

About This Handbook

30 May 2022

Dear New Graduate Student:

Welcome to the Department of Biology!

We are very pleased that you are joining the department, and we look forward to working closely with you over the next several years of your graduate career. This short handbook is designed to give you the most important information that you need and to answer the questions that are most frequently asked by graduate students in Biology. We try to keep it up to date, but University and Departmental policies evolve and change, so please let us know if any of the information needs revision.

Sincerely yours,

The Graduate Affairs Committee

What is the administrative structure of graduate studies?

You are enrolled as both a member of the department of Biology, which is within the College of Arts and Sciences and the UVM Graduate College. The Graduate College makes university wide requirements and standards for graduate student, the department makes more specific requirements that must adhere to the university standards.

What degree programs are offered by Biology?

The Biology Department offers three advanced degrees: The Doctor of Philosophy (PhD), the Master of Science (MS), and the Accelerated Master of Science Program (AMP). Students may enter the PhD program with either an undergraduate science degree or an undergraduate science degree and an MS degree. The AMP program is designed for UVM Biology major undergraduates, who apply to the program in their junior year, so that the course work in their senior year counts towards some of the credits for the MS degree. The PhD, AMP, and MS degrees all require course work, a candidacy exam, and a written thesis, and a public thesis defense presentation.

Getting Started

How do I obtain keys and get set up when I first arrive at UVM?

First check with your major advisor to find out where your office will be located, and what laboratory rooms you will need access to for your research. Your next stop should be the Biology Department Office, 120 Marsh Life Science Building. At the time of this writing (May 2022), Karen Duncan is our office manager and will help with this process. You should contact the Biology Main Office at biology@uvm.edu or 802-656-2922 to set up an appointment to fill out necessary paperwork for obtaining your keys to the building, your office, and laboratory space, as well as any employment paperwork (GTAs/GRAs). You will also receive directions on how to set up your NetID, email, and obtain a student ID (CatCard).

If you need to obtain a campus parking permit, the details are here (<https://www.uvm.edu/transportation/student-parking>).

How do I find out the details about my salary, benefits, and health insurance coverage?

First, review your contract letter, which contains important details about your salary and benefits as a graduate student. As a UVM employee, your benefit and salary details are managed by the PeopleSoft software package. With your student ID, you can log into your PeopleSoft account here (<https://erp.w3.uvm.edu/>), which will allow you to set up automatic deposit with your bank and will give the dates and amounts of your most recent and past paychecks, as well as information on fees and any outstanding balances.

Your health care coverage is through the UVM health care system, and the facilities are described here (<https://www.uvm.edu/health/insurance>). Once you have your student ID, you can receive an assignment for a personal health care physician. Most routine health care appointments take place at the student health care center at 1 South Prospect Street (<https://www.uvmhealth.org/medcenter/location/1-south-prospect-street>), which is directly adjacent to the main campus. Surgery and more extensive care facilities are located at the UVM Medical Center- Main Campus (111 Colchester Avenue), which is also a short walk from campus (<https://www.uvmhealth.org/medcenter/location/uvm-medical-center-main-campus>).

How do I set up my graduate committee?

You should begin by talking with your major advisor to start getting a focus on your specific research interests. Your advisor should be able to suggest a few potential faculty members, both within the Biology Department, but also in other units on campus. You should contact these faculty members, introduce yourself, and set up a meeting to talk with them about your research interests. It probably will not be until near the end of your second semester that you will actually select your committee. Official committee members must be members of the UVM Graduate College (https://www.uvm.edu/graduate/graduate_faculty).

For PhD students, your committee will consist of your advisor, two faculty members within the Biology Department, and one faculty member from another department. For MS and AMP students, your committee will consist of your advisor, one faculty member within the Biology Department, and one faculty member from another department.

How often should I be meeting with my committee and my advisor?

At a minimum, you should have a formal committee meeting at least once a year. These meetings typically last 1 to 1.5 hours. They are an important chance to discuss your research progress, data collection, plans for the upcoming year, roadblocks or unexpected challenges, course work, and other issues.

You will want to ask your advisor to set up a schedule for regular meetings about your research. Many students meet weekly with their advisors, others do so on a less frequent schedule. But regular contact is important to stay in touch as your work progresses. You may also want to consult with other committee members individually about specialized topics (such as experimental design, or laboratory protocols) that are part of your work.

Taking Classes

What are the course and unit requirements for a graduate student?

Detailed guidelines from the Graduate College are found here: <https://www.uvm.edu/sites/default/files/transfercrredit2.pdf>. Briefly, for the PhD, 75 credits are required, including a minimum of 30 graded course credits (A-F scale), 20 research credits (S/U) and 25 additional course or research credits. Six credits of colloquia are needed, 4 of which need to be graded (A-F scale), therefore can count towards the 30 graded course credits. The other 2 can be non-graded (Pass/fail scale).

For the AMP/MS, you must complete 15 graded course credits and 15 research credits for a total of 30 credits. For the AMP, up to 9 graded course credits may be completed as part of your bachelor's degree in your final year to count towards your AMP. Other details, especially about transfer credits can be found on the Graduate College site (<https://www.uvm.edu/sites/default/files/transfercredit2.pdf>)

What are the courses that are required of all graduate students?

Within the Graduate College requirements, the Biology Department has additional, more specific requirements. At this time, there are two required courses, two required seminars and 4-6 required colloquia credits for all Biology Department graduate students:

- Biology 381 (Computational Biology; 4 credits; spring semester)
- Biology 371 (Scientific Survival Skills; 1 credit; fall semester)
- Biology 385 (weekly departmental seminar; 1 credit; fall and spring semesters of every year)
- Biology 381 (weekly graduate student seminar; 0 credits attending/ 1 credit presenting; fall and spring semesters of every year).
- Biol 381 a proposal-writing "course" that you will take during the semester in which you defend your proposal (Bio 381; 3 credits).
- Colloquia (meetings for the exchange of views) are typically 1 or 2 credit courses that focus on literature review and discussion. These vary over a broad range of topics, changing every semester to reflect current interests and hot topics in the field. Some are graded (A-F scaling) and some are S/U (satisfactory/unsatisfactory). BIOL 385 (biology seminar) and BIOL 381 (graduate seminar) are considered colloquia, and 2 units can be used to fulfill the required 4-6 credits towards your degree.
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How do I decide which other courses to take?

Talk first to your major advisor and the other students in your lab, your committee will also make recommendations. Your advanced course work should train you in specific skills, such as computer modeling, statistical analysis, bioinformatics, microscopy and imaging, and molecular/lab techniques. The University is currently changing the course numbering system to be more explicit; however, for AY 2022-2023 you will need to talk to the instructor and make sure the course you are interested in is available for graduate credit. There are some 200-level undergraduate courses that can be counted for graduate credit, but they involve some extra work or projects beyond the undergraduate requirements. Somewhat confusingly, many graduate courses use the same generic Bio

381 number if they have not been given a unique number for the catalogue. Make sure you are taking the correct section of Bio 381 that corresponds to the course you want.

In addition to units for course work, there are courses with variable credits for PhD research (Bio 491: 1 to 10 credits) or MS research (Bio 391: 1 to 10 credits).

What are the weekly department and graduate seminars?

The department and graduate seminars and opportunities to network within the department. It is an opportunity to establish your mentoring and friendship networks within the department and establish yourself as part of the team. As such all faculty and all graduate students are expected to attend the departmental and graduate seminar every week.

Bio 385 is the departmental seminar, held on Mondays at noon. This seminar presents invited speakers from within and outside the UVM campus to speak on their research. The seminar committee solicits suggestions for invited speakers, so this is a good chance for your lab to host a visitor and do some networking.

“Biolunch” (Bio 381) is the graduate student seminar, held on Fridays at noon. Biolunch includes presentations by department graduate students describing their research plans and progress. Each graduate student is required to make at least one presentation a year in Biolunch and will receive 1 credit for the course that semester. First year graduate students may be presenting their research plans or perhaps results from previous undergraduate or MS research. More advanced students will present results of ongoing experiments and studies that are part of their thesis research or possibly other collaborative projects. Senior graduate students may use Biolunch to practice a full-length job seminar or a shorter conference presentation. Often, Biolunch consists of two shorter graduate student talks back-to-back.

What are the grade, residency, and unit requirements for a graduate student to be in good standing?

Until they reach the 75 (PhD) or 30 (MS/AMP) credit requirement, students register for 9 credits per semester (fall & spring) and up to 5 credits in the summer. Some of these will be graded courses and some will be research credits. More details can be found here

(<https://catalogue.uvm.edu/graduate/admissionfinancial/fellowshipsassistantships/>).

You must hold a GPA of 3.00 or higher to be in good standing and to graduate. The Graduate College policy is a maximum of 5 years to complete an MS and 9 years to complete a PhD. In Biology, students usually complete the MS in 2 to 3 years, and the PhD in 5 to 6 years.

What does a typical course schedule look like for a PhD student?

Here is a typical schedule for a PhD student. For the Year 1 schedule, we have inserted the specific required classes.

Required research credits:

PhD: 45 credits (BIOL 491)

MS/MAT (BIOL 391)

Required graded course credits:

30 credits (including 6 colloquia credits)

After completing 75 (PhD) or 30 (MS):

enroll in GRAD 903 (reduces student senate, etc. fees by a lot)

Semester	Course	Category	Credits	Total
Fall 1	Bio 381 Biolunch	Colloquia (graded)	0	
	Bio 385 Biology Seminar	Colloquia (graded)	1	
	Elective	Course (graded)	3	
	Elective	Course (graded)	3	
	Bio 371 Survival Skills	Colloquia (graded)	1	9
Spring 1	Biolunch	Colloquia (graded)	1	
	Biology Seminar	Colloquia (graded)	0	
	Bio 381 Computational Biology	Course (graded)	4	
	Elective	Course (graded)	3	
	Research	Research	1	9
Summer 1	Research	Research	5	5
Fall 2	Biolunch	Colloquia (graded)	0	
	Biology Seminar	Colloquia (graded)	0	
	Elective	Course (graded)	3	
	Elective	Course (graded)	3	
	Elective	Colloquia (not graded)	1	
	Research	Research	2	9
Spring 2	Biolunch	Colloquia (graded)	1	
	Biology Seminar	Colloquia (graded)	0	
	Elective	Colloquia (graded)	2	

	Proposal Writing	Course (graded)	3	
	Research	Research	3	9
	CANDIDACY	End of year 2	Pass/Fail	
Summer 2	Research	Research	5	5
Fall 3	Biolunch	Colloquia (graded)	1	
	Biology Seminar	Colloquia (graded)	0	
	Elective	Course (graded)	3	
	Research	Research	5	9
Spring 3	Biolunch	Colloquia (graded)	0	
	Biology Seminar	Colloquia (graded)	0	
	Research	Research	9	9
Summer 3	Research	Research	5	5
Fall 3	Biolunch	Colloquia (graded)	1	
	Biology Seminar	Colloquia (graded)	0	
	Research	Research	8	9
Spring 3 and beyond	GRAD 903	Continued Education	9	9+
Total Credits (minimum 75)				78
Research				43
Courses				25
Colloquia (graded)				7
Colloquia (not graded, max 2 credits)				1
Graded Coursework (minimum 30)				32
Colloquia total (minimum 6)				8

What elective courses can be used?

A variety of courses from many departments are available for fulfilling your elective requirements. You should work with your advisor and your committee to select courses that are tailored to your research and background. For some possibilities, here is a list of courses has been suggested by our PhD and MS students:

Techniques in Microscopy (NSCI 328; course)

Introduction to Pharmacology (PHRM 201; course)

Responsible Conduct in Biomedical Research (NSCI 327; colloquia)

Ethics in graduate research (PBIO 295; colloquia)

Cell Biology (CLBI 301; course)

Developmental Molecular Genetics (BIOL 265; course)

Neurodevelopment (BIOL 266; course)
Sensory Systems and Hormones (BIOL 371; course)
Statistical Methods I (STAT 211; course)
Biochemistry (BIOC 301; course)
Neurobiology (BIOL 261; course)
Methods in Bioinformatics (MMG 232; course)
Proteomics (BIOL 371; colloquia)
Cell signaling and development (BIOL 372; colloquia)
Graduate Writing (BIOL 371; colloquia)
Therapies for Neuro-disorders (BIOL 371; colloquia)
Data Science (CS 287; course)
Ecological Genomics (BIO 381; course)
Applied Multivariate Analysis (STAT 223; course)
Bioinformatics (MMG 232; course)
Phylogenetic Systematics (BIO 381; course)
Advanced Genetics (BIO 204/205; course)
Molecular Cloning (MMG 201; course)
Modeling Complex Systems (CS 302; course)
Evolutionary Computation (CS 352; course)
Fundamentals of GIS (NR 343; course)
Applied Geostatistics (STAT 369; course)
Data Modeling for Environmental Science (PBIO 394; course)
Quantitative Thinking in the Life Sciences (PSS 381; course)
Advanced Quantitative Thinking in the Life Sciences (NR 395; course)
Data Science II (STATS 387; course)

Other lists of elective courses can be found through other similar graduate programs:

<https://www.uvm.edu/cmb/course-requirements>,
https://www.uvm.edu/neurosciencegrad/program_study

Research

What common research equipment is available to graduate students in the Marsh Life Science Building?

Under construction...

What sources are available for graduate student research and travel funds?

There are some limited competitive funds for graduate student travel (the UVM Biology Chair's Award, the John Wheeler Award, and the Ronald Suiter travel award (https://www.uvm.edu/cas/travel_funding_ronald_suiter_prize)) and research (The Roberto Fabri Fialho Research Award (https://www.uvm.edu/graduate/student_awards)). Most students fund their research through a combination of small grants that they apply for from scientific societies, and resources available from their advisor's grants. Students are also highly encouraged to apply for predoctoral grants through national funding agencies like the National Science Foundation and National Institutes of Health. Talk to your advisor about research-specific grants.

Do I need to take any lab safety training courses?

All graduate students are strongly encouraged, and most-times required, to take the lab safety training modules and annual updates offered by Risk Management (<https://www.uvm.edu/riskmanagement/training>). These courses and others may be required for students who are doing research on federally-funded grants. There are also basic safety and maintenance protocols within each lab and within the teaching labs, including yearly refreshers and updates. Talk to your advisor and other graduate students in the lab about the details.

Teaching

What courses will I be TAing and how do I learn how to teach?

At the start of the academic year, the Graduate College hosts some orientation workshops that you are required to attend. They cover general topics such as Day One – Engaging Your Students in the Classroom, UVM Reporter Training, Identifying and

Supporting Students of Concern , FERPA Basics, Understanding Your GTA Funding Package, a GTA Panel, and Responding to Culture and Social Justice in the Classroom. More specific training for teaching the Biology labs occurs in the department itself. There are a number of other teaching resources and workshops available on campus if you are interested (<https://www.uvm.edu/ctl/contact/>).

In your first year of teaching, you may be a TA for one of the labs in the first-year Biology Courses (Bio 11/12 or Bio 21). These labs are fairly simple and reliable, and you will learn how to teach these sections in weekly lab meetings with the course coordinator. With a little teaching experience under your belt, you may then move into one of the more specialized second-year courses, such as BCOR 102 (Ecology and Evolution), BCOR 101 (Genetics) or BCOR 103 (Cell Biology). These labs are a little more sophisticated, and again there will be weekly meetings where you will learn the details. Finally, we have a number of advanced specialty courses (e.g. Computational Biology, Physiology, Neurobiology) in which the TA duties are quite specialized. Some of these labs require more time for setting up, but they also have smaller class sizes. TAs for these labs are chosen because of their particular expertise. We will always be careful to make sure you are not being asked to teach something that is outside of your expertise. We also try to let you teach the same course in multiple years, so that you can benefit from your past experience. Each semester, the department asks the graduate students which classes they would prefer to teach; we also ask the faculty which graduate students they would prefer as TAs for their classes. We do our best to match up both sets of requests.

What are my responsibilities as a Teaching Assistant?

At a minimum, your responsibilities are to prepare for your lab teaching each week, to show up and teach the lab for the full scheduled time, to post and be available for regular office hours to your students, to promptly complete the grading of lab exercises and return graded assignments to students, to attend weekly lab and organizational meetings, and to maintain safety procedures and follow protocols during your teaching. In addition, depending on the course you are teaching, there may be additional requirements of prepping and setting up labs, attending lectures (especially if you have never taught the course before), and assisting with the proctoring and grading of midterm and final exams. All of these important GTA duties are for the undergraduate student benefit and your own professional development; this should not be taken lightly. As a graduate student in the classroom, you have the satisfaction of knowing that you are making a difference in their undergraduate careers!

Proposal & Thesis Defense

What is the structure of the proposal defense/comprehensive exam?

A PhD or MS graduate student is someone enrolled in a graduate program. Usually students spend the first 1-2 years focusing on classes and then focus on research. A student becomes a PhD or MS candidate after completing all (or most of) their course work and successfully passing their proposal defense/comprehensive exam. The format and name of this exam varies across disciplines, but in the biology department we call it the proposal defense/comprehensive exam and it has a written and an oral part.

For the written part, the student prepares an NSF/NIH R01-style research proposal (with literature references) that describes the rationale, background literature, experimental or sampling design, statistical analysis, and biological interpretations of the proposed research. The length is between 8 and 10 single-spaced pages, which is comparable to a typical grant proposal. The proposal may include figures and preliminary data as part of the narrative. Examples of proposal from previous students are available from your major advisor.

The student may consult with the major advisor for feedback on the organization and proposal, but the text must be written entirely by the student. The proposal is distributed to the committee 2 or 3 weeks before the oral exam.

For the oral exam, the student should meet with the advisor, and also talk with individual committee members. Committee members will sketch out the kinds of materials they want the student to prepare for, and may provide a set of readings for the student. Oral exams usually last 1.5-2 hours. You should schedule 2 hours for your exam. Before starting the oral exam, the committee should have decided the written proposal is adequate for advancing to candidacy. This does not mean that there will not be changes requested before passing.

The format for the oral exam is:

1. The committee briefly discusses impressions of the written proposal with the student out of the room;
2. The student gives a chalk-talk presentation (chalkboard, but no prepared slides or other audio-visual materials) of the proposal. Although the prepared length of the talk should be about 15 minutes, it typically takes about 45 minutes to present it because there will be numerous questions and discussion with the committee about the proposal elements, and committee members very often follow up on one another's questions to continue the thread of a line of questioning.
3. 5-minute break.

4. General questions from the committee to test breadth of knowledge. Questions often cover general basic material in biology, as well as advanced material that is tailored to the student's research and interests. This section also lasts about 45 minutes.
5. The student steps out of the room and the committee discusses and decides on whether the quality of the proposed work and the student's ability to understand and justify it merits a
 - A. pass,
 - B. contingent pass (with an explicit list of things needed to pass)
 - C. fail.

Note that the written and oral are two different "exams", and thus a student can have two different outcomes for them (eg, pass the written but fail the oral).

The same schedule is followed for MS, AMP s and PhD students; however the length and depth of questions vary depending on the degree.

What is the structure of the dissertation/thesis?

Although many details of the organization of the dissertation will be worked out with you and your advisor, there are number of requirements for specific formatting of the dissertation, which are specified by the graduate college (<https://www.uvm.edu/graduate/resources>).

Many examples of successful theses and dissertations are available in the department office and online https://library.uvm.edu/collections/theses?search_type=dept&dept=67. You will notice they vary a bit in formation and length. They typically begin with an acknowledgements section and an overall abstract that describes the contents of the individual chapters and places them in context. Other requirements, such as a comprehensive literature review, are up to the advisor's discretion. You should begin discussing the content and organization of your chapters with your advisor and your committee well before you begin writing. You are encouraged to write and organize your chapters as stand-alone manuscripts prepared for submission to a peer-reviewed journal. Successful students often have one or two of their dissertation chapters already submitted or even published before the defense. There is no particular requirement for a certain number of chapters or page lengths. The faculty are more concerned that the quality and quantity of research are appropriate for the advanced degree and represent substantive new contributions to the scientific literature.

What is the structure of the final defense?

Once the committee agrees that the student is ready for their final defense, the student must contact the graduate college with this information and initiate the associated forms. The defense is advertised and formally announced by the department and the graduate college. It is scheduled as a full 50-minute seminar. Sometimes this can be scheduled during the standard departmental seminar or biolunch time slots, but more often it occurs during a separate scheduled time. At least two weeks before the defense, the final copy of the dissertation should be sent to all committee members so that they have time to read it and make editorial suggestions.

The defense is open to the public (family and friends often attend in person or virtually), and should be a seminar that reflects the organization, content, and details of the research that are appropriate for an audience of biologists. After the presentation, there is a standard question period in which anyone in the audience can ask questions of the speaker. The audience and the speaker then leave, and the committee discusses the oral presentation and the dissertation or thesis and any particular questions they might have for the closed part of the exam.

The student then returns and the committee discusses the details of the thesis or dissertation and any comments on the writing. Often, the committee will ask for additional changes that the student needs to make before the dissertation is submitted. Typically, the major advisor oversees the editorial changes to the final version. Often, these changes are relatively minor, and the committee may choose to sign the official paperwork in advance of these final editorial changes. Although the committee member from outside the department is issued the paperwork, it is traditional for the advisor to make sure the documents are properly signed (either in person or electronically). It is usually the student's responsibility to submit the final paperwork and copy of the dissertation before the deadlines that are specified by the graduate college.

Graduate Student Life

Does UVM provide any housing options for graduate students?

Yes, there are some options for graduate student housing that can be explored here (https://www.uvm.edu/reslife/affiliate_housing). The housing market is tight in Burlington, and it can be difficult to find housing close to campus that isn't too expensive and/or located in a noisy neighborhood. UVM has some resources for locating off-campus housing here (https://www.uvm.edu/oscr/resources/off_campus_housing_resources). You should definitely ask other graduate students about possibilities that they may be aware of; sometimes good leases and rentals are available from students who are finishing up and

leaving the Burlington area. Once you've set up your UVM affiliated email, another good source for graduate student life and housing is through the Gradnet listserv. Details on how to sign up for it can be found here: <https://www.uvm.edu/graduate/gradnet>

What kind of counseling, health and wellness resources are available to graduate students?

If you are experiencing any personal health or wellness concerns, the University of Vermont has excellent, confidential, counseling resources available at no cost. You can find the help you need through great counseling resources and wellness programs: <https://www.uvm.edu/health>

What if I am having a dispute or problem in my lab or in my teaching duties?

The first person to approach for lab problems is your major advisor, and the first person to approach for teaching duty problems is the instructor or lab coordinator for the course you are teaching. Depending on the nature of the issue, you may also want to talk with the Biology Department Chair of Graduate Studies, the graduate student representative to the Biology Department Graduate Studies Committee, the Biology Department Chair, the counseling resources on campus or faculty and staff in the Graduate College. Your conversations at all of these levels can be frank, and they will remain confidential unless you say otherwise. We encourage frank and prompt discussion of potential problems so that they can be resolved quickly to everyone's satisfaction.

Are there any social activities organized by the Biology Department?

Yes! The department has a social committee run by fellow graduate students that organizes events such as parties, lunches, picnics, photography and pumpkin-carving contests, and other activities throughout the year. Some of these events are for graduate students only, and others are for the entire department. There are regular e-mail announcements of upcoming activities, and we are always looking for new suggestions for social events for the department. Please contact the Social Committee (uvmbiopartyplanning@gmail.com) if you'd like to join or have suggestions for events!

What are the department's expectations on behavior and participation?

Here is an edited version of the department's conduct contract, which is sent to all students with their initial acceptance letter:

Being a graduate student involves much more responsibility than taking classes, conducting research, and writing your thesis or dissertation. As a department, we have expectations for student behavior throughout your time here at UVM:

- **Treatment of others.** All members of the department (students, undergraduates, staff, and faculty) expect courtesy, professionalism, respect, kindness, and fairness in all of our in-person and electronic interactions. The Department of Biology and the University of Vermont are committed to a safe, affirmative climate with several policies in place <https://www.uvm.edu/aeo/policies-and-procedures>
- **Diversity, Equity, and Inclusion.** The department is currently drafting its own DEI statement. For now, we refer you to the University of Vermont's DEI statement (https://www.uvm.edu/about_uvm/diversity), which we enthusiastically support. This site contains details and links to other resources.
- **Academic honesty.** Science is only possible in an atmosphere of transparency and truthfulness. For course work, this means adherence to the university policies that do not tolerate cheating, collusion, or plagiarism (<https://catalogue.uvm.edu/undergraduate/academicinfo/rightsandresponsibilities/>). For research, this means adherence to the principle that data should be fully available and that all results should be repeatable and verifiable. Fabrication, falsification, or alteration of data, analyses, or graphics may be grounds for dismissal (<https://www.uvm.edu/ovpr/research-integrity>).
- **Teaching obligations.** Most graduate students are supported by graduate teaching assistantships, and successful instruction in our laboratory courses is a critical component of the department's teaching mission. In your teaching, you are obligated to attend weekly wet-lab meetings, prepare for and deliver your weekly lab presentations, actively engage with students during your lab sections, grade and return all assignments promptly and carefully, and hold posted office hours to help students with their work. But you will also need to actively engage with your teaching material, improvise solutions when needed, help other TAs, and do whatever it takes to make sure the laboratory portion of the course runs smoothly and that you deliver quality instruction. You must fulfill all of your obligations so that you pull your weight and do not become a burden to the course instructor or the other graduate students.
- **Engagement in the department.** The department has relatively few students and faculty members, so active engagement is important to your success and ours. You are expected to be actively present in the department, engaging with other graduate students and faculty members in discussing research and teaching. Although travel is sometimes an important part of our research, we expect people

to be living nearby and regularly present in the department. The department does organize a number of social events. Although these are not required, attendance and participation are always encouraged.

- **Seminar attendance.** Although there are always a number of interesting seminars and lectures each week on campus, the Department of Biology hosts two weekly seminars that all graduate students and faculty are expected to attend and participate in. The weekly department seminar is given by outside speakers, both from UVM, and from other institutions. Your lab may be hosting an invited seminar speaker, and meeting individually with speakers from other departments and universities is an excellent way to extend your network of scientific connections. Active participation in the weekly department seminar is especially important because of the small size of our department (and therefore our audience for invited speakers). The second weekly seminar event in the Biology Department is the Biolunch seminar. The speakers in this seminar are almost always graduate students in the department. Each student is expected to give at least one presentation per year in Biolunch. Depending on the stage of your research, this may not necessarily be a full 50 minute seminar. We will sometime have faculty presentations or outside speakers in Biolunch for career development, teaching instruction, and coverage of other topics of interest to graduate students. Active attendance and engagement is required for both the weekly departmental seminar and the weekly Biolunch seminar.
- **Conflict resolution.** Even in a smoothly-functioning lab, there will be occasional disagreements, disputes or conflicts that can arise. As a department, it is important that any disagreements, large or small, be discussed and promptly resolved. You should never feel that you are isolated and do not have anyone you can go to about a problem. Depending on the details of the issue, you can contact your major advisor, the department chair, the head of the graduate affairs committee, one of your other committee members, counseling services or the graduate college for advice and guidance. If they are not able to help you directly, they can put you in touch with the right person. Resolving disputes promptly, in a professional and equitable way, is a high priority for the department.
- If you have a situation that makes attending in the department or seminar attendance difficult for a few weeks or more contact someone in the department or counseling services that you feel comfortable communicating with so that we can be aware. We do not need to know the specific details, just that there is an issue.
- I have read and understood the expectations that the department has for all graduate students during their time of residence in the department. I understand that I must abide by these expectations, and that failure to do so could be grounds for disciplinary action, loss of financial support, or termination of my position.

Time Table Of Important Tasks

Here is a list of the target completion dates for different components of your PhD thesis. Most students begin in the fall semester, so these completion dates refer to the end of the spring semester of each academic year you are enrolled in the program:

- every year: make a research presentation to the entire department in Biolunch.
- every year: attend weekly departmental seminars
- every year: be an active, engaged member of your lab group and of the department
- every year: update your Individual Development Plan (IDP) and your Graduate Student Information System (GSIS) account, both of which will be provided to you semi-annually via email from the administrative office
- year 1: assemble graduate committee
- year 2: complete proposal and proposal defense
- year 2: complete Biology required courses (at this time Computational Biology and Scientific Survival Skills)
- year 3: complete required 30 credits of course work
- year 4: complete bulk of field or laboratory data collection
- year 4: submit at least one manuscript for publication to a peer-reviewed journal in your discipline
- year 4 or year 5: if you are supported by grant funding rather than a TAsip, complete at least one approved teaching activity (usually TAing for a course)
- year 5: complete written dissertation
- year 5: defend thesis in a public seminar
- year 5: submit paperwork and final copy of approved thesis to graduate college