submits their dissertation and required forms via the Dissertation Progress Report portal's Degree Petition and Dissertation Submission. If they would like to have their degree awarded in the spring, this must be done by ~March 15th. If they would like to have their degree awarded in the fall, this must be done by ~October 1st. For specific deadlines, which vary by year, see the [GSAS Academic Calendar](#).
 9. The dissertation is sent to the Readers and DGS. Reader Reports are due within 30 days
 10. Once all Reader Reports are in, students can request a degree verification letter from the University Registrar's Office. This letter is typically what is needed for students to begin work at a new position (e.g., post doc)
 11. If submission and Reader Reports are completed by April 15th, students will be awarded their degree in May. If submission and Reader Reports are completed by November 1st, students will be awarded their degree in December. For specific deadlines, which vary by year, see the [GSAS Academic Calendar](#).

Individual Responsibilities

Adapted from [Yale GSAS Template for Program-Specific Guidelines](#)

This section outlines for students and advisors how to approach their advising relationship and helps students understand what they can expect from various advisors.

Responsibilities of the Student

1. Complete academic requirements by the given deadlines.
 - a. Coursework
 - b. Qualifying exams
 - c. Thesis prospectus
 - d. Dissertation Progress Reports (DPRs)
 - e. Dissertation drafts
 - f. Dissertation defense
 - g. Departmental service
2. Consider career goals and discuss them with the advisor and DGS by the beginning of admission to candidacy.

3. Maintain clear communication with the advisor and help establish good practices for scheduling meetings. Be clear about limitations to your schedule, especially regarding religious observance or family obligations.
4. Discuss research expectations with the advisor no later than admission to candidacy. This discussion should include topics such as authorship order, when the advisor should/should not be included as a coauthor, time spent on outside collaboration, and time spent on professional development.
5. Submit materials with enough time for proper faculty review and response. These materials may include, but are not limited to:
 - a. Dissertation chapters
 - b. Material for discussion at regular meetings
 - c. Requests for letters of recommendation
6. Keep the advisor aware of upcoming deadlines, meetings, and other responsibilities. Be proactive in the advising relationship. For example, take the initiative to arrange meetings, keep the advisor informed of any circumstances that might affect academic progress, come prepared to advising meetings, consult with the advisor about presenting or publishing work.
7. Remain open to feedback and be willing to discuss difficult academic ideas and differences of opinion.
8. Commit to regular attendance at departmental talks and events according to departmental and advisor expectations.
9. Welcome prospective students and help them understand departmental or research group practices and culture.
10. Finalize membership of the dissertation committee with the help of the primary advisor.
11. Discuss your funding structure with your advisor and understand when this structure may change. Talk with your advisor and/or the DGS about possible sources of funding outside the university.
12. As you advance to candidacy, establish your expected timeline towards degree, and come to a consensus about these expectations with your advisor and dissertation committee.
13. Be aware of mental health and wellness resources offered by the university.
14. Meet with the DGS and/or dissertation committee members to intercede if issues arise related to the advisor's responsibilities.

Responsibilities of the Advisor

1. Establish expectations with each student for communication, including the preferred means (e.g., email, text, phone, etc.), the best contact times, and shared expectations around response times.
2. Establish expectations with each student for how often you will meet to discuss the student's work.

3. Develop guidelines for reasonable working hours based on departmental expectations, amounts of time for vacation, and other activities necessary for students' mental and physical health.
4. Be cognizant of limitations to the student's schedule, including religious observance and family obligations, while establishing responsibilities #1-3.
5. Understand the required department and GSAS milestones for students in your program. Recognize when completion of these requirements may require an adjustment to research responsibilities, such as when a student must reduce time devoted to research to prepare for a qualifying exam.
6. Help the student develop an individualized timeline for completing academic requirements and meeting professional goals.
7. Discuss career goals and opportunities with the student early in their graduate career (by the beginning of admission to candidacy at the latest) and continue these discussions regularly. In particular, discuss opportunities to attend conferences and to submit publications to help advance students' careers.
8. Discuss research expectations with the student early in their graduate career. This should include topics such as authorship order, when the advisor should/should not be included as a coauthor, time spent on outside collaboration, and time spent on professional development.
9. Give clear, constructive, and timely feedback on the student's work. In particular, give feedback and approve the prospectus and the dissertation, complete Dissertation Progress Reports, and review all related written work by the appropriate deadlines.
10. Consult the student when choosing other members of the Dissertation Committee.
11. Consider establishing a set of "core values" for your lab that explain your expectations about work produced, interactions with others in the lab, wellness, etc. For an example, consult Professor Jennifer Richeson's "Core Values of the SPCL Statement." (See *Appendix C.*)
12. Discuss with each student their individual funding structure, making clear when they need to teach or fulfill other responsibilities outside their research to receive their stipends.
13. Be familiar with mental health resources offered by the university so that you can suggest them if your student approaches you for help. (See *Appendix D.*)
14. Discuss with the DGS and dissertation committee members if issues arise related to your student's responsibilities.
15. Remain open to feedback and be willing to discuss difficult academic ideas and differences of opinion in order to facilitate all students' success.

Responsibilities of the Dissertation Committee

1. Meet with the student at regular intervals as needed.
2. Come to committee meetings having reviewed all relevant materials.

3. Review the prospectus and dissertation within the amount of time established.
4. Provide support for the student if there is tension between the advisor and the student.
5. Establish a timeline to graduation with the student and work with the student and primary advisor to ensure this timeline is followed.

Responsibilities of the Director of Graduate Studies

1. Ensure that all students know how to access policies and procedures and are informed of any updates. Distribute information to individual student cohorts regarding relevant milestones and opportunities. Ensure student cohorts and their advisors understand expectations and process for completing these milestones.
2. Meet with individual students regularly.
3. Facilitate a town hall for all graduate students once or twice a year.
4. Know who the student leaders of the program are and meet with them regularly. (A leader may be the student representative for the Graduate Student Assembly [GSA] or other appointed or elected student[s] in the program.)
6. In collaboration with the advisor, advise on the job market and career paths, including participation in conferences and professional meetings.
7. Offer guidance to students about the process of identifying a new advisor if the advisor and the student have irreconcilable differences, the student's focus has changed, the advisor leaves Yale, etc.
8. Identify whom students can turn to (DGS, Chair, GSAS deans, etc.) if challenges arise in working with their advisor and be familiar with other University resources for student support (Dean's Designees, Title IX office, Office of Institutional Equity and Access, etc.).
9. In the DGS Handbook, all DGSs are asked to provide written feedback to students on their academic progress at least once per year.
 - a. Pre-candidacy: Explain when and what form the feedback takes (in writing, in person, both). If there is an in-person meeting, indicate who is present.
 - i. If the faculty meet to discuss all students' academic progress each year, indicate when the meeting takes place and how that feedback is conveyed to each student.
 - ii. Explain what happens if a student is not demonstrating adequate progress toward a degree or does not pass qualifying exams.
 - b. Post-advancement to candidacy: Explain the Dissertation Progress Report (DPR) and its usefulness to advisors and students. Make sure students, advisors, and the DGS complete their portions of the DPR by the required deadline.
 - c. For students both pre- and post-advancement to candidacy: If a student is not making sufficient progress toward the degree or producing quality work, make sure that this information is communicated in writing to the student, along with necessary steps to remain or return to good academic standing, including deadlines and consequences for failure to meet these requirements.

10. Provide formal exit interviews with graduating students for feedback on department guidelines/practices, unless the Chair fulfills this responsibility. For example, were the responsibilities of student, advisor, DGS, and thesis committee met? Were timelines reasonable? How could the program improve the advising/mentoring experience?

Appendix A: Suggested Questions for Advisors and Students

The following is a list of questions that may be used by students and advisors to establish productive channels of communication and work processes. We recommend students and advisors review this list together at the beginning of the advising relationship to facilitate conversations about how to work together most effectively.

1. What is each party's preferred mode of communication (e.g. email, phone call, video chat, in person, text, etc.)?
2. What is each party's expectations for the student's weekly work schedule (days, times of day, etc.)?
3. What are the expectations for message responses?
4. Does the advisor want/expect the student to be a teaching fellow for them? If so, when during the student's time at Yale?
5. What is each party's expectation of the student's time to degree?
6. What is each party's expectations regarding the student's conference attendance and funding?
7. Is the student expected to seek a secondary advisor or other mentorship within the department?
Outside of the department?
8. When the student collaborates on work with others, what is the advisor's expectation regarding the advisor's role in that work and subsequent authorship?
9. What is the advisor's approach to authorship?
10. What are the student's expectations for authorship?
11. How many publications does the advisor/department expect from the student before graduation?
12. What is the advisor's expectation for the student's research in semesters that the student has to fulfill other requirements (classes, teaching, qualifying exams, etc.)?
13. What are the advisor's or program's expectations regarding the student's mentoring more junior graduate students or undergraduates recruited by the advisor?
14. What are the student's expectations for opportunities to mentor more junior graduate students and/or undergraduates?
15. What training (IRB, lab safety, etc.) is the student required to take before beginning to work with their advisor or embarking on their own research?
16. What professional development programs (writing, teaching, outreach, etc.) is the student interested in participating in?
17. About which career paths can the student approach the advisor for support and when should the student seek career support elsewhere?

Appendix B: Additional Advising Resources

Faculty members and students are encouraged to seek assistance in improving their advising relationships and resolving any issues through a variety of Yale's resources and offices. These include but are not limited to:

- Graduate School of Arts & Sciences (GSAS) Dean's Office, 1 Hillhouse Avenue; (203) 432-2733. <https://gsas.yale.edu/staff-directory>

- Office for Graduate Student Development & Diversity (OGSDD), 1 Hillhouse Avenue; (203) 436-1301. <https://gsas.yale.edu/diversity/office-graduate-student-development-diversity> ogsdd
- University-Wide Committee on Sexual Misconduct (UWC), 55 Whitney Avenue; (203) 432-4449. <https://uwc.yale.edu>.
- Office of Institutional Equity and Access; 221 Whitney Avenue, 4th Floor; (203) 432-0849. <https://oiea.yale.edu>.
- Sexual Harassment and Assault Response & Education (SHARE); 55 Lock Street, Lower Level; (203) 432-2000. <https://sharecenter.yale.edu>.
- Mental Health & Counseling, 55 Lock Street, 3rd Floor; (203) 432-0290. <https://yalehealth.yale.edu/directory/departments/mental-health-counseling>.
- Resources for Students to Address Discrimination and Harassment Concerns. <https://yalehealth.yale.edu/directory/departments/mental-health-counseling>.
- Poorvu Center for Teaching and Learning, 301 York Street; (203) 432-4765. <http://poorvucenter.yale.edu>.
- Student Accessibility Services (SAS), 35 Broadway Avenue (rear entrance), Room 222; (203) 432-2324. <https://sas.yale.edu>.
- Office of Career Strategy (OCS), 55 Whitney Avenue; (203) 432- 0800. <https://ocs.yale.edu>.

Appendix C: *Core Values and Guidelines for Success in the Social Perception & Communication Lab**

Jennifer Richeson, Philip R. Allen Professor of Psychology

Developing a healthy lab culture requires far more than 10 core ideas. Nevertheless, I offer the following guidelines, which I believe make for a strong, productive, yet healthy research group.

1. Strive to become a professional, but do not forget that you are human

Work every single day to become a professional scientist. That is, conscientious, independent, humble, skilled, knowledgeable, rigorous, creative, and ethical; but realize that you will fall short some days. Always focus on being (or doing) better tomorrow than you are today. You will make mistakes. Indeed, mistakes are signals of where you need to improve! Pay attention to them! At the same time, don't focus so much on being professional and a scientist that you forget to be a decent human—i.e., kind, generous, thoughtful, and, yes, vulnerable.

2. Stay focused on (y)our purpose

Yes, you are in school and, thus, need to focus on your courses and many other requirements, as well as building a record that will lead to career prospects! But, maintaining a clear focus on why we do what we do in this lab—that is, why we conduct research on inequality, prejudice, stigma (etc.)— is an essential component for maintaining the motivation to complete basically everything else required of you. Maintaining clarity of purpose will also help you bounce back from the disappointments and challenges that are unavoidable in this career.

3. Wellness: yours and the team's

Consider your mental and physical well-being a central part of your graduate education and work in this lab. Feel comfortable discussing issues and concerns that you may have. Your personal and professional

development require attention to your physical and emotional health. At the first sign of any issues, please let me (or someone) know and we will develop a plan. In addition, look after one another and the students who work with you. We are a team and need to take care of one another. Note: harassment, sabotage, creating a hostile environment, or any behaviors detrimental to the wellness of the team or our research participants will result in removal from the lab.

4. Write it down, or it did not happen

Writing is an essential component of this career and you may as well begin now! Any thoughts, ideas, findings, notions, and other contributions are only real if they are written. This is the most effective way to communicate and to create a trail of your thinking that will have an important influence on the development of your research projects. Writing is also a mechanism of accountability, minimizing misunderstandings, and improving communication. And, of course, the currency of our field remains written publications (see also #9).

5. The lab is a no-competition zone. We all do better when we all do better.

Competition for 1st authorship, grants, fellowships, or, even, my time and attention can become toxic. Our lab is a collaborative team; the success of any one of us reflects on all of us. Collaborate on projects, share credit, be generous (with authorship & resources), listen to others' ideas and critiques, offer assistance, and be genuinely happy for others' successes. Most importantly, meet your own successes with humility and gratitude.

6. Expect to do more and work harder than you think.

Doing more than the bare minimum is essential for success in graduate school, in academia, and in life. In addition, it is nearly impossible to estimate how much time will be required for various work tasks, especially tasks that are unfamiliar. No matter how much time you plan to devote to a specific task, you will probably need to multiply that number by at least three. Basically, tasks are complete when you have actually completed them fully and accurately. Just achieving minimum expectations will require much more time and energy than you expect.

7. The devil is in the details—well, if you don't pay close attention to them.

Although many types of people can become successful scientists, almost all successful scientists have fairly intense work habits (but also take breaks!), incredible focus on the task at hand, commitment to the projects they are working on, and single-minded (nearly neurotic or obsessive) attention to detail. All of these traits will certainly annoy others at some point, but they are critical to cultivate. Indeed, the characteristics are the difference between a vague idea that is floating in the ether and never materializes and a high-quality research project that gets published. Attention to detail, moreover, is often what distinguishes good/acceptable work from exceptional work.

8. Invest in preparation

Writing and delivering a talk are “tip of the iceberg” activities. For every hour of writing, there are at least two hours of planning and four hours of reading (not to mention: seemingly endless hours of data collection and analysis, which require their own preparatory activities). Investment in preparation, in other words, goes a long way. For instance, prepare for every meeting by developing questions you need answered to move forward or come with information to present for feedback. It is through preparation

that you become efficient (and, thus, more productive), as well as successful when you do give talks and submit manuscripts for publication.

9. Develop productive habits

Inspiration comes and goes, but habit remains. To be a successful academic, you will need to develop reading, writing, and critical thinking as habits. Many scholars suggest a certain number of words or pages as a goal for reading or writing each day. I don't work this way, but this practice may be useful for you. Whatever habit/practice you develop, however, focus on becoming the most productive person you can be, without sacrificing quality, and (almost) always stay in a learning mindset. That is, continually approach talks you attend, critiques, reviews, classes, etc. as an opportunity to learn and grow.

10. Be ethical

Ethical violations are not usually due to bad actors, but typically good people who are tired, emotionally overwhelmed, stressed, overloaded with work, up against deadlines, or worried about “looking bad” due to a past mistake. Attention to detail (#7) and preparation (#8) can help alleviate some of these conditions, but there are times that you will be incredibly stressed and still need to perform accurately and ethically. Don't forget that it is not a sin to have to acknowledge that you have made a mistake. Remembering (y)our purpose (#2), can also alleviate this pressure—research done unethically is absolutely useless in terms of fostering social justice. Is that really worth ruining your career for? Make certain that you have communicated proper ethics to the students and other trainees working with you, as their unethical practices can also undermine your efforts and outcomes.

*Adapted from Steven Shaw's “10 core values...”

Appendix D: Mental Health and Title IX Resources

STUDENT MENTAL HEALTH

Faculty and staff should notify Allegra di Bonaventura, Associate Dean for Graduate Academic Support at (203) 432-2735 whenever there is a concern about a student's mental health or wellbeing.

In such instances, you may also call the Director of Yale Mental Health & Counseling (YMH&C) at (203) 432-0290.

IF YOU ARE CONCERNED ABOUT ANY OF THE FOLLOWING...

...CONSIDER THESE INTERVENTIONS & RESOURCES

A student who has socially withdrawn; who has diminished class attendance and performance; displays a noticeable change in appearance and/or hygiene; reports difficulty concentrating; and/or other members of the community are expressing concern about the student's wellbeing.

o Talk to the student in private and offer your support, while listening openly and empathetically.

o Refer the student to a counselor at YMH&C. Students can set up an initial intake appointment by calling (203) 432-0290. The student may be seen by a counselor at YMH&C or be referred to an outside clinician via Magellan Health Services.

A student struggling with severe anxiety, racing thoughts, acute agitation; increased use of drugs and/or alcohol; persistent sleep difficulties; feelings of being trapped or helpless; and/or preoccupation with death or suicide

o Strongly encourage the student to seek YMH&C support by calling (203) 432-0290 or walk the student directly to YMH&C located on the 3rd floor of 55 Lock Street. Even if a student is reluctant to seek help immediately, provide the YMH&C contact information so the student may seek help later.

A student making plans or seeking to harm self or others; and/or causing serious injury to themselves even if they deny the intent to commit suicide

o Immediately call the 24/7 on-call therapist at YMH&C at (203) 432-0290 during office hours and (203) 432-0123 after hours.

o If harm to the student or to someone else seems imminent, call Yale Police Department at (203) 432-4400.