Biology Department Ph.D. Handbook

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ABOUT THE DEPARTMENT

Mission

The goal of the Ph.D. program in the Biology Department ("Department" hereafter) at the University of Texas at Arlington (UTA) is the development of the graduate student's abilities for creative scientific research, analytical evaluation, and scholarship in the biological sciences. The Department provides an active research environment for graduate students in the major research areas of ecology and evolution, genome biology, microbiology, and molecular and cellular biology.

Ph.D. in Quantitative Biology

The Doctoral Program in Quantitative Biology is our primary research degree program and is research centric. A student can enter the doctoral program after having achieved either a prior bachelor's degree or a prior master's degree. The student will directly join one of our research faculty's labs for their dissertation work (direct admission) or will rotate between three labs before choosing one (rotation admission). Our research faculty are engaged a broad range of research topics and rotations can help the students decide on research topic and mentoring fit. Students are provided with the resources they need to succeed in their graduate program through mentoring by faculty, access to state-of-the-art laboratories, and outstanding courses. Graduates of this program are highly trained and should have a competitive advantage for careers in academia, industry, or government.

Communication

Email is the official means of communication, by UTA, and by the Department. Students are responsible for keeping up with both their "Mavs" or student email (@mavs.uta.edu), AND their "employee" email (@uta.edu).

Microsoft Teams is UTA's preferred mode of instant messaging and video conferencing. While individuals or labs may prefer another mode of

messaging or video communication, students should utilize their UTA Microsoft Teams account.

UTA and the Department both use listservs as communication tools. Listservs are "locked down" and require administrative staff to add and remove members and/or senders.

1. Receiving email via listserv

Please add the following listserv addresses to your "safe" list, and check junk mail regularly to assure you are not missing important communication:
BIOL_PHD_ALL@listserv.uta.edu
BIOL_DEPT_ALL@listserv.uta.edu
Each lab also has a listserv:
BIOL_********_LAB@listserv.uta.edu (******** = Faculty member's last name)

2. Sending email to listserv

Most listservs are set up for staff and/or faculty use only. Labs are the exception - we add all lab members to the "safe senders" roster for the respective listservs. If you need to send an email to a listserv, a good way to start is to email front office staff and ask them to forward your email. Or, you may ask for permission to send to a particular list.

UTA and the Department use Sharepoint to share and collaboratively edit shared documents. Go here for more information, and to get access: https://oit.uta.edu/services/sharepoint-online/

Graduate Program Contacts

Graduate Program Faculty Advisor – Dr. Mark Pellegrino: (mark.pellegrino@uta.edu)

> Advises all Ph.D. and MS thesis students. Provides guidance on the graduate program including courses, committee structure, milestones, etc. Reviews and tracks progress of all Ph.D. and MS thesis students. Assists with any graduate student grievances associated with the graduate program. Works with the Graduate Program Staff Advisor to ensure that all students are appointed and enrolled each semester.

Graduate Program Staff Advisor– Stephanie Fenton (stephanie.fenton@uta.edu)

Supports Ph.D. and Master's programs, from admissions to graduation, including: open house, recruiting, record-keeping, degree progress, enrollment, catalog maintenance, all forms or anything milestone related, etc. Processes grad student GTA/GRA support and tuition disbursement forms. Assists Graduate Faculty Advisors. Listserv maintenance.

Associate Chair – Dr. Melissa Walsh (mjwalsh@uta.edu)

Makes teaching and Teaching Assistant assignments. Supervises all GTAs, and approves their appointments and hiring as instructors with Human Resources. Is responsible for performance reviews of GTAs, in coordination with the course or lab instructor, and will help to mediate any issues with GTA performance. Is also responsible for addressing any grievances undergraduate or graduate students have with a course.

Chair of Biology Recruitment and Admissions Committee – Dr. Matthew Fujita (mkfujita@exchange.uta.edu)

Works with PhD applicants on their applications, and leads the committee that prioritizes admissions into the Quantitative Biology PhD Program.

Chair of Biology Recruitment and Interview Committee – Dr. Luke Frishkoff (luke.frishkoff@uta.edu)

Organizes the prospective graduate student recruitment and interview event.

Department Chair – Dr. Clay Clark: (clay.clark@uta.edu)

Oversees all faculty and students in the Biology Department.

Head Departmental Administrator – Steven Nickols: (steven.nickols@uta.edu)

Head accountant, and director of office staff.

Principal Investigator (PI)

The head of your dissertation lab. See: https://www.uta.edu/academics/schools-colleges/science/departments/biology/faculty-research/faculty

ABOUT UTA

The Graduate School

Oversees graduate programs University-wide, and runs programming to support graduate students in all Colleges.
The Graduate School offers/assists with:

- Academic and professional development resources, workshops and programs for graduate students
- Grants/fellowships administered by the Graduate School
- All inquiries regarding Graduate School policies and procedures

Students and faculty are encouraged to visit the Graduate School website to locate important information about graduate programs and to learn about support resources that help students hone critical skills which lead to academic and professional success.

https://www.uta.edu/academics/schools-colleges/gradschool

The University of Texas at Arlington Online University Catalog

is the official catalog of the University. Students are held individually responsible for complying with all requirements of the rules and regulations of the University and the Board of Regents of The University of Texas System. Failure to read and comply with policies, regulations and procedures will not exempt a student from being governed by and accountable to them. Many departments and programs issue program manuals, procedures and policy manuals, student handbooks and other informational publications for students and faculty in its programs. These publications provide detailed and useful information; however, they are not statements of official policy or binding contracts of The University of Texas at Arlington or of The University of Texas System. In all matters, the Rules and Regulations of the Board of Regents of The University of Texas

System, the Handbook of Operating Procedures of The University of Texas at Arlington, and the University Catalog of The University of Texas at Arlington shall supersede departmental, program or college publications.

https://catalog.uta.edu/

For catalog information related to the Quantitative Biology PhD program:

https://catalog.uta.edu/science/biology/graduate/#doctoraltext

Key UTA links

MyMav – check grades and admissions status, pay bills, register for classes

https://www.uta.edu/mymav/

Frequently asked questions about registration:

https://www.uta.edu/administration/registrar/students/faq

How to add, drop or withdraw:

https://www.uta.edu/administration/registrar/students/registration/courses/add-drop-withdrawal

Registration policies:

https://catalog.uta.edu/academicregulations/registration/#graduatetext

Academic calendar:

https://www.uta.edu/academics/academic-calendar

Graduate grading policies:

https://catalog.uta.edu/academicregulations/grades/#graduatetext

ABOUT THIS HANDBOOK

The Ph.D. handbook will likely be updated every year or so to reflect any organizational or catalog changes. You are expected to complete the graduation requirements described in the handbook version of the year you began your program. If you wish to follow the requirements of a more recent catalog, you can ask permission from the Graduate Program Faculty Advisor.

DEGREE REQUIREMENTS

Courses and Enrollment

Years 1, 2 / pre-candidacy:
enroll in 9 credits each long semester (Fall + Spring)

Summer enrollment:
Do not enroll; you will only receive tuition scholarship for summer if you are required to enroll to maintain financial aid (loans/grants). You are expected to work in your thesis lab full time during the summer, and you will be paid either as a TA or an RA, unless you are enrolled for credits, in which case you will be paid as a GRA or a GTA. The pay will be the same when you are paid as an RA.

Years 3-5 / Post-Comprehensive exam / after advancement to candidacy:
enroll in 6 credits each long semester

For research and dissertation credit, please enroll in your dissertation supervisor's section:

INSTRUCTOR	SECTION #
Arterburn	01
Castoe	02
Grover	03
Christensen	04
Coleman / Psyc	05
Betran	06
Fujita	07
Tholen	08

	09
Frishkoff	10
DuBay	11
Boutte	12
	13
	14
	15
	16
	17
	18
Cuntz / Physics	19
Chippindale	20
Mydlarz	21
Maynard	22
Walsh, Matt	23
Wilk	24
	25
Demuth	26
Ravenscraft	27
Pellegrino	28
Tang	29
Clark	30
	31
Palmer	32
Ghose	33
Weidanz	34
Buckner	35
Fuchs / Psyc	36
Parks	37
Koromila	38
Rogers	39
Roelke	40
Walsh, Melissa	41
Johnson-Winters / Chem	42
Aranda	43
Chang	44
Schargel	45
Hale	46
Perroti / Psyc	50

Lin / Psyc	51
Prisby / Nursing	52
Pan / Nursing	61
	62
Henry	63
Liegey-Dugall / Psyc	64
Iqbal / Engr	65
Peng / Psyc	66
Purgason	67

If your dissertation advisor does not have a section listed in MyMav, email the Graduate Program Staff Advisor right away and they will create a section for you.

Required courses

See: https://catalog.uta.edu/science/biology/graduate/#doctoraltext

Enroll in courses by using MyMav.

General Course Requirements:

All students are required to take three one-credit professional development seminars:

BIOL 6101: Graduate Development
BIOL 6102: Responsible Conduct in Research
BIOL 6103: Career Development

All students are required to take 3 out of the following 5 three-credit courses:

BIOL 5314: Biometry
BIOL 5340: Bioinformatics
BIOL 6301: Essential topics in genomics
BIOL 6302: Microbiology, Molecular and Cellular Biology
BIOL 6303: Ecological and Evolutionary Analysis

In addition to course work, graduate students will need to take at least 30 credits of research/dissertation hours.

This is an example of a course plan:

First Fall - total 9 credits
BIOL 5314: Biometry (3 credits)
BIOL 5340: Bioinformatics (3)
BIOL 6101: Graduate Development (1)
+ BIOL 6291: Rotation/Research (2)

First Spring - 9 credits
Choose 1 out of the 3 PhD core elective courses:
BIOL 6301: Essential topics in genomics (3)
BIOL 6302: Microbiology, Molecular and Cellular Biology (3)
BIOL 6303: Ecological and Evolutionary Analysis (3)
+ BIOL 6691: Rotation/Research (6)*
Diagnostic Examination

Second Fall - 9 credits
BIOL 6102: Responsible Conduct in Research (1 credits)
+ BIOL 6691: Research (6 credits)*
+ BIOL 6291: Research (2 credits)

Second Spring - 9 credits
BIOL 6103: Career Development (1 credits)
+ BIOL 6691: Research (6 credits)*
+ BIOL 6291: Research (2 credits)
Comprehensive Examination

Subsequent semesters – 6 credits
BIOL 6699: Dissertation (6 credits)

Final semester – 3 credits
BIOL 7399: Doctoral degree completion (3 credits)

In the semesters you enroll in the one credit seminar courses (6101, 6102, 6103), or need to adjust cumulative enrollment to accommodate coursework as decided with your advisor, the number of Rotation/Research Credits can be reduced by enrolling in a research credit course with fewer

credits, as needed to maintain 9 credits per semester for pre-candidacy students, and 6 credits per semester for post-candidacy students. **It is important that you always enroll in either 9 credits or 6 credits depending upon your stage in the program.**

BIOL 6691: Research (6 credits)
BIOL 6591: Research (5 credits)
BIOL 6491: Research (4 credits)
BIOL 6391: Research (3 credits)
BIOL 6291: Research (2 credits)
BIOL 6191: Research (1 credit)

Enrollment after the comprehensive exam:

Students who have passed their comprehensive exam are advanced to candidacy. At that point, the number of credits required for enrollment is reduced to 6 credits per long semester.

Instead of enrolling in research credits, doctoral candidates in years 3-5 will enroll in dissertation credits. Most students will enroll in BIOL 6699 for 6 credits, in their dissertation supervisor's section. If you are planning to enroll in other classes/credits you may do so with the guidance and permission of the graduate advisor. In the semester the student is defending they will enroll for 3 credits in BIOL 7399.

Biology dissertation credits are offered under the following course numbers:
BIOL 6699: Dissertation (6 credits)
BIOL 6599: Dissertation (5 credits)
BIOL 6499: Dissertation (4 credits)
BIOL 6399: Dissertation (3 credits)
BIOL 6299: Dissertation (2 credits)
BIOL 6199: Dissertation (1 credit)
BIOL 7399: Doctoral degree completion (3 credits)

Academic integrity and responsible use of artificial intelligence

Graduate students are expected to uphold the highest standards of academic honesty and scientific integrity in all coursework, research, and scholarly activities. Students are responsible for understanding and complying with University policies regarding academic misconduct,

plagiarism, fabrication or falsification of data, and other forms of academic dishonesty.

Research expectations and good standing

A student's research progress is in good standing when they demonstrate sustained, stage-appropriate progress toward an independent, rigorous dissertation, even when experiments produce negative or unexpected results. The assessment considers both research outcomes and how the student approaches their work.

Criteria for satisfactory research progress:

Criterion	**Evidence of satisfactory progress**
Clear research direction	Can explain the central question, its biological significance, and the rationale for the experimental approach. Has achievable dissertation aims.
Progress appropriate to training stage	Meets program milestones and makes reasonable progress toward goals established with the advisor and dissertation committee
Experimental competence	Develops the technical skills needed for the project, uses appropriate controls, and performs experiments with increasing independence
Consistent research effort	Sustains engagement in research, prepares for experiments, follows through on agreed tasks, and communicates obstacles promptly.
Scientific reasoning and troubleshooting	Interprets results critically, recognizes limitations, investigates technical problems, and proposes reasonable next steps.
Rigor and research integrity	Maintains accurate, accessible records; uses appropriate analyses; follows applicable safety and ethics requirements; and reports findings honestly.
Knowledge of the literature	Understands relevant research and uses it to refine hypotheses, experimental designs, and interpretation.

Communication and responsiveness to feedback	Provides substantive updates, presents findings clearly, and incorporates feedback or explains the scientific basis for an alternative approach.
Increasing intellectual independence	Takes progressively greater ownership of experimental design, interpretation, project decisions, and dissertation planning.

Expectations by training stage
Early stage: Establish a research question, learn essential methods, understand the literature, and generate preliminary observations.
Middle stage: Execute and refine experiments, develop interpretable datasets, troubleshoot effectively, and demonstrate increasing ownership.
Late stage: Address remaining questions, integrate findings into a coherent dissertation, and make measurable progress toward writing and defense.

Milestones – other major requirements

In addition to coursework, there are 6 key milestones that must be completed for the Ph.D. in Quantitative Biology. There is paperwork that needs to completed as part of these milestones. The 'Annual CV' and 'Milestone agreement' needs to be completed each year for your annual committee meeting. For three of these milestones (Diagnostic, Comprehensive, and Dissertation defense), there is also a form that needs to be completed and filed with the university. Those forms can be found here: https://resources.uta.edu/gradschool/forms/forms-for-doctoral-students.php.

Milestone meetings fulfill the department annual committee meeting requirement.

1. First year committee meeting (Diagnostic Examination)
   Student presents research interests and receives feedback from the committee. The student should distribute the 'Annual CV' to the committee prior to the meeting. At the conclusion of the meeting, the 'Annual CV', 'Diagnostic Examination Report' and the 'Milestone Agreement Form' is completed and signed and given to the Graduate Program Staff Advisor and Graduate Program Faculty Advisor

2. Comprehensive Exam (2nd year committee meeting)
   Completed by end of 4th long semester. Student writes a proposal detailing the proposed dissertation research, which is distributed to the committee prior to the exam. The student should distribute an updated 'Annual CV' to the committee prior to the exam. At the exam, the student presents and defends their proposal orally. At the conclusion of the meeting, the 'Annual CV', 'Comprehensive Examination Report' and the 'Milestone Agreement Form' is completed and given to the Graduate Program Staff Advisor and Graduate Program Faculty Advisor

3. Annual Committee Meetings (year 3 and 4)
   All students must hold annual committee meetings to update their committee about their progress. These meetings need to be completed by June 1 each year. The student should send an updated 'Annual CV' to the committee prior to the meeting. At each meeting, the 'Annual CV' and 'Milestone Agreement Form' should be reviewed and signed.

   Committee meeting structure (1.5-2 hours)
   - 30-45 minutes: presentation
   - 30-45 minutes: discussion, questions (this often occurs concurrently with the presentation)
   - 10 minutes: committee-only meeting (student leaves the room)
   - 10 minutes: meeting with full committee and student, in which committee gives advice for the following year

4. Meetings with Committee Members
   Your committee is your mentorship team, and you should get their advice and guidance outside of committee meetings. To ensure that you take full advantage of your committee, you are required to have at least a 30 minute one-on-one meeting with each of your committee members during your Ph.D. Plan to have one meeting each year. Topics of discussion for these meetings can include:
   - Advice on project development, grant or paper writing.
   - Advice on the process of the Ph.D. (i.e., which classes to take, when to graduate, etc)
   - Discuss any issues in your mentoring relationship with your PI or someone else at UTA (It is important to indicate

whether such discussions should be confidential, in which case no actions would be taken; or whether you want help in mediating problems from your committee member, in which case you cede confidentiality.)
- Advice on career development

In your Annual CV form, provide information about which of your committee members you met with during the preceding year. You are encouraged to meet with your committee members as needed for your development, one meeting per year is just the minimum requirement!

5. Oral presentations and Publications

Each student must make at least two public oral presentations. These may include the proposal defense, a research progress report, and/or the dissertation defense or public talks at one of the UTA or Departmental seminar series. Students are also strongly encouraged to give at least one presentation at regional or national (or international) conferences.

All students are also required to publish (or submit) one manuscript to a peer-reviewed journal prior to defending.

6. Dissertation Defense

Occurs at end of 5th year, or once the student has completed a significant research contribution. The student writes the dissertation, which is shared with their committee and made available to the Department. Student gives 45-minute talk that is open to the public. Committee meets in private thereafter to ask questions and provide feedback. At the conclusion of the meeting, the 'Dissertation Defense Report' is completed and given to the Graduate Program Staff Advisor and Graduate Program Faculty Advisor.

DETAILED INFORMATION ABOUT THE PHD PROCESS

Year 1:

In your first year, you should take at least 1-2 of your required 3-credit classes. You should plan to tale at least one of the required seminar courses (BIOL 6101, 6102, 6103). If you are doing rotations, then these will occur during your first semester, and half way into your second semester in the program. During this year, you should choose your dissertation lab, form your dissertation committee, and hold your Diagnostic Examination Committee Meeting. You may also be working as a GTA.

Students in the Quantitative Biology PhD Program are admitted either as direct-admits to their chosen dissertation lab, or they are admitted to the Rotation Program. Direct-admits will start doing research in their dissertation lab from the first semester. Rotations students – please read the following.

The UTA Biology Rotation Program:

Rotations serve to allow first-year graduate students to explore the various research opportunities at UTA. The purpose of rotations is to acquaint a student with the research area and style --of several labs to enable the student to find the home lab that is the best fit for them during their dissertation research. During the rotation period, rotation students are not committed to any lab, and thus have the flexibility to change which labs they choose to rotate in as needed.

First-year students in the rotation program will carry out three lab rotations (see rotation periods below). Upon completion of the third rotation period, all rotation students will submit their ranked list of home labs, in order of preference, to the rotation committee. The PIs will also submit a list of students, who rotated, that they would be interested in accepting to their lab. The rotation committee will use these lists to match rotation students and home labs, with the consultation of the PIs.

To set up a rotation, students should contact each PI of the labs they are interested in rotating in. It is up to the student to plan in which order (1st, 2nd, 3rd) they will rotate through the labs. Please see the FAQ below to answer any questions about the Rotation Program.

Rotation Periods (Fall Entry):

Rotation	Start	End
1st	The first day of Fall Semester	Friday of the 6th week of Fall semester
2nd	Monday of the 7th week of Fall semester	Last day of Fall semester
3rd	The first day of Spring semester	Friday of the 6th week of Spring semester

Home Lab Match Survey Due Date: Monday of the 7th week of Spring semester

Rotation Periods (Spring Entry):

Rotation	Start	End
1st	The first day of Spring Semester	Friday of the 6th week of Spring semester
2nd	Monday of the 7th week of Spring semester	Last day of Spring semester
3rd	The first day of Summer semester	Friday of the 6th week of Summer semester

Home Lab Match Survey Due Date**:** Monday of the 7th week of Summer semester

Rotation Program Committee:
Dr. Mark Pellegrino (*mark.pellegrino@uta.edu)*
Dr. JC Buckner (*janet.buckner@uta.edu)*
Dr. Alicia Rogers (*alicia.rogers@uta.edu)*

Frequently Asked Questions about the UTA Biology Rotation Program:

1. When do I reach out to faculty members to enquire about rotation opportunities?

Answer: As soon as possible! Prior to coming to UTA, we strongly urge you to reach out to potential faculty members whose labs are of interest to you.

2. How do I know which lab will be my first or second rotation?

Answer: It will be up to the student to organize the dates of their rotation with their prospective PIs. Please note that the timing of the rotations will sometimes depend on the availability of the PIs, so we suggest contacting them as soon as possible.

IMPORTANT: Once you know the host labs for your rotations, and when these will happen, please fill out the survey emailed to you at the beginning of the Fall semester by the Rotation Committee. This will allow the Rotation Committee, to track your progress and to make sure that the rotations are happening accordingly.

3. Can I change the host lab for my rotation during the semester?

Answer: Yes, a student may make changes to their scheduled rotation lab, but it will be up to them to organize the change. We suggest you reach out to the prospective new lab first before making any adjustments. *Please contact Dr. Pellegrino (mark.pellegrino@uta.edu) with any confirmed changes*.

4. What research course do I register for at the beginning of the semester?

Answer: In the Fall and Spring semesters of your first year, rotation students register for BIOL 5301 (Advanced Research_rotation).

5. If I've decided to join the lab of my first rotation, do I need to perform my other rotations?

Answer: Yes, the student must complete their rotations regardless. We feel that the student will benefit from their experience in a different lab by learning new theoretical knowledge and experimental techniques. Furthermore, to be equitable, all Rotation Program Participants will be matched on the same day at the end of the third rotation.

6. Can I begin my next rotation earlier if I've decided that the current rotation lab is not a good fit for me?

Answer: Yes, but it is the student's responsibility to contact the PI of the next rotation lab to request an early start. *Please contact Dr. Pellegrino (mark.pellegrino@uta.edu) with any confirmed changes*.

7. How should I decide the order in which to rank my lab choices after my rotations?

Answer: We recommend considering the following criteria before deciding which lab you would most like to join:

1. Mentor-mentee relationship (i.e. mentoring style, communication, accessibility, etc.)
2. Your general interest in what the lab does. You want to make sure you love what the lab does in general (scientific topic, techniques, organism, etc.), not just the project you may be working on.
3. Lab culture
4. Projects in the lab that you could work on

8. I know what lab I most want to join. What do I do now?

Answer: A "Home Lab Match Survey" will be due on the Monday of the 7th week of Spring semester. The Rotation Committee will work to match rotation students with their best fit based on this survey. We encourage you to reach out to the PI of the labs you are most interested in joining and discuss whether you can join the lab once you have decided which lab you think is the best fit for you, prior to completing the survey. Ultimately, the PI will have the final decision of who joins their lab.

9. What happens if none of the labs I rotate in are a good fit for me?

Answer: In this case, the student would pursue a fourth rotation, again for 6 weeks, after the initial match date. The department is invested in the success of our admitted students, and it is highly unlikely that a rotation student would be unable to find a host lab by the end of the first academic year. However, you must identify a host lab by the end of the fourth rotation, or you will be dismissed from the program. Please reach out to the Rotation Committee if you are experiencing any difficulties during your rotation experience. *Please contact Dr. Pellegrino (mark.pellegrino@uta.edu) if a fourth rotation is required.*

10. Who do I need to sign my Milestone Agreement?

Answer: As Rotation Program Students do not have a "home lab" when they start at UTA, the Milestone agreement of rotation students only requires the signature of the Graduate Program Faculty Advisor.

Choosing your dissertation lab

If you did not opt to do rotations, then you chose your dissertation lab before arriving at UTA. If you are doing rotations, you will be assigned to a lab for your dissertation after your third rotation. This placement will be based mostly on your ranking of the labs you rotated in. After your rotations, you should consider the following when choosing how to rank the labs you rotated in:

- The mentoring relationship with the PI (Do you have productive conversations with the PI? Do you feel that this PI will promote your growth as a scientist and thinker? Do you think that the PI's mentoring style and level of engagement are the right fit for you?)
- The expectations of the PI (Does the PI expect you to develop your own project, or to work on a project that he/ she has already designed? Do the work/ life balance expectations of the PI match your needs and expectations? Does the PI have a vacation policy for the lab that works for you? How often will you be expected to work as a GTA?)
- The research focus (Do you find the research interesting? Have you discussed a possible dissertation project with the PI that you find exciting? Will this lab allow you to gain the technical skills you want to gain for your career advancement?)
- The lab environment (Do you like the labmates in the lab? Are they helpful and supportive? Do you think the lab is organized in a way that will allow you to be productive in your research?)

If you are unsure about any of these things regarding the labs you have rotated in, you should schedule a meeting with the PIs to ask them questions about the issues above, and also ask questions of your putative lab-mates. Before ranking labs, you should have an idea of how you will be mentored in that lab, what the PI's expectations are for your work in lab, and how your dissertation project will be developed. You may also want to ask each PI how many students they plan to accept.

Once you have given your lab rankings to the Rotation Committee, they will match you to your dissertation lab. You should contact the Graduate Program Staff Advisor and Graduate Program Faculty Advisor to let them know which lab you are joining.

Developing your dissertation project and forming your dissertation committee

Once you have joined your dissertation lab, you should work with your PI to develop a framework for your dissertation proposal. If your rotation project is not appropriate for your dissertation, then you should start on a project that will be part of your dissertation as soon as you join the lab officially. In some labs, you will be expected to develop your own research project from scratch, while in other labs you will be given a project framework and be expected to help develop it. In either case, your PI should direct you to relevant literature to read, and give you some guidance. Developing a dissertation project idea requires thorough reading of the literature, and discussions with your PI and other scientists.

Typically, at some point in their second semester, students have joined a dissertation lab, and have developed a framework for their dissertation project, and are working on experiments relevant to their dissertation. When you are at this point, it is time to form your dissertation committee.

The purposes of the dissertation committee are:

a) To give you a set of secondary mentors to help support and guide you in your development as a scientist.
b) To serve as advisors, independent of your PI, to give you advice on the progress of your dissertation project.
c) To independently assess the progress of your dissertation project, and determine whether and when you are prepared to defend your dissertation
d) To assess your dissertation and your knowledge of your field at your dissertation defense, and determine whether you have met the requirements for receiving your Ph.D.

The dissertation committee is made up of at least four faculty members: Your PI and at least three other faculty members. You may have more than four faculty members on your committee, if needed. It is required that faculty members of the UTA Biology Department comprise the majority of the committee. For example, a standard committee of four faculty members (the PI and three additional faculty members) must have at least three committee members from the Biology Department. You may also choose members from other departments if they have expertise relevant to your dissertation. Outside examiners from institutions other than UTA may serve as members of a committee, but their participation must be approved by the Graduate Faculty Advisor, with final approval by the Office of Graduate Studies (form available through the Office of Graduate Studies website).

When considering who to ask to be on your committee, you should consider the purposes above, and choose committee members who you think will be supportive mentors, and who will give you the best advice and guidance as you work on your dissertation project. You may want to choose some committee members because their expertise is relevant to your dissertation, and may choose others because you think they will be supportive mentors. Because our department has such a diversity of research interests, it is common to have 1-2 committee members who have expertise outside of your dissertation field; these committee members are likely to ask you more big-picture questions about your research, and may focus more on your career development than your project details.

You should discuss your ideas for a committee with your PI. Email the faculty you have chosen, and ask them if they are willing to serve on your committee. You will want to tell them whose lab you are in, and give them a brief overview of your dissertation framework in this request. Once you have four faculty members who have agreed to be on your committee, Congratulations! You have formed a dissertation committee. You should contact the Graduate Program Staff Advisor and Graduate Program Faculty Advisor to let them know.

Diagnostic Examination Committee Meeting

Students typically hold their Diagnostic Examination toward the end of their second semester in the program. Your Diagnostic is the first committee

meeting. Either email a scheduling poll, or go around and ask your committee members in person for their availability during the month you wish to have your meeting. Committee meetings are typically 1.5-2 hours. Once you have found a time for your meeting that your PI and all committee members can attend, schedule a conference room using the Outlook Calendar.

In your Diagnostic Committee Meeting, you should tell your committee about:

- Which graduate level classes you have taken, and plan to take, and what your grades have been so far.
- Background information about your project – give just enough information so that your committee can understand what follows. Keep in mind that some of your committee members may not be in your field, so keep things broad, and explain any specialized terms.
- Give an overview of your dissertation project framework. This is not a full dissertation proposal at this point, but you should have some idea of the questions you plan to address.
- The preliminary data you have generated so far, or at least describe the work you have done.
- Any other context about your journey as a scientist that you think will help your committee better mentor you.

Your committee members will likely ask some questions about your project or data, and they may offer suggestions about which classes you wish to take, and the direction of your project. This is not a proposal defense, so they will likely not ask too many questions. Keep in mind that anything you put on a slide is fair game for questions, so make sure you understand the background information and methods and data you are presenting. If you don't know the answer to a question, it's ok! Try to take notes of things you didn't know, and make sure to look up the answers later. Keep track of who asked which question. Your dissertation advisor should not intervene to help you answer any questions, so be prepared to answer yourself, and manage moving forward in the discussion if you don't know the answer. This meeting will help you understand the kinds of questions your committee members are likely to ask, so you can anticipate some of their likely questions next year when you will be defending your proposal. Your committee may give you some advice about what to focus on in the next year, and what they would like to see in your next committee meeting.

The expectations for the Diagnostic Committee Meeting are that:

1. You are completing your Ph.D. coursework on schedule
2. You can describe the background information behind your project clearly, and can describe an outline of your proposed project
3. You have made some progress either in developing ideas or skills required for your dissertation project, or in producing data

After your presentation, there will be discussions about your development.

First there will be a ~10 minute meeting of the committee alone. You will step out of the room and your committee and PI will discuss your progress.

When you are asked to come back in, your committee will let you know what they think of your progress, and what they think you should focus on.

After the Diagnostic Committee Meeting, get your committee to sign the 'Annual CV', 'Diagnostic Examination Report' and the 'Milestone Agreement Form' and give them to the Graduate Program Staff Advisor and Graduate Program Faculty Advisor. You might want to keep a copy for your records.

Year 2:

In your second year, you should finish taking your required classes, continue working on your dissertation research, and write and defend your dissertation proposal at your Comprehensive Examination Committee Meeting. You may also be working as a GTA.

Dissertation proposal and Comprehensive Examination (2nd Committee Meeting)

Students typically write their dissertation proposal and hold their Comprehensive Examination towards the end of their second year in the program. You should work with your PI to further develop your dissertation framework into a thorough dissertation proposal. Schedule your 2-hour Comprehensive examination (2nd committee meeting) at a time when all of your committee members can attend.

Dissertation proposal

In your 4th long semester of the program, you should write a dissertation proposal. This document should be ~12-16 pages, single spaced, not including the references. The dissertation proposal should include:

1. Specific Aims/ Project summary – a one-page summary of your proposal, with the major experimental aims outlined, and the major expected outcomes described
2. Introduction/ Background – a 3-6 page literature review of your field, with a focus on the published data that is relevant to your proposed work
3. 2-4 Experimental Aims – 2-3 pages each, each of which should include:
    a. Overview of the published data that serve as the premise of the aim
    b. Hypothesis that is being tested
    c. Overview of the experimental approach
    d. Description of possible results of proposed experiments, and how each result would be interpreted
    e. Expected outcomes
4. Conclusions – 1-2 pages describing the conclusions you should be able to draw from the proposed experiments, and how they will move your field forward
5. References – these are excluded from the 16 page limit.

All the literature you cite in your proposal must be properly referenced. It is recommended that you use a reference management software such as Zotero or Endnote. When you describe data from other papers in your document, you must use your own words and cite the source of the knowledge or idea you are discussing.

Your proposal must be written in 11 or 12 pt font, and be single spaced. Figures may be included, and are included in the page limits, so they should be embedded into the text, not put onto separate pages. Figure legends may not be smaller than 7 pt font. URLs are not permitted in the proposal.

When planning your proposal, you may use experimental ideas generated by your PI for most of your proposal. However, you are encouraged to generate ideas for some of the aims independently.

Take note of the UTA honor code when writing your dissertation proposal: https://www.uta.edu/student-affairs/community-standards/academic-integrity

You may work with your PI to get help outlining and editing your dissertation proposal, but you must do all the writing yourself.

Send your completed dissertation proposal to your dissertation committee at least two weeks before your scheduled Comprehensive Examination.

Comprehensive Examination

At your 2nd committee meeting, you will present your dissertation proposal and answer questions about it. Prepare a ~30-45 minute slide presentation that includes:

- Background information about your research topic
- The major hypotheses you plan to test in your dissertation
- Outlines of the approaches you will use in your research
- Expected results and interpretations
- Why your work is important

During and after your presentation, your committee will ask you questions designed to probe your knowledge of your field, and your understanding of your proposed experiments. Typical questions cover:

- Details about background information you have provided. You should be very familiar with the literature you cited and preliminary data you show in your proposal and in your slides, and should be able to elaborate on anything.
- Clarification about the premise of your hypothesis. You should understand the literature that provides the foundation of your proposed work. You should also be able to discuss any uncertainties surrounding your hypothesis. Every proposed hypothesis is possibly

wrong – you should be able to discuss alternate hypotheses that you could test.
- The methods you are proposing to use. You should understand these methods thoroughly, know the controls and validations you will use, and you should understand what kind of data you will expect to get, and how to analyze it.
- The importance and impact of your proposed work. You should be able to explain why your work is important, within the context of your field, and how your proposed research will impact your field.

Your committee meetings are largely between you and your committee, your PI should not speak very much, and will not help you answer the questions.

The expectations for the Comprehensive Examination Committee meeting are that:

1. You are making progress in your Ph.D. coursework, and have made a GPA of at least 3.0
2. You can describe the background information behind your project clearly, and have an understanding of the literature in your field
3. You understand the background and research ideas you are presenting – this is revealed through your independent response to questions, where you should be able to explain in further depth the ideas and research discussed
4. You are familiar with the methods you propose to use, and can explain them in depth if asked
5. You have produced some publishable data, or can show evidence of skills you have built

Your dissertation committee does not expect you to know the answer to every question they ask, but you should at least be able to demonstrate some depth of knowledge of the literature in your field, and you should be able to answer questions about the methods you are proposing to use. If you don't exactly know the answer to a question, but you have an idea, you can speculate based on your knowledge, just be clear about what is speculation and what you are certain about. Keep in mind that sometimes the answer to a question is, "No one knows that, it is a current uncertainty in my field." You should know what is and isn't known in your field. If you truly don't know the answer to a question, don't panic! Just say something

like, “I will make sure to look that up.” Take notes, and make sure you fill in your knowledge gaps before your next meeting.

After your presentation there will be a short meeting with the committee when you will be absent. Then, you will come back in the room and the committee will tell you the outcome.

There are three possible outcomes of your Comprehensive examination:

1. Full pass – Congratulations, you are now a Dissertation Candidate!
2. Conditional pass – if you fulfilled most of the requirements to advance to candidacy, but not all, the committee may ask you to make corrections, edits or additions to your written proposal, or may spell out other requirements for completing your advancement to candidacy
3. Fail – if you have not met a majority of the expectations for your examination, your committee may fail you. Failure can be grounds for termination from the PhD program. In some cases, your dissertation committee may decide that failure of your Comprehensive Examination constitutes a written warning of possible termination (See: Graduate Student Termination). In that case, you will be given instructions in writing by your committee on what you need to do to progress in the program. At minimum, you will need to re-write and successfully re-defend your dissertation proposal.

After you have passed the Comprehensive Examination, get your committee to sign the ‘Comprehensive Examination Report’ form and give it to The Graduate Program Administrator and Graduate Program Advisor. The committee should also review the updated ‘Annual CV’ and ‘Milestone Agreement’ at this meeting.

Years 3 and 4

Toward the end of years 3 and 4, you will have a committee meeting in which you update your committee on your progress. As before, the committee meeting will consist of a 30-45 minute presentation, with questions and discussions by yourself and your committee. You should update your committee about papers you publish, talks you give, and any other accomplishments. As before, you will have a 10 minute committee-student meeting, a full committee meeting with the student absent, and

finally a meeting with everyone where you will get advice from your committee. You should be ready to discuss your future career plans with your committee in these meetings. You and the committee needs to review the 'Annual CV' and 'Milestone Agreement' at these meetings. Turned signed versions into the Graduate Advisor.

During years 3 and 4 you should try to publish at least one paper, and should present your work at meetings. In your dissertation committee meetings, you should be improving in your ability to thoroughly discuss your research and your field.

Year 5

At the end of your 5th year, you should defend your dissertation and graduate. If your PI and your committee think you are not ready to graduate, then you should have a regular committee meeting, and plan to graduate the following semester.

<u>If you will be ready to graduate soon:</u>

Please review graduation deadlines and procedures, and apply to graduate here:
https://www.uta.edu/administration/registrar/students/graduation/applying

It is also necessary to confirm with your dissertation committee that they agree you are ready to graduate.

I have applied to graduate and got an email saying I have outstanding requirements? Why?

If you have confirmed with an advisor that you have fulfilled all of the Biology doctoral degree requirements, you are on track and all set to graduate in terms of all requirements unrelated to the dissertation. Your degree status will always say some version of "pending" until the very end, when all grades are posted and the dissertation milestones (defense, manuscript submission) are completed and accounted for.

Dissertation

Once you have completed a substantial body of research, you may write your dissertation. Go here for information about how to write and format the dissertation, and take care of all the required paperwork: https://www.uta.edu/academics/schools-colleges/gradschool/resources/academic/dissertations#manual

Most Biology dissertations are “Article based,” see: https://cdn.web.uta.edu/-/media/project/website/grad-school/documents/dissertation-resources/article-based-thesis-dissertations-final-22616.ashx?revision=ea4cf3f2-b554-434d-9d62-df2bdafe29a6

The general format of a dissertation is:

1. Abstract (1 page)
2. Chapter 1: Introduction – an in depth literature review (~10-50 pages)
3. Chapters 2-4: Results – each chapter can be a published paper, or a manuscript, or a description of unpublished data written up in manuscript format (50-150 pages total)
4. Chapter 5: Conclusions – comprehensive discussion of all chapters (3-20 pages)

Work with your PI to develop an outline for your dissertation, then start writing. If your data chapters are already written up or published, then you only have to write an Introduction and Conclusion, which should only take ~2-3 weeks. If you have to write up your data chapters, each one may take ~1-2 weeks.

Make sure to send your dissertation to your committee at least two weeks before your scheduled Defense date. You must deposit your Dissertation in the Biology Department office before your defense.

Dissertation Defense

You should schedule your dissertation defense such that you have time to finish your defense and file your dissertation before the semester deadline.

See here for deadlines:
https://www.uta.edu/administration/registrar/students/graduation/applying

The dissertation defense needs to be advertised to the department via an email announcement and posters displayed in LS. Your dissertation defense will be an in-person (or virtual, if needed), ~45 minute public presentation of your dissertation work. You are encouraged to make this comprehensible to an untrained audience, as the public are invited. After your public presentation, there will be a short Q&A session with the public. Then, everyone except the dissertation committee leaves, and the dissertation committee will ask questions.

As in the dissertation defense, your committee may ask questions about the background, methods, interpretation, analysis, conclusions and importance of your work. You should be able to discuss all these in depth. After the defense discussion there will only be a full committee meeting where you will step out of the room and the committee will discuss whether you have met the requirements for graduation. The committee members may ask you to make corrections to your dissertation before you file the final version with the Library.

UTA required paperwork, the Dissertation Defense Report (DDR) can be found here:
https://resources.uta.edu/gradschool/_documents/forms/doctoral/Dissertation%20Defense%20Report.pdf.

Completed forms are submitted to the Graduate Faculty Advisor.

Students should print and complete their portion of the DDR form, and bring to their Dissertation Defense meeting. The Department recommends an in-person dissertation defense, where committee members can sign the DDR with a "wet signature."

Graduating

Please review graduation deadlines and apply to graduate using the procedures described here:
https://www.uta.edu/administration/registrar/students/graduation/applying

It is also necessary to confirm with your dissertation committee that they agree you are ready to graduate.

I have applied to graduate and received an email saying I have outstanding requirements, why?

If you have confirmed with an advisor that you have fulfilled all of the Biology doctoral degree requirements, you are on track and all set to graduate in terms of all requirements unrelated to the dissertation. Your degree status will always say some version of “pending” until the very end, when all grades are posted and the dissertation milestones (defense, manuscript submission) are completed and accounted for.

Find the deadlines for applications, dissertation approval and submission here:
https://www.uta.edu/administration/registrar/students/graduation/applying

Applications will continue to be accepted online through the deadlines listed below. A $40 filing fee is billed each semester that you file and is non-refundable and non-transferable. Applications received after the deadline to apply will accrue an additional $60 late fee. Depending on the commencement program publishing deadlines, late-applying students may not have their name included in the commencement program.
*Applications for each term are closed by deadline. Check your eligibility to apply for future terms in MyMav: https://www.uta.edu/mymav/

NOTE: Diplomas will be issued approximately 6-8 weeks after the completion of conferral and will be sent to graduates via USPS mail. Graduates with account balances or transcript or any diploma holds must clear these before their diploma can be released for mailing. Diplomas are only kept and available for mailing for one (1) year after graduation. After one year, the graduate will need to order a replacement diploma.

Meeting the published term deadline assures that records and required documents will be reviewed and processed in time to confer a degree in that term. Short deadline extensions may be requested if unavoidable circumstances make it impossible to meet that deadline. Extension requests must be submitted using this form:
https://common.forms.uta.edu/view.php?id=926234

If approved, every effort will be made to confer the degree upon qualified students. However, there is no absolute guarantee the necessary reviews and approvals can be completed in time to award the degree if a deadline extension is granted. If processing cannot be completed, a student may apply to graduate in a subsequent term.

GTA support and Tuition after Year 5

GTA support is not guaranteed after year 5 in the program. Being appointed as GTA after year 5 will depend on the availability of assistantships in the department.

Doctoral students may be charged non-resident tuition under the following conditions: A doctoral student may pay non-Texas resident tuition beginning the first long semester in which a) the student has been enrolled previously as a graduate student for 14 or more long semesters, AND b) the student has accumulated more than 99 semester credit hours of doctoral study at UT Arlington. **Students exceeding both limits will not be eligible for assistantships supported by state funds**. Individual exceptions for students exceeding these criteria who are nearing degree completion are considered. See: https://catalog.uta.edu/academicregulations/tuition_fees/

ASSISTANTSHIPS AND FINANCIAL AID

General Information Regarding Assistantships

Students holding either a Graduate Research Assistantship (GRA) or a Graduate Teaching Assistantship (GTA) have out-of-state tuition reduced to in-state rates, regardless of residence.

Research Assistantships

Graduate Research Assistantships are awarded by individual faculty who have received funding for their research through various sources. Prospective and current students should consult with individual faculty members to determine availability of funds. Students may be supported by both a GTA and a GRA during their graduate program. Many of the same regulations apply to GRAs as GTAs (see below).

Teaching Assistantships (Ph.D.)

The Department awards a limited number of Teaching Assistantships on a per semester basis.

Students must fulfill the following conditions for continuation of the assistantship beyond the first semester and for renewal in subsequent semesters:
(a) good standing academically;
(b) satisfactory progress toward the advanced degree, as determined by the PI/dissertation committee (evaluated by the annual report for Ph.D. students); and
(c) performance of assigned assistantship duties satisfactorily during the preceding semester, as determined by the appropriate laboratory coordinator/supervisor/faculty member/Associate Chair.

Failure to satisfy any of these conditions can result in loss of the assistantship. Students will be evaluated each semester through teaching evaluations. These evaluations will be reviewed by the Associate Chair. Poor evaluations may be brought to the attention of the Graduate Studies Committee, and if problems persist beyond one subsequent semester, those students may have their assistantships revoked. Decisions may be appealed to the Chair of the Department and subsequently to the Graduate Dean.

Upon initial appointment, each TA must check in with the Graduate Program Staff Advisor so that the necessary appointment forms can be completed, and the TA can be put on the payroll. New TAs must attend a university-directed orientation session that typically occurs in August each year.

All students whose native language is not English are required to show proficiency in English.This requirement does not apply to international students and permanent residents who hold a bachelors degree from a college or university in the United States if their native language is not English.

Students have four pathways to meet the English requirements at UTA to TA:

1. Take/retake TOEFL iBT and score a 23 or higher on the speaking section
2. Take/retake IELTS and score a 7 or higher on the speaking section
3. Take and pass the UTA Developmental English course for ITAs (offered through the ELI)
4. Take and pass the ELPA interview (offered through the ELI, students can only take it one time)

The ELI conducts ELPA interviews the week before any semester starts (week 0) and in the middle of long semesters (week 8).

It will take about 2 weeks after interviews are complete for results to be released.

DE is a 10-week course.

In addition, students can receive a 1 semester waiver from Graduate Admissions to keep their assistantship while working on certifying their English.

For more information, please visit our website https://eli.uta.edu/ita/
You can also visit the Office of Graduate Studies webpage for details of how these requirements can be met for assistantships:
https://www.uta.edu/admissions/apply/international-graduate

Teaching assistants are usually assigned to teach laboratories. The usual teaching load is up to 8 hours per week of teaching time, in addition to the time required for preparation of labs, meetings with the lab coordinator, grading of papers and office hours with students. Working as a GTA should take no more than 15-20 hours per week. However, teaching loads may be altered when warranted by departmental circumstances. Teaching assistants must set aside three hours per week for office hours. Additionally, teaching assistants are periodically assigned as proctors for exams in larger lecture sections. Proctoring assignments may be for lectures in which the TA teaches labs or for non-associated lectures.

Teaching assignments are determined by the Associate Chair and lab coordinator/supervisor prior to the beginning of each semester. Assignments can vary from one semester to the next as course and laboratory offerings vary, but every effort is made to keep TAs in one or two courses to minimize the time spent on learning new laboratories each semester.

Teaching assistants are assigned office space by the graduate program assistant. Generally, offices are shared by two individuals, but some larger offices may be occupied by three or more. The departmental staff arranges for keys to offices and teaching laboratories for each new assistant and for continuing assistants whose current assignment requires additional keys. Assistants may obtain their office assignments and keys from the departmental office.

Responsibilities of Graduate Teaching Assistants

Graduate Teaching Assistants play an important role in undergraduate education. A GTA is a front-line representative of the Department and the University and is responsible for creating a positive educational experience for students in the classroom. In addition, the experience acquired through teaching is a significant component of graduate education. GTAs will be evaluated by their students each semester.

The duties and responsibilities of Graduate Teaching Assistants include:

1. assisting the professor teaching the course as needed and assigned (this includes attending mandatory weekly GTA meetings to discuss the material to be covered in the lab and setting up schedules for turning in grades to the professor)
2. regular clean-up of preparation and laboratory areas (particularly important at the end of each semester)
3. setting reasonable office hours and being available to students who have questions
4. providing adequate safety instruction for students in the laboratory and adequate security for equipment and supplies in the laboratory
5. efficient organization, preparation, and instruction of laboratories and laboratory exams.

6. responding to student inquiries via email or teams within 48 hours. GTAs should use their staff email address (@uta.edu) when communicating with professors, lab coordinators and students regarding their Teaching Assistantships. Students should monitor their staff emails at least one month prior to the start of the semester to ensure they receive information about their teaching assignments.

The grades of undergraduate students in laboratory and lecture sections are confidential and should be discussed only with the specific undergraduate and the appropriate laboratory coordinator/supervisor or faculty member. Grades should not under any circumstances be posted publicly or communicated via email.

GRADUATE STUDENT ORGANIZATION, ACTIVITIES, AND AWARDS

Organizations

Biology Graduate Student Association (BGSA)

The Biology Graduate Student Association aims to provide graduate students in the biology department with comprehensive academic resources and foster a collaborative community. The organization strives to establish a framework of opportunities for the academic, social, and professional development of biology graduate students. It helps enhance their educational experience and facilitates professional connections both on and off campus. BGSA cultivates a sense of community and camaraderie among graduate students through peer-to-peer interaction, mentorship, and a feeling of belonging within the department. BGSA also offers a platform for graduate students to voice their interests and concerns. We provide resources to address mental health challenges related to graduate school, such as anxiety, stress, and impostor syndrome.

Membership in the organization is free, and all biology graduate students are automatically accepted. Members can apply for BGSA travel grants,

which offer several $500 grants for domestic conferences and $750 grants for international conferences each year. To receive funding, members must actively participate in the organization by attending BGSA-hosted workshops and social events. A significant event that BGSA organizes is the annual Biology Graduate Student Research Symposium, where students present their research work to the larger community.

BGSA holds meetings and events every month during the long semesters, and all graduate students are encouraged to participate in the organization.

Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

The Society for the Advancement of Chicanos/Hispanics and Native Americans in Science, also known as SACNAS, is a national organization dedicated to promoting the success of students and professionals from diverse backgrounds in attaining advanced degrees, careers, and positions of leadership in STEM. While the organization has kept its original name to honor its roots and founding members, SACNAS has grown to become the largest diversity in STEM organization and welcomes all who support its mission. SACNAS' key themes include cultural celebration (as opposed to assimilation) and 'bringing your whole self to science'.

The UTA SACNAS Chapter works to bring the spirit of SACNAS to our campus. The Chapter organizes community-building events and professional development opportunities for graduate and undergraduate students across the sciences and promotes UTA students to attend the annual national SACNAS conference.

For more information about SACNAS, please visit https://www.sacnas.org/. To learn more about the UTA SACNAS Chapter, visit linktr.ee/SACNASatUTA or contact us at sacnas@uta.edu.

Other campus organizations

https://mavorgs.campuslabs.com/engage/

Funding Opportunities for Graduate Students

The Office of Graduate Studies maintains a detailed list of internal and external funding sources for graduate students (https://www.uta.edu/academics/schools-colleges/gradschool/funding).

In addition to those sources listed on the Office of Graduate Studies' website, outlined below are several research-centric funding sources that have traditionally been pursued by Ph.D. students early in their careers at UT Arlington. Other avenues of funding are also available (some are specific to research areas), and students should discuss their funding needs and possibilities with their PI.

Graduate students are encouraged to apply for research funding in order to gain experience in applying for extramural funding—experience that will be useful later in their careers—and to lend some flexibility and independence to their research. Additional information on research grants and fellowships can be obtained from the Office of Grant and Contract Services (http://www.uta.edu/research/administration/departments/gcs/index.php).

Sigma Xi Grants

https://www.sigmaxi.org
Sigma Xi, The Scientific Research Society, has provided grants in aid of research since 1922. These have typically been limited to a $1000 maximum, including funds for travel and subsistence and supplies, but not for equipment or salary. The grant proposal includes a brief description of the proposed research and a detailed budget. Three letters of recommendation are also required. There are two deadlines each year for these grants
(March 15 and November 15).

National Science Foundation Graduate Research Fellowship

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=6201&org=NSF

These fellowships are intended for students at or near the beginning of their graduate career. They must be applied for during the first semester as a graduate student (having completed fewer than 20 semester hours of graduate courses), and are usually due in November each year. They are limited to three years of support for research leading to a Ph.D. and include a 12-month stipend. They are awarded on the basis of academic record (GPA), GRE scores, and letters of recommendation. These fellowships are highly competitive, and women, minority students and persons with disabilities are particularly encouraged to apply. Incoming graduate students should discuss the possibility of applying for this fellowship with their initial faculty sponsor.

Conference Travel Grants

The Graduate School provides funding for travel to conferences ($500 for domestic meeting, $750 for international meetings). See the link below. Students need to apply for these grants and then request matching funds from the department. Students must present at the conference to receive travel support.

https://www.uta.edu/academics/schools-colleges/gradschool/funding/internal/travel-grant

Graduate Student Awards

T. E. Kennerly Award

The Kennerly award is awarded each year to the Graduate Teaching Assistant who best exemplifies the devotion to teaching and the concern for students exhibited by the late Dr. Kennerly. Nominations are made by the faculty to the department awards committee. Nominees must have completed at least one year of teaching. The award consists of a plaque and a book of the student's choice, as agreed upon by the major professor, with the cost approved by the department chair.

Outstanding Graduate Research Achievement Award

This award is given annually for outstanding achievement in graduate student research. Nominations are made by the faculty to the department awards committee.

William L. and Martha Hughes Award for the Study of Biology

The Hughes Award for the Study of Biology is an annual monetary award. Award amounts are determined by availability of funds. Students apply directly to the department awards committee.

TROUBLESHOOTING

Advice for navigating the PI-student relationship

Effective communication with your PI is critical in a successful Ph.D. Sometimes students and PIs have different communication and thinking styles, which can make communication more difficult, but these difficulties can usually be surmounted. If you think you are struggling because you are uncertain of your PI's expectations, or are suffering from poor communication, you should schedule a meeting with your PI to discuss these issues. The following are some suggested talking points, depending on the situation:

1. "I am often uncertain about your expectations…" You may want to discuss establishing a system of regularly writing down what you understand your PI expects of you, and having them confirm, clarify or re-write these expectations. Keeping written records of conversations helps in many situations!
2. "I often don't understand what you mean when …" You can ask how your PI would like you to handle these situations, and discuss strategies. Be aware that your PI suffers from the "curse of knowledge," which is when someone assumes that what they know is obvious to everyone. It is ok to tell your PI that you don't understand something, and to ask for

clarification, or ask to be pointed towards a resource that will help you learn more about that topic. If you incompletely understand their recommendations, you may want to suggest a system in which you write down your understanding of their recommendations, and ask them to make any needed corrections.

3. "I am struggling with the differences in our communication styles…" People have different situations that help them do their best thinking and communicating. Sometimes it can be difficult for someone who is a verbal communicator, for example, to communicate well with a written communicator. Understanding how you communicate best is important in navigating these difficulties. Think about your own thinking and communication styles, and how they are clashing with your PI's, and work with them to develop a communication method that works for both of you. Understanding your own learning style can also help – if you are a visual learner, you could ask that more diagrams be used in explanations to you, for example. You may want to take a quiz such as: http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml to help you think about your own learning style.

It is better to have these types of conversations as soon as you recognize an issue, so you can work on improving communication and efficiency before problems become serious enough to affect your progress.

Grievances

If you are having a problem with something, there are multiple avenues to pursue resolution. Ask for help!

If the incident involves student misconduct, please file a report here: https://www.uta.edu/student-affairs/community-standards/report-an-incident

If the incident involves discrimination or sexual misconduct, please report to the Title IX office here: https://www.uta.edu/student-affairs/dos/file-a-complaint/discrimination-sexual-harassment-title-ix

If you have a complaint about procedural irregularities or differential treatment, you may file a complaint with the Dean of students: https://www.uta.edu/student-affairs/dos/file-a-complaint

If you are struggling with depression, lack of motivation, or other mental health concerns, please schedule an appointment at the Counseling and Psychological Services office: https://www.uta.edu/student-affairs/caps

If you are having issues with your lab-mates that you cannot resolve on your own and that are interfering with your research, you should discuss them with your PI and they should help you resolve the problem. You are also encouraged to go to your committee members or other trusted faculty for advice.

If you are having an issue with your PI or other faculty members, you should seek advice from your committee members, or any other trusted faculty member. Write an email and ask for a meeting to discuss an issue you are having. If the issue is large and may require further efforts to resolve, you may want to establish a written record of your efforts to resolve the problem through email communications. This can help in situations where outside people are needed to resolve a problem. You can help establish a written record of your efforts to resolve a problem by asking and receiving advice through email, or by writing email summaries of in-person discussions. Some conversations are more productive when done in-person, so it is recommended that you have in-person discussion with your mentors, then send them an email afterwards summarizing the discussion and asking them to confirm what you wrote.

If you have issues that are not resolved through discussions with your PI or committee members, you should then ask for help from the Graduate Advisor, then the Chair of the department. If the issue is still not resolved, you should ask an Associate Dean in the College of Science for help.

Grievances involving grades in graduate courses should be resolved between the faculty member and the student whenever possible. If an agreeable resolution cannot be reached between the two parties and if a student wishes to appeal a decision relative to a grievance, the student should consult with the Associate Chair (Dr. Melissa Walsh). If a student is dissatisfied with the decision of the Associate Chair, s/he should then appeal to the Dean. The decision of the Dean is final.

Change of dissertation PI/lab

On rare occasions, a graduate student may wish to change laboratories as their research interests evolve or they gain a clearer understanding of the mentorship and training they need. Differences in mentoring styles, challenges with laboratory culture, limited funding, or changes in a project's direction or feasibility may also prompt such a transition. Therefore, transitioning to a laboratory that better aligns with the student's scientific interests, professional goals, or working style may be warranted and will be considered on a case-by-case basis.

The following conditions must be satisfied for a change of PI to be allowed:

1. Only one PI/lab change is possible.
2. The change must happen before the student's comprehensive exam/proposal defense.
   Once a student passes their comprehensive exam/ proposal defense, no changes are permitted.
3. The student must get approval for this change from their dissertation committee.
4. A change is contingent on a faculty member giving their support (i.e., it is not guaranteed).

Graduate Student Termination Policy (Approved by Graduate Assembly 2-15-07)

Students have the initial responsibility to recognize when they are having academic difficulties and are expected to initiate steps to resolve the problem. When a student is in academic difficulty, and dependent upon the severity of the problem, the student may receive an oral warning and/or written statement of the problem and required corrective actions. Failure to take these corrective actions can result in termination from the degree program.

A graduate student whose grade point average in all graduate courses taken while enrolled as a UTA graduate student falls below 3.00 will be placed on academic probation. The student must attain a grade point average of at least 3.00 in the next semester he or she is enrolled or be

subject to dismissal. Undergraduate courses or graduate courses graded P, R, X or W cannot be used to remove the condition of academic probation.

A student who has been dismissed from the Graduate School for failure to meet the 3.0 grade point average requirement may be readmitted for further graduate study in the same or in a different program only if a Petition to the Graduate Faculty has been approved by the appropriate Committee on Graduate Studies and the Dean of Graduate Studies.

A student can be dismissed from a degree program not only for failure to maintain an adequate grade point average, but also for such reasons as unsatisfactory progress toward a degree (as defined by the department or program), inability to pass a diagnostic or comprehensive examination, failure to prepare or to defend a thesis or dissertation in a satisfactory manner, or inability to complete thesis or dissertation work in an acceptable amount of time. In such cases, students will receive a written warning which will include a statement of the problem and the corrective actions that need to occur.

Students failing to pass a diagnostic/comprehensive examination or thesis/dissertation defense may be terminated upon the recommendation of the examining committee. Such decisions are indicated on the Diagnostic Evaluation Report, Comprehensive Examination Report, or Final Defense Report which are returned to the Dean of Graduate Studies. The Graduate Dean will notify the student formally of the program's or department's decision.

Termination due to inadequate academic progress is a decision made by the department's Graduate Advisor and Dissertation Committee. A student's thesis/dissertation committee may recommend termination for failure to prepare a thesis/dissertation proposal, prospectus or final draft in a satisfactory manner or failure to complete work in an amount of time acceptable to the program's Graduate Advisor and Graduate Studies Committee. The student may appeal their termination to the Dean of Graduate Studies in writing within one year of the date of the decision by the Graduate Advisor and Graduate Studies Committee. The student may continue enrollment during the termination process.

Petitions
A petition allows students to request exceptions to university and departmental rules, including not meeting The Office of Registration, Records, and Admission's deadlines in the few cases where exceptions are allowed. The petition must explain the basis for the requested exception and must be submitted to the Graduate Advisor. Exceptions may be allowed if the facts presented in the petition fully justify the exception. The petition must be approved by the Graduate Advisor, the Biology Graduate Studies Committee and ultimately the Dean of the College of Science. All petitions must be submitted online via the Office of Admissions, Records, and Registration's Graduate Student Services (http://wweb.uta.edu/aao/recordsandregistration/content/student_services/graduate_student_services.aspx) webpage. Special forms are available for withdrawal and in absentia registration. The Graduate Advisor should always be consulted by students who are considering filing a petition.

Withdrawal
A student who wishes to withdraw voluntarily from the University before the semester drop date must file the proper resignation form in the Office of the Registrar. After the drop date, a student in a graduate course is not permitted to withdraw or drop selected courses; however, in exceptional cases, a student may submit a petition to the Dean of the College of Science via the UTA online petition system after the drop date. To file a petition, see the Office of Admissions, Records, and Registration's Graduate Student Services webpage (**link broken). If the petition is not approved, the student remains responsible for all course requirements. Do not stop attending classes until the petition is approved.

Continuous Enrollment Policy
Graduate Students must enroll in at least one credit hour each long semester (Fall and Spring) in order to be classified as enrolled students. Enrollment in Summer sessions is not required. International students or students with graduate assistantships, fellowships, or support by other programs, offices or agencies with enrollment requirements such as the Veterans Administration must continue to meet those requirements (usually this means being enrolled full-time). It is the student's responsibility to determine the enrollment requirements of such entities.

Leave of Absence Policy
A student in good academic standing (not suspended for academic or disciplinary reasons) is eligible to apply for a leave of absence if there are exceptional circumstances (health-related issues, childbirth, child care, elder care, or significant family concerns, and major personal circumstances that prevent him or her from being continuously enrolled). Leaves are granted for up to two long semesters. Students returning from leave as scheduled will be automatically readmitted and will not be required to submit an application or pay application fees. A student requesting leave should discuss the possibility with the Graduate Advisor and then complete the Leave of Absence Request (available online through the Office of Graduate Studies webpage). Final review and approval of these requests will be made by the Dean of Graduate Studies.

INTERNATIONAL STUDENTS

The Office of International Education International Student and Scholarship Services website had information about:

- Scholarships and loans
- Healthcare and Insurance
- Immigration advising
- Forms and procedures for students on F-1 visas
- Other information helpful to International students!

https://www.uta.edu/student-affairs/oie/isss

STUDENT SAFETY AND EMERGENCIES

Late night security escort service

Free service offers students, faculty, staff, and campus visitors an escort from one location to another. Available 7 p.m. to 3 a.m., 7 days a week during the semester*. Hours may be altered to meet changing University needs and during university breaks.

Request a ride using the free Transloc On-Demand app: https://transloc.com/app/. Once you're logged in, you can request a ride and track the vans all the way to your pick-up location or wherever you need to go on the UTA campus.

Outdoor warning sirens

If you are outside and hear a warning siren, go inside, stay away from windows, and look for shelter in an interior part of the building (follow designated storm shelter signage if applicable). If you can, turn on a weather alert radio, radio or a T.V. for information on actions to take or wait for instructions from MavAlert. Sirens can be activated for 5 reasons:

- Tornado in the immediate area,
- Severe weather with winds over 70 mph,
- Large damaging hail,
- Elected official or President of the University designates siren activation for other emergencies and,
- Testing on the 1st Wednesday of each month at 12:30 p.m., if the weather is clear. The City of Arlington also tests outdoor warning sirens the 1st Wednesday of every month at 1pm.

Vehicle Assistance

Dead car battery? Call UTA Police (817) 272-3381

Campus evacuation route maps

Life Sciences:
https://www.uta.edu/campus-ops/ehs/fire/Evac_Maps_LS_Floors.php
SEIR:
https://www.uta.edu/campus-ops/ehs/fire/Evac_Maps_SEIR_Floors.php
ERB
https://www.uta.edu/campus-ops/ehs/fire/Evac_Maps_ERB_Floors.php
All buildings
https://www.uta.edu/campus-ops/ehs/fire/Evac_Maps_Buildings.php

Medical emergencies

Call 817-272-3003 for medical emergencies on campus. The number is also on emergency decals displayed on campus telephones. Provide dispatchers with the nature of the emergency, the location, and a phone number where you can be called back. Police and an ambulance will respond based on the initial call. UTA Health Services cannot respond to medical emergencies outside of the health center. Police department personnel are trained in CPR and other first aid procedures and will provide stabilization until an ambulance arrives.

Mental Health emergencies

If you or a friend are experiencing crisis after office hours, please reach out to any of the following source for help:
MAVS Talk 24 Hour Crisis Line 817-272-8255
UTA Police 817-272-3003
Emergency Assistance: 911
24 Hour National Suicide Prevention Life Line 988

Biological safety/ Laboratory safety/ Environmental health and safety

EH&S Biological Safety Program offers training in the following areas: Biosafety level 2 special practices, bloodborne pathogens, vaccinia virus safety, biosafety issues for Laboratory Teaching Assistants, and biohazardous waste management by autoclaving. Safety manuals, standard operating procedures, and other guidance documents are available for laboratory use.
EH&S Biological Safety Program also assists the UTA campus community in disposal of microbiological, animal, blood/other potentially infected materials waste, and sharps.

https://www.uta.edu/campus-ops/ehs/

Biological safety emergency contacts

Police: 817-272-3003
Environmental Health & Safety: 817-272-2185
Poison Control Center: 1-800-222-1222

Substance use prevention

UTA is a community that cares about the well-being of its students, faculty, and staff, and as such, UTA continually strives to create and maintain a safe, secure, and supportive campus environment. As part of this effort, UTA prohibits the illegal use of alcohol, tobacco and other drugs (ATODs) on its campus and at campus-sponsored events, has developed an ATOD-prevention program, and strictly complies with the requirements of the Drug-Free Schools and Communities Act amendments of 1989 (DFSCA).

https://www.uta.edu/student-affairs/health-services/health-promotion/substance-use-prevention

schedule an alchohol screening and intervention session:

https://outlook.office365.com/owa/calendar/HP@bookings.uta.edu/bookings/