

**Department of Biodiversity, Earth and Environmental Science  
College of Arts and Sciences  
Graduate Student Handbook**



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## I. INTRODUCTION

The Department of Biodiversity, Earth and Environmental Science (BEES) offers graduate programs leading to the Doctor of Philosophy degree and to the Thesis or Non-thesis Master of Science degree. The curricula are designed to provide students with advanced coursework, introduce students to the current scientific literature, as well as prepare students for scientific communication. These classes will expand students' knowledge, analytical ability, and use of the scientific method.

Thesis research provides the opportunity to utilize and expand these abilities while addressing a novel scientific question. The intellectual life of the department relies heavily on the participation, creativity, and energy of graduate students in addressing these questions. Publishing manuscripts is expected since it provides both an indication of successful learning and implementation of the scientific method and a necessary milestone for future advancement in science. In addition to being mentored by a professor, seminars and informal discussions provide a rich, interactive environment in which students can develop.

This handbook has been designed to provide guidance to current and prospective graduate students, as well as to address common questions regarding departmental programs. Students are expected to familiarize themselves with the policies herein.

**Special circumstances** – The Department's Graduate Committee recognizes that deviation from the guidelines presented in this handbook may be necessary in special circumstances. Graduate students and/or their faculty advisors may petition the Graduate Committee for exemptions to the prescribed rules and schedules. Exemptions that conflict with university policy will not be granted.

## II. GRADUATE PROGRAMS AND REQUIREMENTS

### **The Doctor of Philosophy Degree**

The Doctor of Philosophy (Ph.D.) degree is the terminal degree for students who wish to eventually pursue a leadership role in academic, governmental or industrial settings. Besides having the necessary academic background, students in the Ph.D. EEES program have research interests that are a good fit with the research activity occurring within the department. Students are admitted directly into a lab with an identified faculty research advisor upon entering the program (as opposed to conducting laboratory rotations to determine lab placement).

In accordance with university policy, students who enter the program with a master's degree (post-masters status) must complete 45 credits of coursework and/or research. Students entering the program with a bachelor's degree (post-baccalaureate status) must complete 90 credits.

Typically, the focus of the first 12-24 months in the program is on completing coursework and developing a dissertation topic together with your faculty mentor. By the end of the first or second year, all Ph.D. students are expected to have completed their candidacy examination (details below). After successful completion of the candidacy examination, students will devote their efforts to the completion of an original research project. The results of the student's research must be of sufficient quality to be publishable in mainstream, peer-reviewed scientific journals. Progress towards these degree requirements is overseen and guided by the faculty advisor, the faculty research committee, and the graduate program committee.

### **Coursework**

It is important for each student to be particularly conversant at an advanced level in their prospective field of study. Ph.D. students are advised individually by their faculty advisor and research committee whereby an individualized course sequence will be recommended, taking into account the student's existing knowledge, fields of study, and research and career goals. Students are required to take 6 credits in each of the following areas: core courses, track electives, and graduate electives. For specific course listings, please see the catalog [here](#).

Students register for 9 credits of classes and/or research all four quarters of the year (Fall, Winter, Spring and Summer quarters). Students must maintain a cumulative grade point average (GPA) of at least a 3.0. The progress of each student is reviewed each term by the Graduate College. Failure to maintain a minimum 3.0 cumulative GPA will result in the student being placed on academic probation and may result in the loss of the student's research or teaching assistantship. For students placed on probation they must, during the following two academic quarters: 1) earn a 3.0 or better in each term and 2) achieve a cumulative GPA of at least a 3.0. Failure to meet either of these requirements will result in the dismissal of the student from graduate studies at Drexel University. Graduate students must have a minimum 3.0 cumulative GPA to graduate, i.e. students cannot graduate while on academic probation.

## **Eforms**

Eforms is an electronic web-based system used to track PhD and MS Thesis student progress. It allows students to track their progress and faculty approvals through a series of tabs. There are 14 tabs (set-up, select student, core information, supervisor information, plan of study, candidacy committee (PhD only), candidacy examination (PhD only), annual reviews, advisory committee, proposal examination, graduation requirements, dissertation/thesis defense, submit dissertation/thesis and supporting documents). Each tab has a unique function and requires approval from certain constituents. Under each tab, you will find one or more navy blue information boxes with a summary of instructions on how to use the tab and proceed. Much of those instructions can also be found in the [Eforms Guidebook](#).

The tabs are in a sequential order that pertains to the progressive steps taken in the PhD program. Students begin with the Supervisor Appointment tab and during the first year are expected to complete both the Supervisor Appointment and Plan of Study tabs. Note that tabs are locked (unavailable) until the prior necessary steps/tabs have been completed and all approvals received. **It is the student's responsibility to ensure their Eform approvals and tabs are up-to-date and reflective of progress made thus far in the program.**

To access Eforms, go to: <https://gradcollege.irt.drexel.edu/>  
You must either be oncampus or logged in using Drexel's Cisco VPN.

## **Department Seminar: ENVS 864 Graduate Research Seminar**

All Ph.D. and M.S. (Thesis) graduate students are required to attend the Graduate Research Seminar, aka Departmental Seminar, on Thursdays from 3:30pm – 4:50pm. With the exception of first and final year students, all Ph.D. students are required to present a seminar once per academic year. Second and third year students will give 15-20 minute seminars, while fourth year students will give 30-45 minute seminars. Unless otherwise recommended by the faculty advisor, students in their final year (usually fifth year) do not give a seminar since they will defend their dissertation. A schedule will be generated by the beginning of the fall quarter.

## **Dissertation Advisor and Research Committee**

Selecting a dissertation advisor is a very important step in the career of Ph.D. students, since their thesis mentor will be directly advising them for the next 3-5 years as well as advising students throughout their professional careers. In our program, Ph.D. students are recruited directly into specific faculty laboratories during the admission process.

In consultation with the dissertation advisor, a committee will be selected to guide the progress of the Ph.D. student. It is recommended that for students entering with a Master's degree, that this committee must be formed and meet by the end of the spring quarter of the first year. For students entering with a Bachelor's degree, this committee must be formed and meet by the end of the fall quarter of the second year. The committee must consist of at least five members, with at least three members who must be currently tenured or tenure track Drexel faculty members with their primary appointment in the BEES department, one of whom is the student's dissertation advisor. At least two of the committee members must be from outside the student's primary specialization area. At least one of the committee members must be from outside the student's department, preferably from outside Drexel University. The chair of the dissertation

research committee will be one of the departmental faculty members on the committee, other than the dissertation advisor. The chair of the committee must be a tenure-track faculty member, but it is highly recommended that the chair be a tenured faculty member whenever possible. Recognizing that there may be reasons for committee composition to deviate from the above model, the student and advisor may petition the Graduate Committee to modify the guidelines on an individual basis.

In the BEES department, usually the students' dissertation research committee is the same for both candidacy and dissertation defense. In some cases, candidacy may be done with four members if a fifth member has not been determined at the time of candidacy. Once a student's committee is formed, students should enter their committee member names (both internal and external) on the **Candidacy Committee tab** in eforms. Each member then approves their participation on the candidacy committee in eforms. The candidacy committee can be copied over to the dissertation committee tab once the **Candidacy Exam tab** has been completed (which again requires each committee member approval).

The student will conduct dissertation research under the direct supervision of the dissertation advisor and general guidance of the dissertation research committee (henceforth referred to as the student's "committee"). The committee must be convened at least once per year to assess whether the student is making satisfactory progress toward the degree. The students are encouraged to update the committee periodically on their progress during the year. It is a responsibility of the students' adviser to enter each annual meeting on the student's **Annual Meeting tab** in eforms. If possible, this meeting should correspond to the timing of the student's required annual graduate research seminar presentation.

It is important to schedule the first meeting of the committee promptly; it is a key factor in scheduling your candidacy examination. Prior to the first meeting of the committee (if needed), the student will prepare a revised plan of study with the faculty advisor. Any change to the plan of study in eforms needs to be updated. At the first committee meeting, the student should make a presentation to the committee that outlines the proposed dissertation project. This project will form the basis of the candidacy examination. The committee will provide feedback on the specifics of the proposed dissertation project. At the same time, the committee will describe the "knowledge areas" that students should have advanced knowledge in. Students will be expected to have command of facts, experimental approaches and the latest findings of these areas for the candidacy examination.

### **The Ph.D. Candidacy Examination**

The function of the candidacy examination is to test the breadth and the depth of the student's capabilities in their chosen area of study. The graduate student becomes a Ph.D. Candidate only after successfully completing the candidacy examination and completing 15 or 45 credits (for post-master's or post-bachelor's degree students, respectively).

Students entering the program with a Master's degree are recommended to complete the candidacy examination by the end of their first year, and no later than the end of the second year. Students entering the Ph.D. program with a Bachelor's degree are expected to complete this

examination by mid-summer quarter of their second year. Part-time students will take the candidacy examination at a time recommended by their committee.

The candidacy examination will be conducted by the student's candidacy/dissertation committee, and students should convene a committee meeting as early as possible to propose a dissertation project (by spring at the latest). The committee will give the student valuable feedback on the proposed project that the student should consider thoroughly. In addition, the committee will describe the "knowledge areas" that students should have mastered. Students will be expected to have command of facts, experimental approaches and the latest findings in these areas for the candidacy examination. Finally, in consultation with their committee, students should schedule the candidacy exam at least 4 weeks in advance of the oral exam.

The candidacy exam is comprised of three parts. The order of parts 1 and 2 will be determined by the candidacy committee. These parts will precede parts 3 and 4.

**1. Written Examination.** The goal of written examination is to assess students' ability to answer questions related to their proposed dissertation project and focal research area. The duration, content, & format of the written examination will be determined by the committee. Typically 1-4 questions per faculty examiner are asked, and there are generally 3 faculty examiners. The examination takes the form of a "take-home" examination. The questions will be appropriate for the student's research interests and background but must be sufficiently diverse to demonstrate the student's depth and breadth of knowledge. Students must submit their answers to the committee no later than two weeks before the oral candidacy examination and orally defend their responses at the oral exam.

**2. Dissertation Research Proposal.** The student will also prepare a proposal of their anticipated dissertation research project outlining the major chapters of their dissertation including background information, specific questions being asked and hypotheses being tested. It is expected that the student will be developing the proposal in consultation with the dissertation advisor and committee. The proposal must be distributed to the candidacy committee at least one week prior to the oral examination.

**3. Oral Examination** will typically begin with the committee-led discussion on the written exam followed by a seminar-type presentation on the research proposal and any preliminary results. Committee members will question the student on topics presented in the presentation and proposal, as well as "knowledge area" topics. The questioning may be broadened to include basic knowledge of the student's discipline(s) or of science in general.

*Assessment* - Based on a student's performance on all three aspects of the candidacy exam, a grade of pass, revise, or fail will be given. The intent of the exam is to test the ability of the student to synthesize material, to solve problems, and on their potential ability to complete the proposed research and interpretation of results related to the chosen research topic.

If a student is asked to revise either dissertation proposal and/or the written examination, then the committee will give the student specific comments on the material and the student must revise the document within two weeks of the exam. There is a limit of two rounds of revision; students that do not make satisfactory progress in these revisions after two rounds will fail the exam. If a student should fail the candidacy examination, the student may retake the

examination once, but there must be a minimum 3-month period between the exams. A second failure will result in the termination of the student from the degree program. Upon notification of termination from the program, the student can petition the Graduate Committee to be permitted to complete a Non-thesis Masters degree, provided they meet the credit requirements. Once a student passes the candidacy exam they become a Doctoral Candidate.

*Reporting Candidacy Decisions.* The chair of the committee must enter the candidacy decision into Eforms as two parts. First, the Candidacy Exam tab needs a decision to reflect the written portion of the candidacy. Once the Candidacy Exam tab is complete, the student should copy the candidacy committee over to the Dissertation Committee tab. Once committee members approve their participation and the dissertation committee tab is complete, the Proposal Defense tab will open. The chair of the committee must then enter a decision for the dissertation proposal part of candidacy, to be followed by committee agreement/disagreement.

### **Dissertation and Final Defense**

The student will finalize their dissertation only after approval to write is granted by the committee. Approval will be based upon an evaluation of the breadth and depth of original research being conducted by the student. The dissertation must follow the format specifications set forth by Drexel's Graduate College located on the Hagerty Library website under Thesis Manual.

Research conducted for the dissertation must be presented in a lecture open to the public and then defended, privately, before the student's committee. The dissertation defense must be scheduled four weeks in advance to ensure committee availability and to secure a room location. A final draft of the dissertation must be given to all committee members two weeks prior to the defense and a public notice of the defense lecture posted two weeks before the defense. The committee members are free to examine at length the research as reported in the dissertation, as well as the student's overall competence. The student must pass this exam (with the assent of at least four fifths of the committee members).

*Reporting Defense Decision.* The chair of the committee must enter the defense decision into Eforms within 48 hours of the defense, followed by committee agreement/disagreement. Comments should be provided with any revisions and recommendations provided to the student for editing the dissertation.

*Finalizing Dissertation.* Students have until the first Friday of the following term to complete all revisions. Once they submit the final dissertation to the dissertation committee, they need to add their dissertation information and date of submission (to committee) on the Submit Thesis tab in eforms. Once the committee approves the final dissertation in eforms, the student can download the Thesis/Dissertation Approval Form. The Thesis/Dissertation Approval form becomes page 1 of the dissertation before submitting to proquest.



## **Mileposts in the Ph.D. Program**

1. *Selection of Dissertation Advisor* - Students are admitted to an identified Dissertation Advisor's lab starting in the Fall of their first year. Students should complete the Supervisor Appointment and Plan of Study tabs in Eforms by the end of Fall quarter.
2. *Committee* - Dissertation Research Committee constituted by the end of the first year. Students enter the committee member information on the Candidacy Committee tab in Eforms.
3. *Annual Review* - Dissertation Research Committee is updated on student's academic progress and the adviser submits meeting outcomes on the student's Annual Review tab in Eforms for each meeting.
4. *Coursework* - Core coursework must be completed within the first two years of study, unless the Dissertation Research Committee requires otherwise
5. *Exam* - The Candidacy Examination successfully completed by the end of the first or second year. In Eforms, this completes the Candidacy Exam tab, as well as the Dissertation Committee and Proposal Defense tabs.
6. *Dissertation* - Each Ph.D. student is expected to complete their dissertation defense within 5 years. Drexel University requires that the dissertation be finished within 7 years. Final completion of Submit Thesis tab in Eforms.

## **The Master of Science Degree with Thesis**

The Master's degree with thesis is for students interested in advanced graduate coursework and experience in completing an original research project. Faculty need to be contacted directly by the student in advance of admission and must agree to serve as a student's advisor before a student can be considered in the MS thesis program. During the first year, students begin their original research project. The findings of this work should be publishable in a peer-reviewed scientific journal. Progress towards these degree requirements is overseen and guided by the selected thesis advisor, the student's thesis research committee.

### **Coursework**

The Master's degree requires 45 credits beyond the Bachelor's degree, up to 12 credits of which may be credits for research and thesis. There are three core courses generally taken in the first year: ENVS 501 Chemistry of the Environment (fall), ENVS 511 Evolutionary Ecology (winter) and ENVS 506 Biostatistics (spring). Electives may be taken on a full or part time basis and should be discussed with the student's faculty advisor and the graduate advisor. It is recommended that a plan of study be created by the end of the first quarter. Generally, full-time registration is not possible in second year without going over 45 credits due to the additional time required to complete a thesis project. Students should work with the graduate advisor to ensure their course and research credits are distributed across terms appropriately to avoid exceeding 45 total credits.

### **Master's Thesis Research**

**Committee.** Research for the thesis is conducted under the guidance of the student's thesis advisor and thesis research committee. The thesis advisor must be a faculty member in the department and must agree to serve as advisor. The student's committee consists of at least three faculty members, of which at least two are from the Department. The chair of the thesis committee shall be a departmental tenure-track faculty member who is not the thesis advisor and preferably tenured. Once a committee is formed, students complete the Advisory Committee tab in Eforms.

**Thesis Proposal.** Within one year of entering the program, the student must orally present and defend their master thesis proposal to the thesis research committee. Committee members may examine the M.S. student on subject matter related to their thesis project. Once the thesis proposal is approved, the Thesis Proposal tab in Eforms must be completed and approved by the student and committee.

**Thesis.** Students will finalize their thesis only after approval is granted by the thesis research committee. Approval will be based upon an evaluation of the breadth and depth of original research being conducted by the student.

**Thesis Defense.** Research conducted for the thesis must be presented in a lecture open to the

public and then defended, privately, before the student's committee. The thesis defense must be scheduled on the Thesis Defense tab in Eforms at least four weeks in advance, a final draft of the thesis given to all committee members two weeks prior to the defense and a public notice of the defense lecture posted two weeks before the defense. The committee members are free to examine at length the research as reported in the thesis, as well as the student's overall competence. The student must pass this exam (with the assent of at least two thirds of the committee members).

After the defense and once revisions have been finalized on the thesis document, the committee approves the final thesis on the Submit Thesis tab. Once the committee approves the final thesis, the student may export the Thesis Approval Form from the Submit Thesis tab in Eforms to add as page 1 to their thesis before submitting to the Proquest. All Eform tabs and Exit Surveys must be complete before the student will be cleared for the M.S. degree.

### **Mileposts in the M.S. Thesis Program**

1. *Advisor* - Students must be accepted into the laboratory of their thesis advisor prior to the start of the first quarter. In some cases, non-thesis students can switch to the thesis option as long as a faculty member agrees to serve as the student's thesis advisor. In such cases, an advisor should be identified no later than the end of Fall quarter. Complete Supervisor Appointment and Plan of Study tabs in Eforms.
2. *Committee* - Thesis Research Committee must be constituted by the end of the second quarter. Complete Advisory Committee tab in Eforms.
3. *Proposal* - Thesis Proposal acceptance by the Thesis Research Committee must be successfully completed by the end of the first year. Complete Thesis Proposal tab in Eforms.
4. *Coursework* - Coursework must be completed in the first two years of study, unless the Thesis Research Committee requires otherwise.
5. *Thesis* - Each M.S. student is expected to complete his/her thesis defense within 3 years. Drexel University requires that the thesis be finished within 5 years. Complete the Thesis Defense and Submit Thesis tabs in Eforms.

## **The Master of Science Degree, Non-Thesis**

The non-thesis master's degree is a coursework-based degree for those looking to advance in their fields, but not desiring direct research experience. The non-thesis program is designed to accommodate a large grouping of electives which can be tailored to students' career and educational interests. Students may take coursework from environmental science, ecology, evolution, biodiversity, earth science, environmental policy and environmental engineering (with prerequisites).

### **Coursework**

The MS degree requires 45 credits beyond the Bachelor's degree. There are three core courses (9 credits) usually taken in year one:

Fall: ENVS 501 Chemistry of the Environment

Winter: ENVS 511 Evolutionary Ecology

Spring: ENVS 506 Biostatistics

The remaining 36crs of coursework may be planned based on the students' individual interests and career goals. The number of courses taken per term is up to the student based on their full or part time status. Students should consult with the graduate advisor regarding course offerings to learn when certain courses will be offered so that they can plan accordingly. The courses that are applicable to the degree outside of the BEES department, ENVP or ENVE must be approved by the Graduate Curriculum Chair. Annual meetings with the departmental graduate advisor are recommended, and early in year one a plan of study will be created to suit their individual needs.

### **Research Experience**

If a non-thesis MS student has an interest in working in a faculty member's lab to gain research experience without conducting a full thesis project, the student is encouraged to contact faculty to inquire about working in their lab for academic credit. Non-thesis MS students may take up to 6 credits of research (ENVS 797 or GEO 797) as part of the total 45 credits needed to complete the MS degree. One research credit requires a minimum of 3 hours per week in lab, and research credits may be taken as 1, 2 or 3 credits per term.

### III. RESPONSIBILITIES OF THE STUDENT (MS and PhD)

**Plan of Study.** A plan of study is a description of the courses and/or research a student intends to take to fulfill their degree requirements. A plan of study should be developed in discussion with faculty and the graduate advisor and completed by the end of a student's first quarter. Faculty can best advise on appropriate courses for a student's academic area of interest. The graduate advisor can guide on when certain courses are being offered and how best to plan for courses term by term. Students must upload their plan of study and complete the Plan of Study tab in eforms by the end of their first quarter.

**Proposal.** It is the responsibility of the PhD student to propose (in written form), plan, carry out and write up the research results in a doctoral dissertation format. It is the responsibility of the Thesis MS student to propose, plan, carry out and write up the research results in a Master's thesis format as outlined in Hagerty Library's Thesis Manual.

**Research Committee Meetings.** Students in either the thesis MS or PhD Program must have at least one committee meeting per year and doctoral students must present a research seminar each academic year in a department wide forum discussing their research (results obtained to date, methodological quandaries and plans for future work). The setting for this presentation can be the Graduate Student Research Seminar, provided that the dissertation committee attends. For Ph.D. students, a written thesis proposal serves as the basis of the candidacy examination at the end of the second year. Progress in these responsibilities will be evaluated by the student's thesis or dissertation committees.

**Research Publications.** It is expected that the completion of a Ph.D. dissertation will be accompanied by the production of scientific manuscripts from all data chapters, suitable for publication in peer-reviewed journals. It is anticipated that the completion of the M.S. (thesis) degree will be accompanied by the preparation of at least one scientific manuscript suitable for publication in a peer-reviewed journal.

### IV. Satisfactory Progress in the Ph.D. and MS Thesis Degree Program

To track the progress being made by graduate students, assure that students are, indeed, making progress toward their degrees, and provide regular feedback for students, the following progress assurance and tracking program is required for all students in Ph.D. or Masters with thesis programs.

- 1) Students are expected to meet with their committee at least once each year to discuss their progress (e.g. courses completed, exams taken, research goals attained, etc.).

- 2) After this meeting, the faculty adviser must report the meeting outcome on the student's Annual Meeting tab in eforms (PhD only). If the committee determines that the student is not making adequate progress, it must detail what difficulties it sees and what must be done to remedy those difficulties.

3) If a student's committee decides the student is not making satisfactory progress, then the student is placed on probation. The student must then reconvene their committee in the next quarter to reconsider the student's progress. Two successive reports of unsatisfactory progress will subject the student to corrective/disciplinary action, as recommended by their committee to the Graduate Program Committee and the Department Head. Such action may include loss of eligibility for departmental financial support, probationary status or dismissal from the program. In addition, the Graduate Program Committee will consider the student's progress reports in making recommendations for TA/RA appointments.

4) It is the student's responsibility to schedule the meetings with their research committee and provide the documentation of progress. Failure to meet with the committee or provide the evidence of progress will also place the student on probation.

Questions regarding the applicability of the requirements described in this handbook or deviations from those requirements should be referred to and will be arbitrated by the Graduate Program Committee.

## **V. GRADUATE ASSISTANTSHIPS (PhD only)**

### **Purpose**

The purposes of graduate assistantships are to support the teaching and research functions of the Department and to support the education of graduate students. Assistantships shall be awarded to PhD students primarily based on academic ability and performance. Appointment to teaching assistantships shall also require the ability to teach effectively.

### **Appointment procedure**

1. Teaching assistantships (TAs) are awarded on a competitive basis at the time of PhD admission. The Graduate Program Committee will recommend to the Department Head candidates for teaching assistantships from among those who have applied for such appointments.
2. Research assistantships (RAs) will be awarded by individual faculty members who are principal investigators (PI) holding grants and/or contracts. Ideally this occurs once a Ph.D. student begins their 3<sup>rd</sup> year but varies due to faculty funding. The expectation is that RA's are established for a full academic year. In the event a principal investigator is not able to fund an RA for at least two terms, the PI will need to partially offset the cost of the graduate student's summer stipend by covering 1/3 of the summer stipend costs. Both the PI and student are expected to communicate changes to their TA/RA status as early as possible to ensure TA needs for the department can be met.
3. When possible, one curatorial assistantship (CA) will be awarded to a Ph.D. student for one to four quarters of their graduate assistantship.
4. Assistantships are normally awarded at the start of the academic year and are 12-month appointments unless otherwise indicated.
5. Reappointment is subject to review of the student's teaching/research effectiveness by faculty and students, academic performance, satisfactory progress towards their degree, and active participation in the departmental seminar series and departmental research activities. TAs can be revoked after suitable warning if it is the determination of the Graduate Program Committee and the Department Head that the student is not performing their duties in a satisfactory way.
6. Ph.D. students are responsible for notifying the department of any pending changes to their TA or RA status as soon as it is learned.

## **Criteria for Teaching Assistantships**

1. TA support is dependent on the graduate student's academic standing, student and faculty teaching evaluations, satisfactory progress towards their degree, and active participation in the departmental seminar series and departmental research activities.
2. Regular (full time) TAs are awarded only to full time Ph.D. students.
3. During Welcome Week, new TAs are required to attend the TA Orientation and Mentorship Circle provided by the Teaching and Learning Center (more info below).
4. All international students with a teaching assistantship are required to have the ITA Speaking Assessment Interview which tests for oral proficiency. This interview is given as part of the ITA Program or upon your arrival to Drexel. Students must successfully pass the interview by the end of their third quarter to qualify as making satisfactory progress in the PhD program. Failure to receive a recommendation as "Assistant" by the end of spring quarter of first year will result in loss of TA funding and possible dismissal from the PhD program.
5. New, entering Ph.D. students are guaranteed a TA position for their first two years in the graduate program, assuming they maintain satisfactory progress academically and receive satisfactory teaching evaluations.
6. Beyond 2<sup>nd</sup> year, Ph.D. students are eligible for TA positions when research assistantships are not currently available.

## **Assignment and Duties of Teaching Assistant**

1. Assignment of TAs to specific courses is based on several factors: expertise in subject matter, teaching experience, faculty recommendation, academic record, TOEFL scores (international students), letters of recommendation, and department teaching needs. TA appointments will be made in such a manner as to capitalize on students' background and knowledge base as much as possible.
2. Both faculty and TAs may recommend/request specific TA assignments at the start of an academic year. Requests are granted if all other teaching needs can be appropriately met.
3. TAs are expected to teach 3 quarters per academic year. The 4<sup>th</sup> quarter is generally in the summer and used for field season. In the event that a field season occurs in a quarter other than summer, it is the TA's responsibility to inform the department prior to the start of the academic year. Late notification may prohibit approval.
4. Duties of TAs shall be established by the course instructor in consultation with the TAs at the beginning of each quarter. The activities for a regular (full-time) assistantship require



20 hours/week on average.

5. All courses to which TAs are assigned have a primary instructor with an active role in providing course materials, such as the syllabus, lab protocols, and examinations.
6. Teaching assistants may be appointed to courses in the Department of Biology and will need to refer to the Teaching Assistantship regulations outlined by that department.

### **Teaching Resources**

Most first-year students have no prior teaching experience, which may make the role of teaching assistant intimidating. Fortunately, the department and the University provide a number of resources to assist the graduate students through this process. The greatest resources for advice, information, and materials, of course, are the professors and graduate students who were formerly TAs themselves for the same course.

Beginning Welcome Week, the week before Fall classes start, all first year TAs attend a mandatory TA Orientation and Mentorship Circle provided by the Teaching and Learning Center. Several workshops and speakers provide an opportunity to develop teaching skills and acquaint graduate students with the campus and its resources. The TA handbook, sponsored by the Graduate College, provides information and guidelines for developing good teaching skills. For more information, please see <https://drexel.edu/teaching-and-learning/programs/teaching-assistants-training/>

The Teaching and Learning Center (TLC) provides resources, workshops and one-on-one pedagogical support to Drexel University's faculty and teaching assistants. <https://drexel.edu/teaching-and-learning/>

Instructional Technology Group (ITG) can assist TAs who have questions regarding computer applications such as Drexel Learn. <https://drexel.edu/it/help/a-z/learn/>

To learn about other available technology workshops and trainings, visit: <https://drexel.edu/it/services/workshops/>

Additionally, Instructional Media Services can assist with classroom equipment and troubleshooting. They can be reached at 215.895.2925, website: <https://drexel.edu/it/help/a-z/ims/>

In instances where TAs identify a need for individual student support, they can refer to various university services on campus:

Center for Learning and Academic Success Services (CLASS). Provides academic coaching

and tutoring resources. <https://drexel.edu/studentlife/student-success/academic-support/center-learning-academic-success>

Student Resources. Provides links to multiple student resources for academic support, health and wellbeing, as well as international student services.

<https://drexel.edu/coas/academics/student-resources-support/#health>

## **Professional Ethics**

Teaching assistants are expected to adhere to the same ethical standards as Drexel University faculty and professional staff. TAs should be clear, consistent, and objective in developing classroom policies and assigning grades to students. TAs must always maintain strictly professional relationships with students.

## **VI. POLICIES AND PROCEDURES**

### *Academic Honesty*

Academic honesty and integrity are important characteristics for any institution. In accordance with Drexel University and the BEES Department's commitment to integrity, policies regarding academic honesty have been adopted. For a more complete overview of the University's policies, students are encouraged to refer to the [Academic Integrity Policy](#) and [Student Code of Conduct](#), as well as the [Doctoral Student Handbook](#). Included in the policies on academic honesty are statements about plagiarism, fabrication, cheating and misconduct:

*Plagiarism* is the use of another person's words, ideas or data as one's own. Work submitted for credit that includes another's words, ideas or data is to be appropriately referenced. Any work submitted certifies the originality of all work unless otherwise identified and acknowledged.

Plagiarism covers both published and unpublished sources.

*Fabrication* is the use of invented or falsified research or findings. This includes citing material not contained in a source, listing sources in a bibliography that are not used, submitting fictitious data, and presenting work prepared by another as one's own.

*Cheating* is the act or attempted act of deception by which a student misrepresents that they have mastered material or information on an academic exercise. This includes copying another's material, allowing someone to copy your material, unauthorized use of notes and texts, unauthorized collaboration on assignment, and taking a test for another individual.

Other *misconduct* includes stealing test answers or questions; selling test answers or questions; bribing a person to obtain test answers, questions or information; changing or altering a grade on a test or in a grade book; and being an accessory to the previously stated actions.

### *Grievances and Appeals Procedures*

Both informal and formal procedures exist for students who have a grievance against another student, staff person, or faculty member, or who wish to appeal a decision of the faculty.

Whenever possible, students are encouraged to resolve issues via informal means through discussion with their advisors and/or the department head. The faculty advisor or department head will attempt to work with the student to resolve the issue informally. In some cases, an issue might require discussion by the faculty as a whole.

In the event that informal mechanisms prove insufficient, or if a student elects to pursue a more formal route, the University has separate complaint procedures for academic matters, university staff and administrators, and students. Students are referred to the [Office of Equality and Diversity](#) (OED) and below links for specific procedures for filing complaints.

### *Diversity and Inclusion*

Drexel University and the Dept of Biodiversity, Earth and Environmental Science is committed to providing a welcoming, inclusive and respectful environment for students, faculty, professional staff and guests. This commitment includes ensuring that the University complies with its own policies and with federal, state and local laws prohibiting discrimination and harassment based upon race, color, religion, national origin, age, disability, sexual orientation, sex, gender identity and expression, veteran status, genetic information, and any other characteristic prohibited by law.

Drexel's [Discrimination, Harassment and Bias Incident Prevention Policy](#) and [Sexual Harassment and Misconduct Policy](#) provide timely, fair, thorough, private and dignified processes for handling and investigating complaints of discrimination, harassment and misconduct, including sexual assault. For more resources, training and reporting information, please visit the [Office of Equality and Diversity](#) (OED).

### *Sexual Harassment Policy*

Students should be aware of their rights and responsibilities with respect to issues of sexual harassment. The student can consult the University's Sexual Harassment and Misconduct Policy, available here: <http://www.drexel.edu/hr/resources/policies/dupolicies/oed3/>. These university-based services are intended to support and assist students coping with instances of

sexual harassment. For reporting and other Title IX Resources, please see: <https://drexel.edu/oed/reporting/Title-IX/>

### *Mandatory Reporting*

It is important to note that under Drexel policy, all faculty, staff and student employees, which includes graduate students on assistantship/fellowships, are mandated reporters of discrimination, harassment and bias incidents, and/or sexual harassment to the University's Office of Equality and Diversity. Any discussion regarding discrimination and/or harassment cannot be confidential and must be reported to OED. For more information on Reporting, please see: <https://drexel.edu/oed/reporting/overview/>

## **VII. FUNDING AND HEALTH INSURANCE**

### *Stipend and Tuition Remission*

PhD students are on a 12-month appointment, and stipends are distributed over 12 months (Oct-September). Students can expect their first stipend payment at the end of October (Oct 31). Students should refer to their Doctoral Fellowship Appointment letter for financial details.

Tuition remission is limited to 9 credits per term Fall, Winter, Spring, and Summer terms, and only courses on a student's plan of study will be covered.

### *Health Services and Insurance*

All full-time students are required to carry health insurance. Drexel offers health insurance through UnitedHealth, which is the University-sponsored [Student Health Insurance Program](#). Full-time assistantship/fellowship appointment terms (i.e. 20 hours per week for at least 3 quarters of the current academic year) will qualify for a [full subsidy](#) of the Drexel Health Student Insurance Plan. Students electing to add a spouse and/or dependents will be responsible for paying the additional cost of this plan, as the subsidy provided to eligible graduate students is only for the basic plan. Students may waive the Drexel Health Insurance as long as proof of alternative health insurance is provided.

Prior to the start of the academic year, students will be sent information on [enrolling or waiving](#) Drexel Health Insurance. Students are advised to familiarize themselves with the terms of coverage before seeking medical services.

**Additionally, students are responsible for a one-time Immunization Fee (\$35) at the beginning of their first year.**

### *Conference Travel Award*

The BEES Department offers a Travel Award to doctoral students to help offset the costs of travel and conference registration for local and national conferences. To be eligible to apply, students are expected to be presenting a poster or paper at the conference. The departmental graduate committee will review applications twice a year in September and March of the academic year, and students are eligible for one award a year. It is important to note that this amount is not guaranteed and is always dependent on Departmental finances.

Students must also apply for travel funds from the Graduate College <http://drexel.edu/graduatecollege/research-funding/travelsubsidy/> and/or if applicable, the Office of Global Engagement <https://drexel.edu/global/about/global-drexel/China-Collaborative/Resources/Internal-Funding/>

### *McLean Fellowship*

The Academy of Natural Sciences, in conjunction with the Department of Biodiversity, Earth and Environmental Science (BEES), offers a fellowship to PhD students in support of original doctoral research in the fields of environmental science and/or ornithology. A faculty member within BEES must support and approve the application. The fellowship is for one academic year, which may cover stipend, fees, tuition, and research expenses (such as supplies and travel). Funds may be used for laboratory or field support as well as the final stages of a PhD dissertation. The successful applicant will be required, *as needed*, to serve as a teaching assistant for one quarter of the academic year; the quarter will be determined in advance at the discretion of the BEES Department. Current BEES PhD students that have passed candidacy or will have passed candidacy by the end of Fall Quarter in given Academic Year are eligible for this year-long fellowship.

### *Susan S. Kilham Research Fund*

To stimulate graduate scientific education, funds are available to PhD students to help offset the costs associated with graduate student research including but not limited to buying software, hiring a research consultant, purchasing equipment and other expenses regularly associated with doing research. The funds may not be used for travel.

Full-time doctoral students in good academic standing are eligible to apply. Selection of recipient is made by BEES Graduate Committee and the Department Head.

Applications will be rolling for the fiscal year (July 1 to June 30).

### *Tax Liability*

Graduate student stipends are taxed, and the issue of tax liability for stipends received is somewhat complicated. Students with questions about taxes can visit the Office of Comptroller website here: <https://drexel.edu/comptroller/general-accounting/policies-procedures/graduate-student-policy/>

## **VIII. STUDENT RESOURCES**

### *Graduate College*

The [Graduate College](#) is *the* hub of information and resources for graduate students across the University. The Graduate College sets and/or communicates [policies and procedures](#) on important academic processes as it relates to graduate studies and also provides various programming to support [professional development](#) and the overall graduate student experience at Drexel. There are a number of [resources](#) available to students including the student lead Graduate Student Association (GSA), International Graduate Student Association (IGSA) graduate student lounge, and travel subsidy awards.

### *International Student and Scholars Services*

In the same way the Graduate College supports and provides valuable information on graduate studies at Drexel (for both domestic and international students), the [International Student and Scholars Services \(ISSS\)](#) office provides important information and resources specific to international students, including guidance on F-1 visa requirements, student travel and employment in the US.

### *Drexel University Counseling Center*

The [Office of Counseling and Health Services](#) offers free, confidential counseling services to all graduate students, including in-person care for full-time graduate students on campus on the University City and Center City campuses and remote services for all graduate students over the phone via peer counseling and other call services, and online support via articles, videos, screenings and webinars.

All students are welcome and encouraged to connect with the Counseling Center for assistance, as well as take advantage of available [Health and Wellness Resources](#) for graduate students.

### *Office of Disability Resources*

At an institutional level, the [Office of Disability Resources](#) (ODR) facilitates programs and accommodations for students with physical disabilities. In general, the Drexel campus has

handicap accessible buildings and parking. However, it is recommended that students contact the Office of Disability Resources to confirm availability.

For students requiring support for learning disabilities, the University provides various education support programs. Students seeking accommodations can register with the Office of Disability Resources [here](#).

### *Drexel Dragon Card Office*

All students must obtain a Drexel Dragon identification card by Week 1 of their first quarter. Students can get (or pick-up) their Dragon Card from the Drexel Dragon Card Office one week prior to the start of Fall quarter (usually during Welcome Week). Students have the option of uploading a photo online via the website or having their photo taken at the card office.

For instructions, please visit: <https://drexel.edu/business-services/dragoncard/overview/> **A validated Drexel student ID card should always be carried due to its necessity for entering all buildings on all campuses.**

### *Drexel University Bookstore*

Drexel University has two bookstores: the [Drexel University Bookstore](#) located on Main Campus in MacAlister Hall on 33<sup>rd</sup> Street & Chestnut Street and the Drexel College of Medicine Bookstore located on the Hahnemann Center City Campus in the Bellet Building on 15<sup>th</sup> Street & Race Street. Students can order books online directly from the bookstore or purchase them in person at the bookstore.

### *Library*

With an active Drexel Dragon ID card, students have access to Drexel's three physical library locations: *Hagerty Library* on University main campus and the two Health Sciences Libraries, *Hahnemann Library* in Center City and *Queen Lane Library* on the Queen Lane Campus.

Graduate students at Drexel University are also entitled to borrowing privileges at other area libraries. To establish in-person borrowing privileges at either [University of Pennsylvania Libraries](#) or any participating [PALCI On-Site Borrowing Libraries](#), you must first obtain a Reciprocal Borrowing Letter from the circulation desk at any Drexel University Libraries location. This letter should be presented, along with your current university ID card, to circulation desk staff at the library from which you would like to borrow materials.

The Drexel ID card also enables graduate students to take advantage of the Interlibrary Loan (ILL) service offered through the Drexel University Libraries. Books, journal articles, book chapters, and other materials not available through Drexel University Libraries may be requested online through either of the Libraries' interlibrary loan systems (EZBorrow or ILLiad) at no charge to the student. Visit the library [homepage](#) for more details. You may also contact us at [ResourceSharing@drexel.libanswers.com](mailto:ResourceSharing@drexel.libanswers.com) for more information.

### *Drexel Recreation Center*

Drexel's offers a variety of intramural and intercollegiate activities, as well as a fully equipped gym, elevated indoor track, aerobic studios, climbing wall, 6-lane swimming pool, squash courts, and fitness and wellness programs. For further information about these programs, please visit the [Recreation Center](#), located in the Daskalakis Athletic Center (DAC).

### *Student Housing*

Although most graduate students find independent housing in the city of Philadelphia, Drexel also offers graduate student housing near the Center City Campus. Stiles Alumni Hall houses up to 315 undergraduate and graduate students in one-, two-, and three-bedroom unfurnished apartments. Each student is given their own bedroom, but will share a kitchen, bathroom and living space. The bedrooms are carpeted, and each room has temperature control, cable, local phone service and internet access. Additional information is available [online](#).

### *Parking*

Because of Drexel's urban location, parking is scarce. The streets on and around both campuses provide metered and unmetered parking spaces for which the maximum time limit is typically 1 to 3 hours. Parking violations are strictly enforced in the city of Philadelphia with occasionally heavy fines. Drexel also has several parking facilities on the University City Main Campus which require parking permits. Since space is limited and many lots even have waiting lists, students should contact the [Parking Services Department](#) (215-895-2813) as early as possible to obtain a parking permit. Regardless of where they ultimately choose to park, all students are strongly advised to purchase a theft protection device for their car and empty their car of all belongings when parking in Philadelphia.

### *Computer and Multimedia Support*

#### Data Analysis and Computer Facilities

Drexel's [Office of Information Technology](#) (IT) coordinates all general computing and information resources for instructional research and administrative activities. Faculty and students have free access to accounts, supported mainframe statistical packages, campus e-mail, and various file servers. Students can familiarize themselves with IT's various services [here](#). In addition, certain [software](#) is available free of charge to students.



### Audio/Visual Equipment

Students have access to various technological equipment (e.g., laptop computers, projectors) provided by the university Instructional Media Services (IMS Department) located on the 4th floor of MacAlister Hall. See the [IMS website](#) for more details.

### ***About Philadelphia***

Philadelphia is the second largest city on the East Coast and ranks sixth in the nation, with a metropolitan population of nearly 6 million. Just 100 miles south of New York and 133 miles north of Washington, D.C., Philadelphia and its surrounding counties (Bucks, Chester, Delaware, and Montgomery) are conveniently situated in the heart of the Northeast Corridor. A world-class city for business, art, and education, Philadelphia's skyscrapers are coupled with a blend of distinct and culturally diverse neighborhoods, creating a unique metropolitan yet intimate urban experience. The area bounded by the Delaware River in the East, the Schuylkill River in the West, Vine Street in the North and South Street in the South, is known as “Center City” (not downtown). Center City’s proximity to Drexel’s campus makes it a popular choice among students looking to rent an apartment. Other popular residential communities include Old City, Queen’s Village, the Art Museum district, Manayunk, and Chestnut Hill.

Drexel University is spread out over three campuses: (1) the University City Main Campus, (2) the Center City Campus, and (3) the Queen Lane Medical Campus. With more than 90 colleges and universities in the city and surrounding region, Philadelphia is a great place to be a graduate student. In addition to Drexel, top schools include Bryn Mawr College, Chestnut Hill College, Jefferson’s College of Health Professions, La Salle University, Moore College of Art and Design, Pennsylvania Academy of the Fine Arts, Philadelphia University, Rosemont College, St. Joseph’s University, Swarthmore College, Temple University, University of the Arts, University of Pennsylvania, Ursinus College, Villanova University and Widener University. The city of Philadelphia also boasts a large number of renowned hospitals and university medical centers including the Hospital of the University of Pennsylvania (HUP), Children’s Hospital of Philadelphia (CHOP), St. Christopher’s Hospital for Children, Thomas Jefferson University Hospital, and Temple University Hospital, among others.

In addition to the historical sites for which the city is known, Philadelphia offers a wealth of cultural attractions and recreational activities. Popular points of interest include: Independence National & Historic Park, the Philadelphia Museum of Art, the Franklin Institute, the Academy of Natural Sciences, the Philadelphia Zoo, Fairmount Park, Penn’s Landing, Longwood Gardens, the Barnes Foundation, and the Rodin Museum. Philadelphia is also home to a large number of renowned theatres offering the finest in music, dance, and live performances. Sports fans can follow teams in every major professional league—baseball (Phillies), football (Eagles), arena football (Soul), basketball (76ers), hockey (Flyers), and soccer (Union). In addition to the famous cheesesteak establishments and red sauce houses of South Philly, Philadelphia offers a wide range of diverse eating and drinking establishments, ranging from food carts to high end restaurants.

The following websites offer comprehensive information about the greater Philadelphia area: [The Philadelphia Tourism Network](#) and the [City of Philadelphia home page](#). Find information about upcoming events in Philadelphia at [Uwishunu](#), the official tourism blog of Philadelphia and its surrounding areas.