

College of Arts and Sciences Graduate

Student Handbook

2023-24

Telephone: 215-895-2624
Email:biology@drexel.edu Web: http://www.drexel.edu/biology

## Table of Contents

I. INTRODUCTION ..... 3
II. GRADUATE PROGRAMS AND REQUIREMENTS ..... 4
A. The Doctor of Philosophy Degree ..... 4
Coursework ..... 5
Required Seminar ..... 5
First-Year Presentations ..... 5
Travel Awards ..... 5
Dissertation Research ..... 5
Dissertation Research Committee ..... 7
Candidacy Examination ..... 8
Dissertation ..... 10
Dissertation Defense ..... 10
Mileposts in the Ph.D. Program ..... 10
B. The Master of Science Degree with Thesis ..... 11
Coursework ..... 11
Master's Thesis Research ..... 11
Mileposts in the M.S. Program ..... 12
c. The Master of Science Degree, Non-Thesis ..... 13
Coursework ..... 13
D. Bachelor's/Master's Dual Degree Program ..... 14
Application ..... 14
Changes in the BS Program ..... 14
MS Program Requirements ..... 14
III. RESPONSIBILITIES OF THE STUDENT ..... 15
Iv. SATISFACTORY PROGRESS IN GRADUATE DEGREE PROGRAMS16
v. ASSISTANTSHIPS ..... 17
Purpose ..... 17
Appointment procedure ..... 17
Criteria for Graduate Teaching Assistantships ..... 17
Assignment and Duties of Teaching Assistant ..... 18
vi. GRADUATE CURRICULA ..... 19
APPENDICES ..... 25
I. Biology Graduate Student Association Constitution ..... 25
II. Academic Integrity ..... 31

## I. INTRODUCTION

Congratulations, you have found the handbook describing the policies and procedures that will help you to navigate the Biology graduate program! The purpose of this handbook is to provide you with all the information you need to have the best possible experience as a member of our department. If you have any questions to not hesitate to contact Dr. Ryan Petrie (Biology Graduate Program Director; rjp336@drexel.edu) or Kate Pelusi (Biology Graduate Program Manager; kp475@drexel.edu).

## DIVERSITY, EQUITY, AND INCLUSION PLEDGE

The Department of Biology at Drexel University is deeply committed to upholding and encouraging diversity, equity and inclusion. Our department is aware of systemic injustices that disadvantage historically excluded groups within science, and we are committed to educating ourselves further about these disparities in order to create a more equitable system. Our department embraces all facets of diversity including but not limited to race, color, sex, gender identity or expression, sexual orientation, national origin, language/ linguistic ability, visa status, religion, creed, age, class, socioeconomic status, military status and disability status.

We stand firmly against discrimination while simultaneously working towards promoting diversity, equity, and inclusion within our department, the College of Arts and Sciences and across Drexel University. Our differences serve both to enrich and connect us. Acknowledging and celebrating diversity provides the only path forward in building a strong community - one that will flourish through open dialogue, meaningful collaboration and shared intellectual curiosity. To achieve these goals, we strive to be a welcoming, accepting and malleable department that can grow and adapt to best serve our members and our community.

The Department of Biology 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 bothan 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, journal clubs and informal discussions provide a rich, interactive environment in whichstudents can develop as scientists.

This handbook is designed to provide guidance to current graduate students in the Department of Biology. Students are expected to familiarize themselves with the policies herein. The handbook is intended to address common questions regarding departmental policies and programs, however, first year students are encouraged to schedule an early appointment with Kate Pelusi, the Graduate Program Manager, or with Ryan Petrie, Ph.D., the Graduate Program Director, to answer your specific questions and to develop a Plan of Study suited to your individual needs.

Graduate Student Eforms - Ph.D. student academic progress is tracked through the Eforms system: https://drexel.edu/graduatecollege/forms-policies/forms/. First-year PhD students will be given instructions by the department on timing for activating their records on Eforms. Ultimately, it is the responsibility of each student to make sure the Eforms are completed in a timely manner, but we will support the students in this task by making sure Faculty are aware of their roles and responsibilities. Current students, please contact Graduate Program Manager Kate Pelusi with any questions. Please see the Graduate College EForm Guide for more information.
M.S. Thesis students do not use the Eforms system and should consult the Graduate Program Manager for appropriate forms. All forms must be submitted to the Graduate Program Manager prior to being forwarded to the Graduate College.

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

## II. GRADUATE PROGRAMS AND REQUIREMENTS

## A. 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. In accordance with university policy, students who enter the program with a master's degree (post-master's 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 of coursework and research.

Table 1 provides a summary of the $\mathrm{Ph} . \mathrm{D}$. program requirements and timelines. Typically the focus of the first 12-24 months in the program is on completing coursework, choosing a dissertation mentor and together with your mentor developing a dissertation topic. By the end ofthe second year all Ph.D. students must have completed their candidacy examination, detailed 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 Dissertation Advisor,the Dissertation Research Committee, and the Graduate Program Committee. Below we provide details on coursework, candidacy examinations, dissertation research and the dissertation defense.

|  |  | Ph.D. Program Timeline |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | Quarter | Classwork | Research | Cmtes/Exams |
| 1 | F | Required Courses | Identify research mentor |  |
|  | W | Required Courses | " |  |
|  | Sp | Required Courses | Choose research topic |  |
|  | Su | no classes | Collect Preliminary data | Develop thesis proposal |
| 2 | F | Required Courses | $"$ | Form Dissertation Cmte |
|  | W | Electives/ | $"$ | Initial Cmte meeting |
|  | Sp | Electives/ | $"$ | Candidacy Examination |
|  | Su | no classes | Dissertation Research | Candidacy Examination |
| $3 / 4 / 5$ | F |  | $"$ |  |
|  | W |  | $"$ | 1 cmte mtg / yr |
|  | Sp |  | $"$ |  |
|  | Su |  |  | Sufficiency Meeting |
|  |  |  |  | Dissertation Defense |

## Coursework

It is anticipated that all the graduate coursework will be completed during the first two years of the Ph.D. Students will register for classes 9 months out of the year (Fall, Winter \& Spring Quarters). All PhD students will be registered for 9 credits in the fall, winter, spring and summer quarters with either coursework or research credits.
After completing the required coursework, students generally fulfill the credit requirements of afull-time graduate student by registering for dissertation research (Bio 997). Students must maintain a cumulative grade point average (GPA) of at least a 3.0.

Concerning final grades, the department of Biology conforms with the language written in the Graduate College handbook: "Final Grades. Permanent/final grades are awarded in one of two ways. 1. Some courses are graded on a letter grade system ( $A+, A, A-B+, B, B-$ , $C+, C, C$-, $D+, D$, or $F$ ). These grades have numerical quality point weights. Students may not receive more than two grades of C in graduate courses towards degree completion. Any additional grades of C , beyond the allowable 2, will not be counted towards degree progression, however will be counted in the term and cumulative GPA calculations. Note that all graduate students are required to maintain a cumulative grade point average of 3.00 or higher to remain in good academic standing and progress toward graduation. Grades below $B$ in required core courses taken in the major field and grades below $C$ in all other graduate courses in the student's Plan of Study are not recognized as passing grades and their credits are not considered to be earned credits in clearing a student for graduation. All permanent grades with quality point weights count in the computation of the student's cumulative grade point average."

The progress of each student is reviewed each term by The Graduate Program Committee. 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 a3.0 or better in each term and 2) achieve a cumulative GPA of at least a 3.00 . 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 3.00 cumulative GPA in order to graduate, i.e. students cannot graduate while on academic probation.

## Required Seminars

All Ph.D. and M.S. (Thesis) graduate students are required to attend the Departmental Seminar/GraduateStudent Research Seminar on Mondays from 3:30pm - 4:30pm. With the exception of first- year and second-year students, all Ph.D. students are required to present their research at the Graduate Student Research Seminar once each academic year. Third- year students and beyond will give 20-minute seminars with an additional 5 minutes for questions. A schedule will be generated by the beginning of the fall term.

## First-Year Presentations

All first-year students will be required to give a brief 10- minute presentation on their projects. If a student has been directly recruited into a lab, they will only need to present once during their first-year. If a student is completing rotations, they will need to present for each rotation completed.

## Travel Awards

In an effort to stimulate scientific education, funds are available to help offset the costs associated withattending scientific conferences, workshops, and courses. The departmental graduate committee will review applications twice a year in September and March.

## Eligibility Requirements and other Relevant Information:

- Students must be presenting a poster or paper, or participating in course
- Preference given to students who haven't received prior funding
- Awards of up to $\$ 350$
- Maximum of one award per year per student. You can get two awards in the same academic year, but this will make you ineligible for an award the next year.
- If a TA, you must assist course instructor to identify a replacement TA for the classes you willmiss.
- Applications must be submitted before travel
- We encourage you to also apply for travel funds from the Graduate College (OGS) and/or the Office ofInternational Studies (OIS) (if applicable)


## Dissertation Research

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, some first year Ph.D. students are recruited directly into specificfaculty laboratories during the admission process. Other students choose their dissertation advisor by completing laboratory rotations.

## Ph.D. Rotations

Students who are rotating prior to selecting their dissertation advisor are expected to complete three 10 -week rotations during the Fall, Winter, and Spring quarters of their first year. Students can petition the graduate committee to drop their third rotation by providing a letter justifying this choice, along with a letter of support from their future dissertation advisor.

## Selection of Dissertation Advisor

By the end of the third quarter of the first year, Ph.D. students should have committed to aresearch lab and Dissertation advisor. Careful and early consideration must be given to theselection of an appropriate research area and Advisor. The Dissertation Advisor must be approved by the Graduate Program Committee and the Department Head.

We encourage student initiative in selection of research areas, but written concurrence by signature on the Plan of Study of a tenured or tenure-track department faculty member who will serve as the Dissertation Advisor must be obtained. The department undertakes the obligation toprovide an opportunity for the student to work on a research problem
deemed appropriate by faculty. If the student and the faculty cannot mutually agree on an Advisor and a research problem, then the student will not be allowed to continue in the program.

Once the Dissertation Advisor is confirmed, the student can complete the Supervisor Appointment and Plan of Study tabs in Eforms.

## Dissertation Research Committee

In consultation with the Dissertation Advisor, a committee will be selected to guide the progress of the Ph.D. student. This committee must be formed and meet by the end of the Fall Quarter ofthe second year. Please note that the Candidacy Committee and Dissertation Committee can be identical and the Eforms system allows the assignments to be duplicated nearly automatically, but will still need the faculty to individually approve their roles.

The five-member committee must include at least three tenured or tenure-track faculty memberswith an appointment in the Biology department, one of whom is the student's Dissertation Advisor. At least one of the committee members must be from outside the student's department.The Chair of the Dissertation Research Committee will be one of the departmental faculty members on the committee other than the Dissertation Advisor. It is recommended that the Chair be a tenured faculty member whenever possible; the Chair must be a tenure-track faculty member. The committee must be approved by the Graduate Program Committee and the Department Head. Recognizing that there may be reasons for committee composition to deviate from the above model, the student and advisor may petition the Graduate Program Committee tomodify the guidelines on an individual basis.

The student will conduct dissertation research under the direct supervision of the Dissertation Advisor and the general guidance of the Dissertation Research Committee. The Dissertation Research Committee must be convened at least once per year to assess whether the student is making satisfactory progress toward the degree. If possible, this meeting should correspond tothe student's required annual Graduate Research Seminar presentation.

## 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).

All students are expected to complete this examination by the end of the Summer Quarter of their second year.

The Candidacy Examination will be conducted by the student's Doctoral Candidacy Committee, which will be comprised of the Dissertation Research Committee and any additional members deemed necessary by the Dissertation Research Committee.

The candidacy exam is comprised of two parts described below:

## Timeline:

- Candidacy exam will consist of two parts, foundations (Part 1) and proposal defense (Part 2), which will take place in separate exam meeting dates (approximately one month apart).
- The candidacy exam should be completed by the end of the Summer Quarter of student's second year. The thesis committee should be formed no later than by the end of Spring Quarter of student's second year, or no later than one month before Part 1 of the exam.
- At least one month prior to the candidacy exam Part 1, students will send to their committee either a zoom recording of a 20-minute presentation* or a one page write-up on their project. The presentation/write-up will:

1. introduce the basic background of the research
2. introduce the overall hypothesis/research question and aims of the proposed research
*It will be sufficient to make the presentation a voice over the PowerPoint slides without using a camera. The total amount of text in the Power Point presentation should be roughly equivalent to the one page write-up; students may choose to submit the the text of their presentation as a separate document.

- Based on this presentation, the committee will formulate in private, via email communication, three to five basic areas of knowledge, on which the students will be questioned during the candidacy exam Part 1. Following the email discussion, the chair if the committee will inform the student of the areas of foundational knowledge, on which they will be questioned.
- It is recommended that faculty members of the committee propose an area that's near to their expertise and that they will be able to assess during the exam.


## Exam content:

## Candidacy exam Part 1 (foundations):

Will focus on assessing the foundational knowledge (up to five predefined
foundational areas) of students with regard to their project.

- Students will give a 10-15 minute oral presentations on the background of their proposed thesis research project, focusing primarily on the knowns/unknowns and the rationale that frame their overarching research hypothesis/question(s) and aims.
- The committee will assess whether students have sufficient knowledge of the field of research (basic textbook-like knowledge and more specialized up-to-date research findings) through 60 minutes of oral questioning.
- During this portion of the exam, the committee may also provide written and/or oral feedback on the aims and hypotheses of proposal in preparation for Part 2 of the candidacy exam.


## Candidacy exam Part 2 (proposal defense):

This portion of the exam will require:

- submission of a written pre-doctoral fellowship research proposal (1-page specific aims, and $\sim 6$-page significance + research strategy) one week before the exam
- An oral presentation and defense of the research proposal before the committee
- The committee will assess students based on the written proposal and the 60 minute oral defense
- Students are expected to demonstrate competence in five specific aspects of proposal building:
- the design and testing of hypotheses and experiments
- anticipation of caveats and outcomes
- use of appropriate techniques and approaches
- interpretation of results
$\bullet$ thinking of alternative approaches.


## Exam evaluation:

An evaluation guidelines for the two parts of the candidacy exam will be developed for more equitable assessment and outcome. This guidelines will be shared with the students ahead of their exam to assist in their preparation.

- Part 1 evaluation: committee members will evaluate students on foundational knowledge areas close to their fields of expertise, rendering a pass/fail assessment.
- If student has failed in one or two foundational areas, they will be given written essay type of question which they will have to answer satisfactorily to pass.
- Failing more than two foundational areas will result in failing Part 1 of the exam.
- Passing Part 1 of the exam is required before taking Part 2.
- Part 2 evaluation: committee members will score the performance of the student in the written proposal and during the oral defense in each of the five aspects of proposal building, as defined above. The scores will be on an NIH/NSF-style numerical scale* and will follow the evaluation guidelines. The scores for each proposal aspect ${ }^{10}$ will be averaged.
- The chair of the committee will provide the student with a summary of comments and with feedback. Students are encouraged to discuss the comments with their PI.
- Scores within the passing range, together with the comments and feedback, should be taken as a guide to identify areas of strength and areas in need of improvement.
- Students who score an average lower than the passing score (7-9 for NIH-scale, Poor for NSF scale) will be asked to revise the corresponding aspect of their written proposal and/or will be given a written question(s) that requires demonstrating improved thinking and competence on the aspects of the proposal which were identified as major weaknesses.
* Committees will use either NIH (1-9) or NSF (Excellent - Poor) evaluation scales, as



## Exam outcomes:

Based on a student's performance, a grade of pass, revise, or fail will be given in both aspects (foundations and proposal defense) of the candidacy exam.

- If a student is asked to revise either a foundational area in Part 1 or a proposal aspect in Part 2 of their exam, as described in Evaluation section above, 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 that Part of the exam.

Failing either Part (after the revisions) will lead to the following consequences according to the established policy for graduate students who fail their candidacy exams:

- If a student should fail either Part of 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 Program Committee to be permitted to complete a Non-thesis Master's degree, provided they meet the credit requirements

Once a student passes the candidacy exam, they are considered a Ph.D. candidate and must complete the necessary E-forms to notify the Graduate Program Manager and the Graduate College.

## Dissertation

The student will finalize their Dissertation only after approval to write is granted by the Dissertation Research Committee during the penultimate sufficiency meeting. Approval will be based upon an evaluation of the breadth anddepth of original research being conducted by the student. The dissertation must follow the format specifications set forth in the Drexel's Office of Graduate Studies.

## Dissertation Defense

Research conducted for the Dissertation must be presented in a lecture open to the public and then defended, privately, before the student's Dissertation Research Committee. The Dissertation defense must be scheduled with the Graduate College four weeks in advance, using

Dissertation Defense tab on Eforms. 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 one week 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 oral defense (with the assent of at least four-fifths of the committee members) and the committee will submit their approvals through Eforms. The Dissertation must be submitted in the thesis format outlined in Haggerty Library's Thesis Manual [http://www.library.drexel.edu/thesis], have been submitted to HaggertyLibrary, and include the Thesis Approval Form before the student shall receive the Ph.D.
degree.

## Mileposts in the Ph.D. Program

1. Selection of Dissertation Advisor Rotations - Students must select a Dissertation Advisor by the beginning of Summer Quarter in their first year.
2. Committee - Dissertation Research Committee constituted by end of the first year.
3. Coursework - Core coursework must be completed within the first two years of study, unless the Dissertation Research Committee requires otherwise.
4. Exam - The Candidacy Examination successfully completed by the end of second year.
5. Sufficiency Meeting -
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.

## B. The Master of Science Degree with Thesis

The M.S. degree with thesis is for students interested in advanced graduate coursework and experience in completing an original research project. Students should choose a research advisor during their first quarter. 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 Thesis Research Committee, and the Graduate Program Committee.

## Coursework

The M.S. degree requires 45 credits beyond the Bachelor's degree, part of which will be credits for research and thesis. Students must maintain a cumulative grade point average (GPA) of at least a 3.0.
A maximum of 12 credits for independent research (either library or laboratory work, under direction of a faculty member from the Department) may be counted toward the degree. The courses that are applicable to this degree must be approved by the Graduate Program Manager in consultation with the Graduate Program Director. Annual meetings with the Graduate Program Manager are required. The first step is to submit a Plan of Study suited to your individual needs through the Graduate Program Manager.

## Final Grades.

Permanent/final grades are awarded in one of two ways.1. Some courses are graded on a letter grade system ( $A+, A, A-, B+, B, B-, C+, C, C-, D+, D$, or $F)$. These grades have numerical quality point weights. Students may not receive more than two grades of C in graduate courses towards degree completion. Any additional grades of C , beyond the allowable 2 , will not be counted towards degree progression, however will be counted in the term and cumulative GPA calculations. Note that all graduate students are required to maintain a cumulative grade point average of 3.00 or higher to remain in good academic standing and progress toward graduation.
Graduate students must have a minimum 3.00 cumulative GPA in order to graduate, i.e. students cannotgraduate while on academic probation.

## M.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 with an appointment 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 have appointments in the Department. The Chair of the Thesis Committee shall be a tenure-track faculty member from within the Biology Department who is not the thesis advisor and preferably tenured. Submit Form D1 to the Graduate Program Manager.

Research. The student will conduct thesis research under the direct supervision of the Thesis Advisor and general guidance of the Thesis Research Committee. M.S. (Thesis) students are not expected to complete the laboratory rotations described above for $\mathrm{Ph} . \mathrm{D}$. students. The Thesis Research Committee must be convened at least once per year to assess whether or not the student is making satisfactory progress toward the degree.

Thesis Proposal. Within one year of entering the program, the student must orally present and defend their M.S. Thesis Proposal to the Thesis Research Committee. Committee members may examine the M.S. student on subject matter related to their thesis project. Submit Form D3A to the Graduate Program Committee, through the Graduate Program Manager.

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 Thesis Research Committee. The Thesis Defense must be scheduled with the Departmental Office 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 one week 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) and the Thesis must be accepted by the Library before the student will receive the M.S. degree. Submit Form D5, the Thesis Approval Form, and the Completion Form to the Graduate Program Committee, through the Graduate Program Manager.

Any student passing the M.S. thesis defense may apply to transfer to the Departmental Ph.D. program through the Office of Graduate Studies. The application will be forwarded to the Graduate Program Committee for their recommendation to the Department Head.

## Mileposts in the M.S. Thesis Program

1. Advisor - Students must be accepted into the laboratory of their Thesis Advisor by the end of the first quarter.
2. Committee - Thesis Research Committee must be constituted by the end of the second quarter
3. Proposal - Thesis Proposal acceptance by the Thesis Research Committee must be successfully completed by the end of the first year.
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.

## C. The Master of Science Degree, Non-Thesis

The non-thesis M.S. degree is a coursework-based degree for those looking to advance in their fields, but not desiring direct research experience.

## Coursework

This degree requires 45 credits beyond the Bachelor's degree. A maximum of 4 credits for independent research (either library or laboratory work, under direction of a faculty member from the Department) may be counted toward the degree. Students must maintain a cumulative grade point average (GPA) of at least a 3.0.
The courses that are applicable to this degree must be approved by the Graduate Program Manager in consultation with the Graduate Program Director. Annual meetings with the Graduate Program Manager are required. The first step is to submit a Plan of Study suited to your individual needs through the Graduate Program Manager.

## Final Grades.

Permanent/final grades are awarded in one of two ways.1. Some courses are graded on a letter grade system ( $A+, A, A-, B+, B, B-, C+, C, C-, D+, D$, or $F$ ). These grades have numerical quality point weights. Students may not receive more than two grades of C in graduate courses towards degree completion. Any additional grades of C, beyond the allowable 2, will not be counted towards degree progression, however will be counted in the term and cumulative GPA calculations. Note that all graduate students are required to maintain a cumulative grade point average of 3.00 or higher to remain in good academic standing and progress toward graduation.

## Mileposts in the M.S. Non-Thesis Program

## Graduate Co-op Option: Non-thesis MS

Students registering for an MS with graduate co-op will gain 6 months of work experience in the summer/fall term (year 1/year 2). The Steinbright Career Development Center will provide students with an overview of professionalism, resume writing, and the job search process. Students will not earn academic credit for the co-op but will earn 9.0 non-academic co-op units per term.

Course requirements for the Biology MS tracks are listed in the Drexel University catalog.

## D. Bachelor's/Master's Dual Degree Program

The Bachelor's/Master's Dual Degree Program allows exceptionally qualified students in Biology to earn both a bachelor's degree and a master's degree in five years. Interested students should see the Biology Graduate Program Manager for more specific details. The first step is to submit a Plan of Study suited to your individual needs through the Graduate Program Manager.

## Application

Exceptional students with a Drexel cumulative grade point average of at least 3.5 are eligible to apply. Students should apply to the Biology Graduate Program Committee after they have completed 90 undergraduate credits and before they have completed 120 credits, which is normally during the pre-junior year.

Students are strongly encouraged to begin planning for entry as early as their freshman year. Approvals to enter the program start with the Biology Graduate Program Committee, then the undergraduate department head, graduate department head, and finally academic dean.

## Changes in the BS Program

Students generally need to take larger course loads by their sophomore year in order to make room for graduate courses in the later years. Several courses normally taken in the senior year will be taken in the junior year. The requirements for the B.S. degree will be 180 credits accomplished by not requiring free elective credit. The free electives are replaced with graduate courses to satisfy the requirements for the Biology M.S.

## M.S. Program Requirements

It is anticipated that most B.S./M.S. students will follow the non-thesis option as outlined above. The non-thesis option requires 45 graduate credits. Up to 4 credits of BIO 997 Research can be included in the non-thesis option. A thesis option is available if a faculty member has agreed to serve as thesis advisor at the time of acceptance into the B.S./M.S. program. In the thesis option, up to 12 credits of BIO 997 can be included among the course requirements. A student can petition the Graduate Program Committee to allow a greater number of research credits.

## III. Responsibilities of the Student

Submission of a Plan of Study. A plan of study is a description of the courses a student intends to take tofulfill their degree requirements. All graduate students must have an approved and current Plan of Study filed with the Department. Department curriculum sheets (or Plans of Study) listing the program's core requirements in the first year should be used prior to formal submittal through EForms at the end of the first year. For the first year, any changes to the existing course plan must be filed with and approved by the Graduate Program Committee prior to the start of any classes. For the second year, and each year thereafter, the Plan of Study will be updated by the student and their Dissertation/Thesis Research Committee at each Committee meeting and filed with the Graduate Program Manager. A Non- Thesis M.S. student must have their Plan of Study approved by the Graduate Program Committee prior tostarting classes each year.

Proposal. It is the responsibility of the Ph.D. 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 M.S. (thesis)student to propose (orally), plan, carry out and write up the research results in a M.S. thesis format as outlined in Haggerty Library's Thesis Manual [http://www.library.drexel.edu/files/services_documents/thesismanual.pdf].

Research Committee Meetings. Students in either the M.S. (thesis) or Doctoral Program must have at least one committee meeting per year (after the first year) and 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 thesisproposal serves as the basis of the Candidacy examination at the end of the second year. Progress in these responsibilities will be evaluated by student's thesis or dissertation committees.

## Progress Report

All students are expected to submit a progress report of 1-2 pages to all committee members no later than one week prior to the scheduled committee meeting. The format is largely at the discretion of the DoctoralCommittee Chair, but the Graduate Committee suggests the following outline:
A. Changes: Since the last committee meeting, have significant changes occurred in the pursuit oforiginal research aims.
B. Progress: Describe concisely the research performed and primary results obtained since the lastmeeting. List all publications and manuscripts in progress.
C. Plans and Timeline: Research goals and activities proposed for next year and a tentative timeline forcompletion.
D. (For advanced candidates) A brief discussion of current career goals

Following the meeting, the progress report should be uploaded into the Supporting Documents
tab in Eforms.

## Doctoral Committee Meetings

1. Prior to each meeting, the student should contact the Graduate Program Manager to go over procedure for documenting the annual meeting in EForms. This will also serve to notify the Graduate Program Manager that a meeting is taking place.
2. All doctoral candidates are expected to have at least one committee meeting each year
3. While the student remains responsible for scheduling the meeting (using Doodle), the Graduate Program Manager may contact the student's faculty advisor and Doctoral Committee Chair in cases inwhich the student has gone more than a year without a meeting
4. The Graduate Committee recommended that meetings should be focused on student progress towards research aims and specific student needs (rather than serving as a detailed account of all of thestudent's research activity). Ideally, the meeting should last no longer than 2 hours in length and when possible can be aligned with the student's research presentation at the departmental seminar.

## Sufficiency Meeting

A penultimate meeting of a student's Doctoral Dissertation Committee, where the Committee a) confirmsthat the student has completed all necessary experiments and, b) gives the student the "go-ahead" to start writing up the dissertation. The student and committee should come away from this meeting with a detailed timeline for completion along the lines of: From today, the student has $x$ months to defend, and $x$ - 1 months to turn the complete draft of the dissertation into the committee.

Research Publications. It is expected that the completion of a Ph.D. dissertation will be accompanied bythe production of at least one to two scientific manuscripts, suitable for publication in peer-reviewed journals. Students are also encouraged to prepare a review manuscript for publication based on their research area. This will be an extension of their thesis or dissertation literature review. It is anticipated that the completion of a M.S. (thesis) degree will be accompanied by the preparation of at least one scientific manuscript suitable for publication in a peer-reviewed journal. With the agreement of the Thesis Research Committee, this is not required.

## IV. Satisfactory Progress in the Ph.D. or M.S. Degree Program

In order 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 which is required for all students in Ph.D. or M.S. (thesis) programs.

1) Pre-candidacy students must meet expectations during their quarterly evaluations. A Research Performance Evaluation Form (available on the department website) must be completed by the student's Dissertation Advisor and signed by both the student and advisor by the end of each quarter prior to successful completion of the Ph.D. candidacy exam or M.S. (thesis) proposal defense. Research performance evaluations can be uploaded into Eforms.
2) Students must meet with their Dissertation/Thesis Research Committee at least once each year to discuss their progress (e.g. courses completed, exams taken, research goals attained, etc.).
3) After this meeting, the Dissertation/Thesis Research Committee must notify the student and the Graduate Program Director in writing whether the committee believes the student is making satisfactory progress toward their degree. If the Dissertation/Thesis Research 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.
4) If a student's Dissertation/Thesis Research Committee decides the student is not making satisfactory progress, then the student is placed on probation. The student must then reconvene their Dissertation/Thesis Research 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 Dissertation/Thesis Research 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.
5) It is the student's responsibility to schedule the meetings with their Research Committee and documenting the meeting in the Annual Review tab on Eforms. Failure to meet the Research 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. TEACHING FELLOWSHIPS \& RESEARCH FELLOWSHIPS

## Purpose

The purposes of Teaching Fellowships and Research Fellowships are to support the teaching and research functions of the Department and to support the education of graduate students. Teaching Fellowships are awarded primarily on the basis of academic ability and performance. Appointment to teaching assistantships also requires the ability to teach effectively. The effectiveness of TF teaching will be assessed quarterly.

## Appointment procedure

1. Teaching fellowships (TFs) will be awarded to $1^{\text {st }}$ and $2^{\text {nd }}$ year Ph.D. candidates and, whenever possible, will be made during spring term for the following academic year. Research Fellowships (RFs) will be awarded by individual faculty members, who are principal investigators holding grants and/or contracts. Students with Research Fellowships must engage in research toward the completion of their Ph.D. Thesis.
2. The Graduate Program Committee will recommend to the Department Head candidates for graduate teaching fellowships (TFships) from among those who have applied for such appointments. Regular (full-time) TF positions are normally awarded on a yearly basis and teaching assignments will be scheduled for all 4 academic quarters.
3. 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 departmental seminar series and departmental research activities. TF positions 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.
4. The Graduate Program Committee shall maintain a prioritized list of applicants who may be available as TFs in the event that additional teaching assistants are required. Such ad hoc appointments are made on a quarter-by-quarter basis.

## Criteria for Graduate Teaching Fellowships

1. TF support is dependent on the graduate student's academic standing, student and faculty teaching evaluations, satisfactory progress towards their degree, and active participation in departmental seminar series and departmental research activities.
2. Regular (full-time) TFships are awarded only to full time Ph.D. students.
3. During the Fall term, new TFs are required to take GRAD t580 TA Orientation and Prep course to support their college teaching. This is a 1 -credit course which carries no tuition charges.
4. All international students with a Teaching Fellowship are required to take the SPEAK exam which tests for oral proficiency. This test is given as part of the ITA Program or upon your arrival to Drexel. Students must successfully pass the SPEAK exam with a minimum score of 55 by the end of their third term.
5. New, entering Ph.D. students are guaranteed a TF position for their first two years in the graduate program, assuming they maintain satisfactory academic progress and receive satisfactory teaching evaluations.
6. Post-candidacy Ph.D. students are eligible for TF positions when research fellowships are not currently available in the thesis laboratory. However these TF positions are not guaranteed and will be limited in number.
7. TF appointments will be made in such a manner as to assure wide and diverse representation from all academic areas of the Department.

## Assignment and Duties of Teaching Assistant

1. Teaching fellowships are awarded on a competitive basis by the Department Head from a prioritized list maintained by the Graduate Program Committee.
2. Assignment of TFs to specific courses shall be judged based on academic record, GRE and TOEFL scores (international students), letters of recommendation, and the personal statement in the graduate application.
3. Faculty can notify the Graduate Program Committee of applicants with special skills needed to teach particular courses.
4. Duties of TAs shall be established by the supervising faculty member in consultation with the TAs at the beginning of each quarter.
5. The activities required for a regular (full-time) assistantship require 20 hours/week on average.

## Field Season Policy

TFs with research that requires field work (domestic or abroad) are allowed a one term exemption for a Field Season during the academic year. TFs that opt for this exemption will have additional TF responsibilities in another term or terms during the year. Field Season notification is expected at the beginning of each academic year so that TF numbers are accurately projected for the year.

## Biology Graduate Student Vacation Leave Policy:

Biology Ph.D. students are eligible for two weeks (ten working days) of vacation time per year in addition to the observance of all days in which the University is closed (refer to Provost Calendar for most updated closure policy), noting that intersession breaks are not University holidays. At least three weeks advance notice must be given for all planned vacation time requests.

It is required that the timing for all vacation leaves be discussed and agreed upon by the student's primary advisor and teaching assistantship (TA) immediate supervisor, if applicable. Primary advisors and immediate supervisors should make reasonable effort to accommodate the student's request for Vacation Leave. All vacation approvals must be in writing and will be forwarded to and archived by the Graduate Program Manager (Graduate Adviser). The student's primary advisor must approve any vacation time beyond two weeks, which will be recorded by the Graduate Advisor.

Students are allowed to take time away from their duties to allow for sick leave. Time used to recover from injury or illness is not considered vacation time. In the event of an emergency, illness, or injury that results in a necessary absence from the lab, it is the graduate student's responsibility to contact their primary advisor as well as their direct TA immediate supervisor, if applicable, as soon as possible. If a student takes an unapproved vacation time, their stipend may be suspended until they return. If a student is not able to resolve potential issues in obtaining approval for desired vacation time, they must first contact the Graduate Program Director or Department Head in the event that the Graduate Program Director is their immediate supervisor.

## VI. Graduate Curricula

The various curricula in the graduate programs are designed to provide a sound professional education, which encompasses the factual, theoretical concepts, and research skills and training. Below are the suggested curricula for the major academic tracks within the department. In addition, students may create an individualized curriculum with consultation and permission of their Research Committee and the Graduate Program Committee.

## M.S. thesis \& Ph.D. students

The faculty of these disciplines feel it is important for each student to be conversant at an advanced level with the material in biochemistry, cell biology, genetics and molecular biology. Therefore during the first year of study there is a flexible core curriculum that provides a strong understanding of general concepts of these disciplines. The second year provides a range of more advanced and specialized topics as elective courses. This core sequence is advisory to individual Research Committees (once constituted), since they can recommend specific courses based on individual student's background and needs. M.S. students may take up to 12 credits of research.

## Required Seminars

All Ph.D. and M.S. (thesis) graduate students are required to attend the Graduate Student Research Seminar/Departmental Seminar on Tuesdays from 3:30pm - 4:50pm. With the exception of first and second year students, all Ph.D. students are required to present in Graduate Student Research Seminar once per academic year.

## PhD Curriculum

The PhD Curriculum is comprised of core required courses and distribution courses divided into two tracks: Cell Molecular Biology Genetics (CMBG) track and Ecology/Evolution.

## Core Courses: Required for both CMBG and Eco/Evolution tracks:

- BIO 740: Readings and Critical Thinking in Biology (3 credits: Fall)
- RCRG 600: Responsible Conduct of Research 0 credit: Winter))
- ENVS 506: Biostatistics (3 credits: Spring **)
- BIO 701: Bioscience Grant Writing (3 credits: Fall of Second-Year)


## CMBG Track

- BIO 500 Biochemistry ( 3 credits: Fall)
- BIO 635 Advanced Genetics \& Molecular Biology (3 credits: Winter)
- BIO 632 Advanced Cell Biology ( 3 credits: Spring)
- One elective course


## Ecology/Evolution Track

Choose two of the following:

- ENVS 527 Molecular Ecology (3 credits: Fall)
- ENVS 528 Conservation Biology ( 3 credits: Winter)
- BIO 636 Population Genetics (4 credits: Spring)
- Plus two additional elective courses
**Biostats options offered outside of Bio department.
*Requirements may be waived by the Graduate Program Committee or the Dissertation Research Committee, once it is constituted, based on the student's academic record. If a waiver is granted, an appropriate elective course will be substituted for the required course.
. After successful completion of the candidacy exam, students should register for 7.5 credits of Ph.D. Research (BIO 997) and 1.5 credits of the Graduate Research Seminar each subsequent term.


## I. Biology and BEES Graduate Student Association (BGSA)

## BGSA Executive Board for 2023-24

President:
Vice President of Biology:
Vice President of BEES:
Secretary:
Treasurer:
Event Coordinator:

Tetyana Martynyuk (BIO)
Breanne Hewitt (BIO)
Sophia Larson (BEES)
Ive-Anwuli Ralph- Uyalor
Christina Thomas (BIO)
Laura Miller (BIO)
tm3272@drexel.edu bh659@drexel.edu sk157@drexel.edu ir333@drexel.edu cmt397@drexel.edu lem344@drexel.edu

## BGSA CONSTITUTION

Revised and Ratified: 22 March 2019
We, the graduate students of the Drexel University Departments of Biology and BEES, through the establishment of this Constitution on the 1sday of June 2005, do hereby empower the officers of the Biology and BEES Graduate Student Association to work on our behalf in order to encourage a constructive relationship between the students, faculty, staff, and administration of the departments of Biology and BEES at Drexel University; to represent the diverse interests and needs of graduate students within the departments and to the Drexel community; to provide a channel for the communication of graduate student ideas; and to provide services that will benefit and protect the interests of Drexel's graduate students in the departments of Biology and BEES.

## ARTICLE I: Name

The name of this organization shall be the Drexel University Department of Biology and BEES Graduate Student Association, hereinafter referred to as the BGSA. The name may be stylized as "B2GSA" where appropriate.

## ARTICLE II: Object

The Association will:

1. Provide a forum for information exchange between graduate students and faculty and administration, such as but not limited to, issues regarding course development, teaching and research assistant responsibilities, departmental research environment and activities, and expectations for degree fulfillment.
2. Elevate the academic experience for both graduate and undergraduate students in the Biology and BEES departments, advance the research environment, and set the stage for high-quality graduate student and faculty recruitment.

## ARTICLE III: Membership

Membership in BGSA is open to all full- and part-time graduate students in the departments of Biology and BEES regardless of degree program, race, religion, national origin, color, sex, gender, sexual orientation, age, veteran status, or ability as long as they are enrolled at the university. Undergraduate students, postdocs, research technicians, staff, and faculty will be encouraged to participate in meetings and activities, but will not receive privileges of membership.

## ARTICLE IV: Students Rights

1. All graduate students that are current members of the BGSA have the right to vote in the BGSA elections and referendums.
2. All graduate students have the right to speak and be heard at the General Meetings.
3. All graduate students have the right to serve on BGSA committees.
4. All graduate students have the right to reasonable access to official BGSA information and records. This includes, but is not limited to, official meeting records and candidate applications for election or appointment.
5. All graduate students have the rights and responsibilities defined in the University's Student Handbook and these rights cannot be impeded by the BGSA.

ARTICLE V: Elections and Officers

The offices of President, Vice President of Biology, Vice President of BEES, and Treasurer are reserved for full-time graduate students. Additionally, the office of the President can only be held by a graduate student with at least one year of Executive Board experience. Other offices and positions may be held by any graduate student in the departments of Biology and BEES.

Terms will be yearly and mirror the academic calendar beginning in the fall term. All officers are responsible for collectively making the yearly budget, planning events, and documenting those events with attendance records and photos.

All offices must be actively fulfilled at all times. In the event that the President, either Vice President, or Treasurer amends their status from full-time to part-time during the term or if any officer leaves their department or the University, the vacant office will be filled by open election.

If two people are running for the Community Chair position, they can propose splitting the position. A majority vote among at least $25 \%$ of the BGSA membership would be needed to approve this split, upon which the two students would be co-chairs.

## Elections

1. Elections will be by anonymous online voting and will occur in the following order, allowing one person to run for multiple offices based on outcome of each election: President, Vice President of Biology, Vice President of BEES, Treasurer, Secretary, and Community Chair(s).

- Assistant positions may be appointed for any position, excluding the President, at the prerogative of the full new board. Assistant positions are not official members of the Executive Board, and are not elected but appointed after self-nominations.

2. Elections for the following fall term's Executive Board will take place during the preceding April, as scheduled by the acting Executive Board.
3. Positions will be elected by a majority of at least $25 \%$ of total membership, via online votes to the acting Secretary.
4. A member wishing to run for an office must submit their name to the Executive Board no later than one week prior to the election, and must state the following: name, degree status, intended graduation date, all offices of interest, and a short summary to the specifications of the Executive Board generally stating why the individual is interested and a suitable candidate for a preferred office.
5. All candidates who want to be considered for an Executive Board office must be in good academic standing with the University during the term in which elections are held and must meet the following requirements:
a. Each candidate must have a 3.0 cumulative grade point average.
b. Each candidate may not have a standing judicial sanction.

Eligibility will be verified by the Faculty Advisor in consultation with the Department Heads.
6. The office of President will switch yearly between Biology and BEES graduate students, with BEES Presidents serving odd-year fall terms and Biology Presidents serving even-year fall terms.
a. In the event that all eligible graduate students from that year's department decline to run for the office of President, election to the office will be opened to the Executive Board members from the other department for that year.
b. The even-year, odd-year order will not be changed in the event that one department holds the office of the President for two years in a row due to the second department declining.

President

1. The President shall be the official representative of the Biology and BEES graduate student body.
2. The President will be responsible for organizing and overseeing both General and Executive Board meetings.
3. They will directly interact with the Vice Presidents, Treasurer, Secretary, and Community Chair to fulfill the obligations of the Executive Board to the general membership.
4. They will be responsible for interaction with the University. The President will also establish and dissolve ad hoc committees to meet the changing needs and goals of the Association.
5. The President will attend mandatory GSA officer trainings and senate meetings, and will file pre- and post-event forms with the aid of the Treasurer.
6. The President is responsible for forming contracts with event vendors.
7. The President is responsible for planning all General Body Meetings with Food each year.

## Vice President of BEES

1. The primary responsibility of the Vice President of BEES will be to act as the Association liaison to the Faculty and Staff of the Department of BEES.
2. The Vice President will be a member on the Graduate Committee, thus being required to attend all of their meetings or send a substitute in their place. The Vice President will also attend all BEES faculty meetings.
3. The Vice President of BEES will fulfill all duties in the absence of the President with the aid of the Vice President of Biology.
4. The Vice President of BEES is responsible for planning two events per year.

## Vice President of Biology

1. The primary responsibility of the Vice President of Biology will be to act as the Association liaison to the faculty and staff of the department of Biology.
2. The Vice President of Biology will be a member on the Graduate Committee, thus being required to attend all of their meetings or send a substitute in their place.
3. The Vice President of Biology will also fulfill all duties in the absence of the President with the aid of the Vice President of BEES.
4. The Vice President of Biology is responsible for sitting on the Department's Infrastructure Committee as the graduate student representative.
5. The Vice President of Biology is responsible for sitting on the Department's Scientific Retreat Committee if the Community Chair is not a Biology student.
6. The Vice President of Biology is responsible for planning two events per year.

## Treasurer

1. The Treasurer will be fully responsible for organizing the financial resources of the organization, allocating funds, and maintaining a workable budget which is to be approved by the Executive Board.
2. As a result of these responsibilities, the Treasurer will work closely with the President, the Faculty Advisor, and the Office of Campus Activities.
3. The Treasurer will attend mandatory GSA officer trainings and senate meetings, and will file pre- and post-event forms with the aid of the President.
4. The Treasurer is responsible for planning two events per year.

## Secretary

1. The Secretary will be responsible for organized information exchange within the organization such as, but not limited to, recording and maintaining minutes of meetings, maintaining an updated membership roster, contact information, web site, and listserv.
2. The Secretary will schedule rooms as needed, post meeting times and locations, and maintain an attendance record and minutes of all meetings.
3. The Secretary is responsible for organizing online voting and keeping track of votes received.
4. The Secretary is responsible for organizing four events per year.
5. The Secretary is responsible for maintaining and updating the website.

## Community Chair

1. The Community Chair will oversee the activities of ad hoc committees.
2. The Community Chair is responsible for sending a list of proposed events to the faculty adviser before budget submissions.
3. The Community Chair is responsible for planning activities related to outreach within the greater Philadelphia and Drexel communities.
4. The Community Chair is responsible for sitting on the Department of Biology's Scientific Retreat Committee unless they are from the BEES Department, in which case this responsibility defers to the Vice President of Biology.
5. The Community Chair is responsible for planning the majority of events each year, including reoccurring events, such as Labsgiving, Retreats, etc. The Community Chair should leave detailed documentation of the planning of these events, in order to create consistency in event planning from year to year.
6. If two students wish to split the position of community chair, see Article V.

## Assistant Positions:

1. Assistants may be appointed for: Vice President of Biology, Vice President of BEES, Treasurer, Secretary, and/or Community Chair based on interest and the needs of the board.
2. Assistants should attend at least one meeting a month.
3. Assistants will fill in for Vice Presidents if they cannot attend graduate program committee meetings, faculty meetings, or other committee meetings.
4. They are responsible for organizing at least one event per year, with the help of the position holder. Assistant Community Chairs are responsible for helping to organizing the majority of events and helping to keep detailed records of event protocols.
5. Assistants are not full members of the Executive Board and thus do not have the voting rights and privileges thereof.

## ARTICLE VI: Advisors

A full-time tenure track or tenure Faculty Advisor must be in place at all times. The Faculty Advisor may serve as a liaison between the BGSA and the faculty, staff, and administration. The Advisor will be expected to attend one Executive Board meeting per quarter and will be invited to attend all other events. The Faculty Advisor will receive a list of all the proposed events from the Community Chair before the budget is submitted.

A candidate for Advisor must display interest in the position and be chosen by the Executive Board. The term of Advisor will not be limited by academic year and the position will only be filled when necessary by resignation or removal by the Executive Board. BGSA may appoint secondary advisors, if necessary, from within the departments of Biology and BEES to assist the Faculty Advisor.

The secondary advisor(s) must be full-time faculty or staff of the departments.

## ARTICLE VII: Executive Board

The primary function of the BGSA Executive Board shall be to ensure that the BGSA functions properly and effectively. The Executive Board will consist of the Faculty Advisor, President, Vice President of Biology, Vice President of BEES, Treasurer, Secretary, and Community Chair. The Executive Board will be responsible for addressing the demands, concerns, and interests of Members. The Executive Board will determine meeting agendas and schedule all meetings and events.

## ARTICLE VIII: Ad hoc Committees

Ad hoc committees can be formed by a BGSA executive board majority vote at any time during the academic year to focus activities, both social and academic, on specific disciplines within the diverse interests of the Departments of Biology and BEES. Each committee stands for one academic year before being put up to a renewal vote by the next year's executive board.

A member is not limited to participation on only one committee, but may be involved in any committee of interest. Committees may consist of members and non- members, and will have a Committee Chair that will report to the Community Chair. The Committee Chair must be a member of BGSA, and will be elected by the committee members under the direction of the Community Chair.

## ARTICLE IX: Meetings

1. All general meetings of the BGSA are open to all BGSA members. All those in attendance shall be permitted to debate.
2. All Officers of the BGSA shall be required to attend all BGSA meetings or send a representative in their place. Attendance will be taken at each meeting.
3. Any member of BGSA may initiate legislation.
4. All legislation and resolutions, within the limitations of this Constitution, shall be final and binding and may only be amended by approval of the Executive Board and by a majority of at least $25 \%$ of total membership, via online votes to the acting Secretary.
5. There will be at least one 20 minute period during each General Meeting to allow students to express their ideas and concerns to the BGSA.

## ARTICLE X: Impeachment

Upon the initiation of the impeachment process, the Executive Board shall inform the respondent of the impeachment at least five calendar days before the hearing. At this time all evidence should be available to the respondent upon request, for the formulation of their defense. The impeachment hearing will take place at the next scheduled General Meeting. Impeachment will be accomplished by a majority of at least $25 \%$ of total membership, via online votes sent to both the Secretary and the President.

## ARTICLE XI: Vacant Positions

1. A vacant position shall be made public by the Executive Board through meetings, advertisements, etc. no more than one week after the position becomes vacant.
2. Vacant positions shall be filled via an appointment by the Executive Board members.
3. All candidates will be interviewed by the Executive Board and attend an information session.

## ARTICLE XII: Substitutes and Representatives

1. A substitute is someone who is sent to a single Executive Board meeting by a standing officer who is unable to attend that meeting. This person may not vote or introduce legislation. They are there solely to give and receive information.
2. A representative is someone who is appointed by a standing officer when the officer cannot attend at least two Executive Board Meetings in a row. The representative will have all the rights and responsibilities of the officer they are representing that pertain to Executive Board meetings once a memo stating this intention from the original officer is received by the Secretary. This is a temporary appointment and cannot last for more than one term. An approval from the Executive Board and Faculty Advisor is necessary to extend this appointment.

## ARTICLE XIII: Ratification

Ratification of this Constitution will be accomplished by a majority of at least $25 \%$ of total membership, via online votes to the acting Secretary.

## ARTICLE XIV: Hazing Statement

Membership should be a valuable and beneficial experience for all students. Leadership of this organization shall provide its new and current members with an experience that is positive, informative, and consistent with federal, state, and local laws, and the policies and procedures of Drexel University. Activities which detract from the goal of fostering personal and intellectual development have no place in this organization. Hazing will not be tolerated by or any member. It is the responsibility of the organization, its leadership and members to report hazing of any kind by members to the proper authority.

## ARTICLE XV: Amendments

Proposed amendments must be submitted to Executive Board at least two weeks before discussion at General Meeting. Amendments will be adopted by a majority vote of at least $25 \%$ of total membership, via an online vote to the Secretary.

## ARTICLE XVI: Dissolution

The organization may be dissolved by order of the Office of Campus Activities or voluntarily by a majority vote of at least $25 \%$ of total membership, via an online vote to the Secretary.

## II. Academic Integrity

All members of the Department of Biology are firmly committed to zero-tolerance of academic dishonesty. Infractions can result in total loss of credit for exams and/or projects, failure of the course or dismissal from the program.

What follows is a brief description of examples of academic dishonesty from The Judicial Review Board of Drexel University.

## For a complete description of Academic services and policies go to: http://www.drexel.edu/cchc/studentlife/

In order to fully articulate its commitment to academic integrity and to protect members of its community from the results of dishonest conduct, the University has adopted policies intended not only to emphasize the imperative of integrity, but also to protect the rights of all members of the University community.

Cheating, plagiarism, and dishonesty will result in severe penalties, including expulsion from the University.

## Cheating

No student shall engage in an act or an attempted act of deception by which a student seeks to misrepresent that he or she has mastered information on an academic exercise that he or she has not mastered. Examples include, but are not limited to:

- Copying from another test paper;
- Allowing another student to copy from a test paper;
- Unauthorized use of course textbook or other materials such as a notebook to complete a test or other assignment from the faculty member;
Collaborating on a test, quiz, or other project with any other person(s) without authorization;
- Using or processing specifically prepared materials during a test (e.g., notes, formula lists, notes written on the student's clothing, etc.) that are not authorized;
- Taking a test for someone else or permitting someone else to take a test for you.

Violation(s) of the cheating policy is grounds for separation, via suspension or expulsion, from the University.

## Fabrication

Fabrication is the use of invented information or the falsification of research or other findings. Examples include, but are not limited to:

1. Citation of information not taken from the source indicated. This may include the incorrect documentation of secondary source materials;
2. Listing sources in a bibliography not used in the academic exercise;
3. Submission in a paper, thesis, lab report, or other academic exercise of falsified, invented, or fictitious data or evidence, or deliberate and knowing concealment or distortion of the true nature, origin, or function of such data or evidence;
4. Submitting as your own written work, printing, sculpture, etc. prepared totally or in part by another.

## Plagiarism

No student shall engage in an act or an attempted act of plagiarism, which is defined as the inclusion of someone else's words, ideas, or data as one's own work. When a student submits work for credit that includes the words, ideas, or data of others, the source of that information must be acknowledged through complete, accurate, and specific references, and, if verbatim statements are included, through quotation marks as well. By placing his/her name on work submitted for credit, the student certifies the originality of all work not otherwise identified by appropriate acknowledgments.

Plagiarism covers unpublished as well as published sources, including sources obtained electronically. Examples of plagiarism include, but are not limited to:

- Quoting another person's actual words, complete sentences or paragraphs, or an entire piece of written work without acknowledgment of the source;
Using another person's ideas, opinions, or theory, even if it is completely paraphrased in one's own words without acknowledgment of the source;
- Borrowing facts, statistics, or other illustrative materials that are not clearly common knowledge without acknowledgment of the source;
- Copying another student's essay test answers;
- Copying, or allowing another student to copy, a computer file that contains another student's assignment, and submitting it, in part or in its entirety, as one's own;
- Working together on an assignment, sharing the computer files and programs involved, and then submitting individual copies of the assignment as one's own individual work.

Violations of the plagiarism policy is grounds for separation, via suspension or expulsion, from the University.

## Academic Misconduct

Academic misconduct includes other academically dishonest acts such as tampering with grades or taking part in obtaining or distributing any part of an administered or unadministered test. Examples include, but are not limited to:

1. Stealing, buying, or otherwise obtaining all or part of an administered or un-administered test;
2. Selling or giving away all or part of an administered or un-administered test including questions and/or answers;
3. Bribing any other person to obtain an administered or un-administered test or any information about the test;
4. Entering a building or office for the purpose of changing a grade in a grade book, on a test, or on other work for which a grade is given;
5. Changing, altering, or being an accessory to the changing and/or altering of a grade in a grade book, on a test, a "change of grade" form, or other official academic records of the University that relate to grades;
6. Entering a building or office for the purpose of obtaining an administered or un-administered test;
7. Continuing to work on an examination or project after the specified allotted time has elapsed;
8. Any buying or otherwise acquiring any theme report, term paper, essay, computer software, other written work, painting, drawing, sculpture, or other scholastic art work, and handing it in as your own to fulfill academic requirements;
9. Any selling, giving, or otherwise supplying to another student for use in fulfilling academic requirements, any theme, report, term paper, essay, computer software, other written work, painting, drawing, sculpture, or other scholastic artwork.
