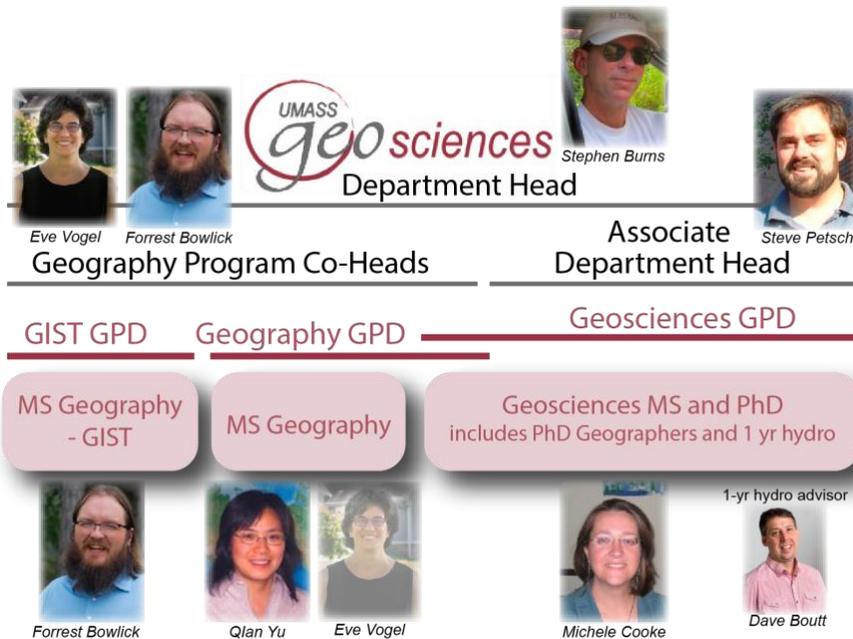


GRADUATE STUDENT HANDBOOK

GEOSCIENCES M.S. AND PH.D. PROGRAMS

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- The Geosciences Ph.D. program includes geographers under the supervision of the Geography GPD and the Geography Program Head.
- The Geosciences M.S. program includes the 1-year hydrogeology M.S. students under supervision of the 1-yr Hydrology Program Head.

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PURPOSE OF THIS HANDBOOK

The primary purpose of this handbook is to provide Geosciences graduate students at the University of Massachusetts with the information necessary to navigate the series of requirements for the acquisition of the Master of Science (M.S.) or Doctor of Philosophy (Ph.D.) degree. These requirements comprise a suite of steps, milestones and deadlines. Some of these are internal requirements governed by Geosciences Department policies. Others are University requirements governed by policies of the University's Graduate School. Please use this manual, which provides department-specific information, in conjunction with the *Graduate School Bulletin* and the *Graduate Students Handbook* issued by the Graduate School and Graduate Dean's Office, and available online at the Graduate School Webpage. The Geosciences Graduate Program operates within the University's graduate degree regulations. All students are expected to be familiar with both Departmental and University graduate degree requirements. Responsibility for meeting degree requirements rests with the student, and not with Geosciences faculty or Graduate School staff.

This Geosciences Graduate Student handbook summarizes the requirements of the Ph.D. degree and both the thesis and the project options of the M.S. Geosciences degree. In addition, to facilitate your success in the Geosciences department, the handbook provides information on different roles of supervisory faculty and department policies for graduate students, such as resolving conflicts. For requirements for the Geography M.S. and Geography M.S – GIST, please refer to the Geography Graduate Student manual and the [UMass Geography blog](#) for procedures and helpful information.

The Geosciences department offers only one Ph.D. degree in Geosciences, which covers all aspects of research within our department, including the discipline of Geography. If you are Ph.D. student working within the field of Human Geography, you should follow the section of this handbook specifically for Human Geography. While the Geosciences GPD will record your progress towards your degree, the Geography GPD and Geography Program Head will be your primary resources for the standards of Ph.D. scholarship within Human Geography.

Geosciences graduate students also have access to Moodle site, maintain by the Graduate Program Director that has a variety of resources, including informal guidebooks, links to useful sites and materials, as well as this manual.

DOCUMENTING AND TRACKING YOUR DEGREE PROGRESS

You, the graduate student, are responsible for making sure that you have accumulated adequate credits, that they classify as graduate-level credits, and that you have submitted the proper forms along the way to the Graduate Program Director (GPD). Do not hesitate to ask your advisor or the Graduate Program Director about any aspect of the requirements that lead to your degree.

The Geosciences Graduate Program Director (GPD) is available to help students to better understand and meet these requirements and should be relied on as the point-of-contact resource regarding graduate program policies and requirements. The GPD also coordinates annual review of each graduate student's progress, serves as the main liaison with the Graduate School, and certifies to the Graduate School the requirements and milestones that graduate students meet. However, it is the responsibility of each graduate student to know these requirements and to ensure that these are met in the right order and at the right time.

All formal progress toward a graduate degree, except course work, is recorded on paper forms (yes, paper!) originating either in the Department or in the Graduate School. All necessary forms for the Geosciences degrees are described in this document along with directions where to find and complete the forms. The student should make sure that any action (such as the selection of a thesis committee) is duly recorded by the GPD. This manual provides details about each of these actions that need to be recorded by submission of one form or another.

Each student has a folder on BOX that contains documentation of progress towards your degree. This folder includes admission and welcome letters, memos to the graduate school, proposal documents etc. One of the files youname_.txt summarizes your degree progress. You can expect the files on your BOX folder to be updated by the Geosciences GPD around the first of every month.

ROLES WITHIN THE DEPARTMENT

1 & 2. ROLE OF ADVISOR / RESEARCH ASSISTANTSHIP SUPERVISOR

For most Geosciences students, their academic advisor is the same as their research assistantship (RA) supervisor. The arrangement between a student and an advisor /RA supervisor usually develops through communications with an appropriate faculty member before and during the admission process. However, some students, including 1-year M.S. students, may be admitted without an RA (this is more common for M.S. students), and others may have independent funding or funding from someone other than their advisor (the latter is often still within the same research group). In these cases, the student's advisor will not be their RA supervisor. In any case, no student is admitted into the Geosciences graduate program (M.S. and Ph.D.) without an advisor. If they do not have an advisor already in place upon matriculation, they are given a preliminary advisor at orientation. These students need to select a formal advisor in consultation with appropriate faculty members by the end of the first semester.



Even in the majority of cases in which the advisor also serves as the RA supervisor, the roles are distinct.

1. ROLE OF ADVISOR & RESPONSIBILITIES OF STUDENT

Your academic advisor supervises your graduate work and chairs your thesis or dissertation committee. Your relationship with your advisor is very important. When you are applying for jobs or further study after your UMass Amherst degree, it will be your advisor's recommendation letter that carries the most weight.

The following activities provide structure to your relationship with your advisor that can greatly support your graduate experience.

- *Discuss academic plans and progress:* You should meet with your advisor to discuss your academic plans and progress at least once a year. Before the start of the Fall semester is a good time for this as Ph.D. students are required to submit to the GPD an annual timeline of academic and research goals. Development of this timeline provides a good opportunity to discuss your academic progress with your advisor and committee, if appropriate.
- *Schedule regular meetings:* It is your responsibility to schedule regular meetings with your advisor to discuss your research, coursework, and other professional interests and concerns. As you develop and do your research, your advisor will be available to consult with you about your research design, results, analyses, revised hypotheses, and changing protocols; and to help guide

you toward funding opportunities. As you move toward writing, your advisor will be available to help you think through how to organize your manuscript, read and comment on drafts, and discuss publication and/or job opportunities. Because different advisors have different approaches and expectations regarding how often and how closely they provide this guidance, the involvement of advisors within a student's research project varies widely across the department.

- *Ask about expectations:* It is your responsibility to read the graduate student manual and know the expectations at each academic stage. Many advisors will tell you their particular expectations about timelines, drafts, etc. It is best if you take the initiative for this as well. Ask your advisor early about expectations regarding academic advising, research development, etc. before a problem arises.

2. ROLE OF RESEARCH ASSISTANTSHIP (RA) SUPERVISOR

Your RA supervisor contributes to your funding, coordinates your laboratory space, research supplies, and keys, and directs the research in which you are participating as an RA.

Interactions to expect, and who is responsible:

- *RA Supervisor.* The RA supervisor should meet with RAs at the start of each semester to outline the scope of the research assistant responsibilities for the semester.
- *Student.* Your RA is a job, and you are expected to meet its responsibilities. It is best to ask your RA supervisor early about expectations regarding work hours, lab protocols, lab safety training, research group responsibilities, research procedures, etc. before a problem arises.



NOTE: ADVISOR / RA SUPERVISOR: UNIQUE ISSUES

When your advisor is also your RA supervisor, which is often the case in Geosciences, two factors arise that impact your relationship to your work and academic progress that can be central to your experience as a graduate student.

- First, you are likely to be expected to spend more time on research than the hours listed in your RA contract. This is because it is understood that your research work contributes to your own academic progress as well as your job responsibilities. However, it is important that the total amount of hours you are asked to work is reasonable, given these combined functions. You should not be asked to work as an employee more than your contracted hours. (See [GEO contract Article 22](#)). Talk early with your Advisor / RA Supervisor to clarify these combined expectations.
- Second, the person who is supporting and leading decisions about your academic progress and development is the same person who supervises your job and controls your funding. This dual role of your supervisor, and your dual responsibility, makes it crucial that you and your advisor /

RA supervisors have a clear and mutual understanding about your responsibilities in both arenas. We want to avoid a situation where problems in one role can jeopardize your success in the other.

3. ROLE OF TEACHING ASSISTANTSHIP SUPERVISOR

Your Teaching Assistantship (TA) supervisor is the primary instructor of your assigned course and manages your contribution to the assigned course. The work of Teaching Assistantships varies in scope across the department but all serve to support learning in our courses.

Interactions to expect, and who is responsible:

- *TA Supervisor.* The TA supervisor should first meet with TA(s) before the semester starts to outline the scope of the teaching assistant responsibilities for the semester and set up regular meetings of the TA(s) throughout the semester. It is an especially good idea for the TA Supervisor to inform the TA about times in the semester when the TA schedule may be heavier than expected, for example, if there is prep work before the class starts, or heavy grading periods during the semester or finals.
- *Student.* Your TA is a job, and you are expected to meet its responsibilities. It is a good idea to keep track of the hours you work and communicate these to your supervisor. The TA workload, including hours in the classroom, should not exceed on average the hours paid by the assistantship (which is 20 hours for full-TA and 10 hours for half-TA at UMass Amherst). In some courses the workload varies weekly. In such cases, the supervisor should inform the TAs of upcoming variations as soon as possible. Also, note that TA appointments start before and end after the semester. Your TA supervisor can expect you to support the course outside of the limits of the teaching semester.
- *TA Supervisor and Student.* Clear and on-going communication of expectations is the best way to reduce the potential for conflict among TAs or between the TA and supervisor.

4. ROLE OF THE GRADUATE PROGRAM DIRECTOR (GPD)

The Graduate Program Directors of Geosciences and Geography oversee and foster progress of Geosciences and Geography graduate students towards their degree. The Geosciences GPD has formal responsibility over the Geosciences program, so Geography Ph.D.s (who earn a Ph.D. in Geosciences) will need to work with both the Geography GPD and the Geosciences GPD.

The Geoscience and Geography GPDs play the following roles for their respective students:

- lead the admissions committee that recommends admission of graduate students to the graduate school;
- assign offices for graduate students;
- sign off on RA and TA appointments;

- assign teaching assistantships in coordination with the Department Head, Geography Program Head, or Associate Department Head;
- keep records of benchmarks, committees and milestones;
- facilitate the annual review of graduate students in each program that happens every Spring; and
- facilitate resolution of conflicts, should they arise, both between students and between students and advisors/supervisors.

Jointly, the Geography and Geosciences GPDs run the new graduate student orientation and manage disbursement of annual travel funds to graduate students. The GIST GPD also helps run the new graduate student orientation.

For geoscientists, the Geosciences GPD initiates payment of the Bromery and Graduate School fellowships. Additionally, the Geosciences GPD coordinates the weekly Professional Seminar (GEO701) and teaches the two required seminars for incoming Geosciences M.S. and Ph.D. students (Geo797R and Geo797A, respectively). The Geography GPD teaches Geog 604, a required course for all incoming geography program graduate students.

For all Geosciences graduate students, including Geography Ph.D.s, the Geosciences GPD relays memos of student milestones to the Graduate School. Documentation (via memo) of these milestones is part of the graduate degree requirements. Students should note that it is not the GPDs' responsibility to proactively ask for or send memos about your committees, thesis, etc. – students and/or advisors need to inform the GPD of the membership of committees and outcomes of milestones before memos can be sent (see forms section of manual). It is also your responsibility to report progress towards your degree to your GPD(s). Provide this information to your GPD by filling out the forms in the M.S. or Ph.D. manual and leaving in the GPD's mailbox. If you are a Geography student doing a Ph.D., you should give copies of any forms to both the Geography and the Geoscience GPD.



5. ROLE OF THE DEPARTMENT HEAD, ASSOCIATE DEPARTMENT HEAD AND GEOGRAPHY PROGRAM HEAD

The Department Head, Associate Department Head and Geography Program Head manage many aspects of the department and its programs. The Department Head signs off on all RA and TA appointments. The Department Head and the Geosciences GPD sign the most important form that you will complete at UMass, the *Degree Eligibility Form*. This is the form that signals the Graduate School to confer your

degree. If the Department Head is not available, the Associate Department Head or Geography Program Head can sign on behalf of the Head.

MS and Ph.D. Geoscientists: The Department Head, and the Associate Head, contribute to the Geosciences GPD's decisions about TA assignments. The GPD in coordination with the Department Head facilitates the annual review of Geosciences graduate students each Spring.

Ph.D. Geographers: The Geography Program Head guides and facilitates decision making about all aspects of the Geography program. The Geography Program Head helps the Geography GPD with RA and TA appointments for Ph.D. students in the geography program and also helps facilitate the annual review of graduate students in the geography program that happens each Spring.

The Department Head, the Associate Department Head (for geoscientists) and Geography Program Head (for geographers), are also available to graduate students as knowledgeable, thoughtful people who can advise and help graduate students on an as-needed basis.

CONDITIONS OF EMPLOYMENT AND FINANCIAL SUPPORT

The material in this section refers to Geosciences students. Geography MS and Human Geography PhD students should see the separate document that describes the employment and financial support procedures for Geographers.

1. TYPES OF FINANCIAL SUPPORT

One-year M.S. students are admitted without financial support. In contrast, most other students are admitted to the Geosciences graduate program only if they have financial support approved by the Department. Common forms of financial support include teaching assistantships and research assistantships. TAs are funded by the Department to assist in teaching duties. TA and RA appointments are governed by the [GEO contract](#), which is the agreement between the University and the Graduate Employee Organization, the graduate student union. Other forms of support include departmental scholarships, governmental scholarships, and some campus-based sources outside the Department; these are not governed by the [GEO contract](#).

2. TYPICAL REQUIREMENTS FOR CANDIDATES FOR TEACHING ASSISTANTSHIP (TA) AND RESEARCH ASSISTANTSHIP (RA) POSITIONS

The Department of Geosciences endeavors to provide financial support for all enrolled graduate students, but limitations in funding sources make this support competitive. For many students, the support takes the form of an assistantship provided by the Department, but some students are supported by external sources, such as government scholarships and other extra-departmental University-based sources.

It is common for funded graduate students initially to have teaching assistantship appointments, and later to move into research assistantship appointments, if funding is available for the latter. Appointments as research assistants are normally funded by faculty grant support. The selection of RA appointees, specific terms of contract, and other details of RA appointments are at the discretion of the principal investigator on the grant or contract that financially supports the RA appointment, subject to departmental and university regulations, and terms of the financially supporting grant or contract.

3. MAINTENANCE OF SUPPORT FOR TWO YEARS

Provided that students maintain satisfactory academic progress and (as relevant) perform their required teaching and research duties satisfactorily, departmental support is normally guaranteed for four academic semesters corresponding to the first two years of enrollment in the program. In some cases, if sufficient funding and need for TA appointments is present, students beyond the limits may receive TA support.

4. GENERAL LIMITATIONS ON APPOINTMENTS

Appointments as teaching assistants for either M.S. or Ph.D. candidates are limited to the two years of enrollment. Re-appointment to a teaching assistantship is not guaranteed beyond the end of a given semester when

- a) course performance is substandard (failure to maintain a 3.0 grade point average),

- b) insufficient progress is being made on other degree requirements (e.g. establishing thesis/dissertation committees, negotiating preliminary comprehensive examinations, etc., or
- c) teaching duties are performed unsatisfactorily (as measured by teaching evaluations performed by the TA's supervisor.

Students who are beyond the normal period for TA appointments may request consideration for available appointments in writing to the graduate program director. In general, those students who are in earlier stages in their studies will receive preference for TA support, and it will only be guaranteed for one semester.

Teaching assistantship appointments may include work during the January intersession period. Details of public holidays, personal leave, and vacation entitlement can be found in the Graduate Appointments Policies and Procedures document issued by the graduate school. While the department has some flexibility in setting working conditions, any proposed departure from the terms of the contract should be discussed with the student's supervisor well in advance.

International graduate student applicants are expected to provide documentation of spoken and written English proficiency in advance of admission. The department reserves the right to make TA or RA employment conditional upon further training in English, by procedures set forth by the GEO contract and University policy.

Students appointed as teaching assistants or research assistants are governed by the conditions of the agreement between the University and Graduate Employee Organization (GEO).

5. WORKLOAD AND LIMITATIONS ON TOTAL HOURS WORKED

University regulations govern the total weekly hours that student may work, which are calculated as hours worked in assistantships plus student credit hours. US Nationals may work a total of 40 hours per week, as working hours plus course credit hours, excluding dissertation credits. Working hours includes any type of campus employment: assistantships, student hours, work-study, etc. F1 and J1 international student visa-holders may work no more than 20 hours per week during the regular semester, calculated as working hours plus credit hours. 40 hours is allowed during summer.

6. OUTSIDE EMPLOYMENT

Graduate students appointed as TAs or RAs may not, in general, accept concurrent employment elsewhere. Any exceptions to this outside-employment restriction must be approved by both the GPD and the dissertation committee chair (adviser) prior to accepting any outside employment. Failure to disclose outside employment may be considered when evaluating student's satisfactory progress towards degree. Graduate students are not allowed to provide paid tutoring services to any student they also are grading in a course.

7. SAFETY TRAINING REQUIREMENTS

Prior to conducting any work in a research or teaching laboratory, students must undergo safety training as prescribed by the Department's Safety Officer. Students who will be driving Department or University vehicles for field trips must receive driver safety training as specified by the Department Head.

Documentary evidence of the satisfactory completion of the safety training requirements must be filed with the departmental GPD. This safety training includes the Laboratory Safety Course provided by the University environmental health and safety organization. If a TA or RA is informed in writing or by electronic mail about a need to comply with specific safety requirements by a specific deadline, failure to comply by the deadline is grounds for being barred without further warning from employment under circumstances that require those safety protocols. If documentation of safety compliance is presented after such an occurrence, reinstated permission to resume normal duties will be automatic, so long as the appointment has not been terminated in the meantime. This policy reflects the department's commitment to workplace safety guidelines.

8. TYPICAL AVAILABILITY OF POSITIONS

Typically, about 10 to 15 students are admitted into the graduate programs of the Department of Geosciences each year, but the number can vary greatly according to the applicant pool and availability of total funding available to support TA and RA appointments. The number of available TA positions varies somewhat from year to year, but typically there are 12 at any one time. The number of RA positions available varies with the amount of funding available to faculty. Due to the uncertainties in obtaining outside funding, it is not possible to predict with certainty the number of RA positions that will be available in any given future semester.

9. MECHANISM FOR ANNOUNCING AVAILABILITY OF POSITIONS AND NOTICE OF RENEWAL

In the spring preceding an academic year, all continuing graduate students are asked to confer with their research mentors about the availability of research assistantships for the upcoming year. Such RA positions may be for either fall or spring semesters or both, and may be full or partial appointments. Students who wish to request TA appointments are asked to apply for them at this time. As the TA listing for a given semester becomes firm, the needs of the courses, the academic preparation, previous experience levels, and the current academic schedule of TA appointees are considered in making actual TA course assignments several weeks in advance of the start of classes for the semester. As funding becomes available at times that are not certain in advance, some fine-tuning of position availability is carried out as a Fall semester is ongoing, for the following Spring semester. The GPD, working in consultation with the Associate Department Head and the TA supervisors, is responsible for selection of student TA appointees. Once a student has committed to a TA appointment by signing a contract, the student is expected to fulfill that commitment even if other support becomes available, unless released from the commitment by the Department Head.

The timing and availability of RA appointments is completely governed by availability of funds to individual principal investigators. In the vast majority of cases, RA appointments are made by principal investigators to students whom they are mentoring, and are only advertised beyond the research group of the principal investigator in cases where there are insufficient personnel. This policy is consistent with typical grant and contract conditions, and with a necessity for principal investigators to work with students who have appropriate professional and safety backgrounds. The call for principal investigators to appoint RAs happens on the same schedule as TA appointment calls (see previous paragraph). Typically, students are informed in writing or verbally about successful RA application at least two months in

advance, although occasionally the late arrival of funding allows appointments to be made at shorter notice by agreement between a RA applicant, a principal investigator, and the department. Consultation with the department in the latter case is important to assure that all teaching duties are properly covered.

Students interested in finding out about available research projects may find out about them in two ways:

1. direct conversation with professors/principal investigators,
2. attendance at the weekly “Professional Seminar”, which highlights the research projects currently being conducted within the Department of Geosciences.

Lists of available departmental grants for which employment opportunities are available will be maintained within the main Department office. The information is accessible upon request of graduate student employees of the Geosciences Department, in the manner described by GEO Contract Article 22, (July 2017- June 2020 version).

10. SATISFACTORY PERFORMANCE

The standard University forms and mechanisms are employed to evaluate the performance of TAs. Both evaluations by students being taught and faculty supervisory evaluations are carried out during the final two weeks of classes each semester. Examples of non-satisfactory TA performance include poor performance at assigned duties, failure to be present for exam proctoring or office hours, or being away from campus during the contract period without permission of the TA supervisor (instructor and/or GPD). In general practice, if TA performance is unsatisfactory during the semester, faculty supervisors inform the TA in question, first verbally, then, if necessary, in writing with copies to the main department office. If performance is particularly and chronically unsatisfactory in the opinion of the faculty supervisor, the department reserves the right to decline to offer TA assistance to a poorly performing individual, consistent with the department's aim to offer the highest possible levels of teaching quality. Any student denied TA reappointment for poor performance would be informed of this before the end of the semester during which the evaluation was carried out. Termination of TA duties due to non-satisfactory performance will not be regarded as lack of satisfactory progress towards degree.

The performance of RAs is primarily determined by the principal investigator (PI) of the grant or contract which provides financial support. Examples of non-satisfactory performance may include poor performance in research, lack of effort or time on research activities, or being absent without permission of the RA supervisor during the contract period. PIs are expected to communicate dissatisfaction with RA performance to the student involved, first verbally, then (if deemed necessary) in writing with copies to the departmental GPD. In cases where a PI has striven over period of time to improve job performance in consultation with the student involved, and remains dissatisfied, the PI may decline to renew the appointment. In cases where a PI declines reappointment, the student involved will be informed in writing at least a month in advance, and the departmental GPD will be informed at the same time.

11. OTHER OPPORTUNITIES

Occasionally, other forms of graduate employment opportunities become available within the department. Examples include summer teaching, tutoring, and special need appointments for various programs. Such

opportunities are typically announced on the departmental Web page, by announcement to graduate students by electronic mail, or by hard copy posting by the prospective employer.

12. NOTIFICATION

At the end of each academic year, each TA and RA will receive written notification concerning the status of their appointment for the succeeding academic year. TA notifications will come from the Department Head or Graduate Program Director, and RA notifications will be made by the relevant grant or contract supervisor.



13. PROBATION, ACADEMIC DISMISSAL AND TERMINATION OF STUDIES

Any student who fails to achieve satisfactory progress will be placed on departmental probation for the subsequent semester. For as long as the missed requirement, milestone or deadline is not fulfilled, the student will be removed from consideration for subsequent TA and/or RA support (citing lack of satisfactory progress towards degree). In addition, lack of satisfactory progress may result a warning with conditions for continuation in the program, or in severe cases may result in termination of studies and academic dismissal, following a recommendation for dismissal by the GPD and approval by the Dean of the Graduate School. In addition, the GPD and Department Head may recommend termination of studies for reasons of safety (to self or others), plagiarism, academic dishonesty, and inactive status.

Student recipients of departmental scholarships (e.g., Bromery or Graduate Fellowship) who fail to make satisfactory progress towards the Ph.D. degree will have their financial support terminated if dismissed from the program.

If, however, there are circumstances beyond the student's control that will lead to a missed requirement, milestone or deadline, the student must contact the Graduate Program Director and his/her Guidance & Exam Committee or Dissertation Committee in advance. The student must then submit and have approved by the Graduate Program Director, the adviser and the Guidance & Exam Committee or Dissertation Committee a revised timeline towards completion of degree requirements prior to the start of the next semester following a missed deadline. The revised timeline must include updated deadlines for meeting degree requirements and steps towards the Ph.D. degree; if these deadlines are subsequently missed without approval of additional extenuating circumstance, the same considerations for departmental probation and removal of TA and/or RA support will be applied.

Failure to meet more than one deadline, requests for more than one Revised Timeline, and failure to fulfill missed requirements during departmental probation, without excuse due to extenuating circumstances, will be considered grounds to pursue Academic Dismissal from the graduate program due to unsatisfactory progress.

POLICIES FOR RESOLVING CONFLICTS

The material in this section refers to all students in the department, both Geosciences and Geography.

1. IF CONFLICTS ARISE BETWEEN YOU AND YOUR ADVISOR/RA SUPERVISOR

Everyone in Geosciences is committed to the success of our students. Although we are a collegial group, occasionally problems or conflicts arise between a student and his or her advisor/RA supervisor. You may find that you do not share the same research interests as your advisor/RA supervisor. Your personalities may clash. You may have different expectations about your research, work habits, or timeline. You may find that you have different expectations about authorship.

Try to resolve conflicts early by scheduling a meeting with your advisor/RA supervisor. It may be uncomfortable to broach a difficult subject, but advisors and supervisors are generally as eager to resolve differences as you are. It will be helpful if you have already talked about expectations and you can both work to clarify and/or follow through. In some cases, conflicts arise because of a simple misunderstanding and a frank conversation is all that is needed. In many other cases, conflicts can be resolved over a short period of time. Even if you cannot resolve the conflict immediately, a conversation helps each of you to understand the other person's position, which often leads to resolution. It becomes more difficult for everyone if problems are left to fester.



If you are dissatisfied with the outcome of your meetings with your advisor/RA supervisor, you are encouraged to meet with the Graduate Program Director. The GPD is very familiar with the norms of the program and the variations in advisor style across the department. Geographers are also encouraged to meet with the Geography Program Head. The GPD or Geography Program Head can serve as facilitator to talk through issues such as whether your advisor has reasonable expectations of you. They may suggest approaches that might lead to resolution of the conflict. If you and the GPD (or Geography Program Head) deem it beneficial, the GPD or Geography Program Head will meet with your advisor, with or without you present (as you desire). Your conversations with the GPD are confidential. Note: In the case that a law has been broken (e.g. title IX sexual harassment) conversations with the GPD are not guaranteed confidentiality.

If your advisor or RA supervisor is serving as the current Graduate Program Director of your program, or if you feel your GPD is unable to resolve the problem or conflict to your satisfaction, you can seek the advice of one of the other GPDs: the GPD for Geography, the GPD for the Geographic Information Systems program, or, for geographers, the GPD for Geosciences. Each of the GPDs in the department is vested in the success of all students in our programs. You can also seek the advice of the Geosciences Department Head, Associate Department Head or Geography Program Head. For some issues, you may find value in having a meeting with several department leaders in order to have multiple viewpoints on

the issue. Although they will not be familiar with the culture of our program, you can also enlist the services of the University's Ombud's office to help resolve conflicts (see below).

CHANGING ADVISORS

Perhaps you and your advisor/RA supervisor have a conflict that cannot be resolved and that will make it difficult for you to continue your degree. You may find a better match with a different advisor. Advisors vary greatly in their styles of interactions with their students and level of involvement with their students' research projects. Students also vary tremendously; some prefer to work very closely with their advisors, and some prefer a more independent path. If you think that you may want to change advisors, discuss it with your current advisor, if it is comfortable to do so. It is often considered bad form to shop around for a new advisor without letting your old one know, especially if you are a Ph.D. student and/or funded to work in your advisor's lab. Discuss your ideas with the GPD or Geography Program Head, who can suggest a different match. However, be forewarned that if your advisor is at least partially responsible for your funding, other potential advisors may not have financial support for you.

If you decide a problem or conflict is not resolvable to your satisfaction, you may change your advisor without jeopardy, providing that details of the transfer are agreeable to all parties concerned. If this occurs, you must notify the Graduate Program Director via email/memo that will be added to your file. The note should provide an effective date of your advisor switch, list your new thesis committee and outline how this change will impact your funding.

Remember that a decision to change advisors, or even leave the program if you cannot find a better match, although it can be painful, can lead to a good outcome. Ask most faculty and they will tell you stories (perhaps their own!) of students who had a change of path during graduate school that ultimately led to success.

A final important note. If you feel that you have been subject to harassment in the workplace, know your rights. Resources include your union (the Graduate Employee Organization, or GEO), the title IX coordinators and the GPD. See section 4 for contact information of resources outside of the department.

2. IF CONFLICTS ARISE BETWEEN YOU AND YOUR TA SUPERVISOR

A variety of factors can contribute to conflicts between TAs and their supervisors. Most conflicts can be resolved with a meeting with your supervisor. Refer to earlier discussions and documents about expectations, and both parties can work to clarify and follow through. If you are dissatisfied with the outcome of your meetings with your supervisor, you are encouraged to meet with the Graduate Program Director or, for geographers, the Geography Program Head. The GPD is familiar with the various TA roles in the program and can work with you to resolve the conflict. You and the GPD may also enlist the advice of the department head, associate department head or geography program head.

You can at any time solicit the advice and assistance of the Graduate Employee Organization. They have experience assisting in mediating conflicts between students and supervisors.

3. IF CONFLICTS ARISE BETWEEN YOU AND YOUR GPD

Unless the GPD is an examination/thesis committee member, he/she is not directly involved in your progress toward your degree and does not impact outcomes of these milestones. Nevertheless, occasional conflicts arise between a student and the GPD. For example, you may be dissatisfied with your office setting or teaching assistantship assignment. The most effective way to resolve conflicts is by scheduling a meeting with the GPD to discuss your concerns. The discussion may quickly lead to resolution as you each present your positions on the issue. Keep in mind that some issues of office or teaching assistantship assignment cannot have immediate resolution due to the multiple other constraints. If the issue is not on a path towards resolution after discussions with the GPD, you may find value in meeting with the associate department head, the geography program head, or the department head.

4. RESOURCES OUTSIDE OF THE DEPARTMENT FOR STUDENT AND WORKPLACE CONCERNS

GEO (Graduate Student Union)

The union provides help resolving workplace conflicts.

GEO Office, 201 Student Union

Email: geo@external.umass.edu

Phone: 413-545-0705

The GEO represents and supports all students employed by the university as RAs or TAs. The GEO has assembled a useful document called *Your rights as a Graduate Student* ([linked here](#)).

The document describes the following rights:

- You may request to have your GEO department steward or a union representative present when meeting with your supervisor if you think that the meeting may result in discipline or lead to termination.
- When your supervisor or employer violates the GEO contract, state and/or federal law, the employer's policies, past practice, or fair treatment policies, then you have the right to file a grievance via GEO.
- The University shall not discriminate with respect to appointment, reappointment, or terms of appointment of graduate student employees, ... on the basis of race, native language or dialect, sex, gender identity or expression, color, religion, creed, marital status, pregnancy, parental status, national or ethnic origin, age, sexual orientation, disability, political affiliation or belief, veteran status, citizenship, HIV status, or GEO affiliation and/or activities.
- Sexual harassment, which includes unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, is prohibited under Title VII of the Civil Rights Act of 1964.
- As a GEO member, you are under no obligation to work more than the hours specified in your contract. If you feel that you are working more than your contract specifies, begin documenting the amount of hours you work each week, and contact GEO.
- Graduate student employees are guaranteed a healthy and safe work environment.

[Ombuds Office](#) - Resolution Services for Students for Conflicts and Concerns

The Ombuds Office helps hundreds of undergraduate and graduate students every year with a wide variety of conflicts and concerns. The Ombuds Office can be particularly helpful in informally mediating disputes between students, or between students and faculty or staff, whether those disputes are academic, work related, or interpersonal. We can assist with issues of academic honesty, and can help you understand the policy and procedures for informal resolutions and formal charges (see the [Academic Honesty website](#)).

OFFICE HOURS:

Monday - Friday 9 am - 5 pm and by appointment

CONTACT INFORMATION:

Campus Center, Room 823, UMass Amherst

Phone: (413) 545-0867

Email: ombuds@umass.edu

Dean of Students Office

Dean of Students Office (DOSO) staff can answer questions, advocate on your behalf, and make sure you get the help, resources, and support you need. The DOSO Student Life Team is available to meet with you, listen to your concerns, and assist in developing a comprehensive action plan for your academic and personal success.

Phone: (413) 545-2684

Location: 227 Whitmore, www.umass.edu/dean_students

Center for Counseling and Psychological Health

We provide short term individual, couple's and group psychotherapy; psychiatric medication consultation and treatment; psychological assessment (testing); behavioral medicine; and crisis intervention services. We are open from 8:30 a.m. to 5 p.m. Monday through Friday and are also available 24 hours a day to provide crisis intervention services and assessment.

Many options for student services: <https://www.umass.edu/counseling/services>

Location A: Bartlett Hall (2nd floor, north), 130 Hicks Way

Location B: 415 New Africa House, 180 Infirmary Way

Phone: (413) 545-2337 or (413) 545-0333

Title IX Coordinator

Equal Opportunity and Diversity (EO&D)

Phone: 413-545-3464

Email: eod@admin.umass.edu

Site: <https://www.umass.edu/titleix/>

The Title IX Coordinator is responsible for overseeing the investigation of Title IX related complaints, including sexual harassment, sexual assault, relationship violence and stalking; and for conducting or providing training for investigators and employees on their responsibilities under Title IX. The Title IX Coordinator chairs the Title IX Team, which coordinates responses to Title IX incidents. The Title IX Coordinator is also the Title VI, Section 504, Americans with Disabilities Act Coordinator, and Chief Diversity Office for the campus.

Center for Counseling and Psychological Health (CCPH)

Jessi Bond, Center for Counseling and Psychological Health (CCPH) - *CONFIDENTIAL
Phone: 413-545-2337
Email: jsbond@uhs.umass.edu

Center for Women and Community (CWC)

Becky Lockwood, Center for Women and Community (CWC) – *CONFIDENTIAL
Phone: 413-545-0800 (24/7)
Email: rlockwood@umass.edu

University Health Services (UHS)

Dr. George Corey, University Health Services (UHS) – *CONFIDENTIAL
Phone: 413-577-5000 (24/7)
Email: gcorey@uhs.umass.edu

University of Massachusetts Police Department (UMPD)

Lieutenant Brian Henault, University of Massachusetts Police Department (UMPD) –
*CONFIDENTIAL
Phone: 413-545-2121
Email: brianh@admin.umass.edu

*Please note that staff listed as confidential will not share any information unless they've received permission from the person. If you are ever confused as to whether a conversation is confidential, do not hesitate to ask the person you are having a conversation with.

MS STUDENT MANUAL FOR THE M.S.-GEOSCIENCES

MASTER'S DEGREE REQUIREMENTS

- A minimum of 30 graduate credits are required for a master's degree
- A minimum of 21 of these credits must be in the field of Geosciences
- Up to 10 of the 30 credits can be thesis credits, if the student chooses the thesis option (see below)
- A full year course in two of the following: biology, chemistry, physics, either taken as an undergraduate or during the graduate program at UMass
- Fulfilling the basic requirements of the Department undergraduate degree in Geology; any deficiencies in the undergraduate background will be discussed during the arrival interview between the student and the faculty
- A full year course of college mathematics or statistics, beyond the precalculus level, appropriate to the student's course of study, either taken as an undergraduate or during the graduate program at UMass
- Enrollment in *Geo 797R Preparing for M.S. research during the first Fall semester*. (1-yr hydrogeology M.S. students can opt out of this requirement),
- Participation in each semester of residence in *Geo 701, Professional Seminar*,
- At least one oral presentation of research results, either at that seminar or at a professional meeting. (1-year hydrogeology M.S. students are exempt from the professional presentation requirement)
- A minimum of one-half of the total required credits must be in courses for which a letter grade was given
- For the thesis option, a minimum of 6 credits must be in 600-800 level courses (in addition to thesis credits). For the project option at least 12 credits must be in 600-800 level courses.
- Credits transferred from another institution cannot be used to satisfy the University's requirement for graded credits nor the 600-800 course level requirement.
- The grade point average (GPA) must be 3.0 or above
- Submission of a completed MS Degree Eligibility Form in time for University graduation deadlines

THESIS OR PROJECT TRACK TOWARD THE M.S. DEGREE

The Department of Geosciences offers two alternative tracks toward the master's degree: the thesis track and the non-thesis track.

THESIS TRACK:

The thesis track is appropriate for those with strongly focused research interests. Coursework of students in the thesis track is typically focused on the broad field related to the planned thesis area. The student does an in-depth research project and writes a thesis summarizing that study. Students in the thesis track

do NOT take an oral comprehensive exam, but do have a thesis defense at the end of their program. The thesis must be formatted and submitted to the Department and the Graduate School according to the prevailing regulations. The Department requires at least one final copy of your thesis. See the Graduate School publications Graduate Student Handbook and Guidelines for Master's Theses and Doctoral Dissertations for information on style and formatting.

PROJECT TRACK:

The project track is appropriate for those wishing to emphasize breadth of geological or interdisciplinary knowledge. Students in the project option may take courses covering a wide range of topics within the field of geology. The student does a research project that has smaller scope than usually required for a thesis would and writes a final report on the research project. The student's advisor and guidance committee ultimately review and approve the report, but the report does not need to meet any University requirements, as a thesis would. An oral comprehensive exam is required and is normally taken in the spring semester of the second year of residence, near the end of completion of the research project. The oral exam is NOT a defense of the project but rather an exam on the scope of the student's knowledge reflecting the coursework undertaken.

The project track hosts the 1-year hydrology M.S. concentration. Students in this concentration take their M.S. credits in coursework related to hydrogeology. In lieu of a research project, 1-year hydrogeology students take 2 independent studies focused on field hydrogeology methods and data analysis. Additionally, many students take an additional independent study or project focused on advanced hydrogeologic analysis.



MILESTONES IN THE MASTER'S PROGRAM:

Arrival Interview: All incoming students are given an interview with the entire geology faculty on arrival during the Geosciences orientation. The purpose of this interview is to review the student's academic background, to assign a temporary advisor, and to discuss any possible deficiencies in the course background.

Annual Review: A yearly review is made by the entire faculty of each M.S. student's progress toward the degree. This annual review takes place each year in the Spring semester.

THESIS OPTION MILESTONES

Thesis Topic: In consultation with the advisor and relevant faculty the student chooses a thesis topic.

Thesis Committee: In consultation with the advisor, the student selects a thesis committee consisting of at least three members as soon as a thesis topic has been chosen. Select the thesis committee by the start of the second semester of residence. These committees can be modified later if needed. [Fill in M.S. Form 2](#) and submit it to the Graduate Program Director, who will send the appropriate memo to the Graduate School.

Thesis Proposal: (The Graduate School calls this the Thesis Outline) The student writes a thesis proposal and submits it first to his or her advisor, then, when the advisor has approved it, to the rest of the thesis committee. Faculty will undertake to return thesis proposal drafts to students within three weeks of receipt. When all committee members are satisfied with the proposal, they sign the title page, which is in the format required by the graduate school; see above mentioned publications for information. At that time the student takes one copy of the thesis proposal to the Graduate School Records office in Goodell, completes [M.S. form 3](#) and gives this form and one copy of the thesis proposal to the Graduate Program Director to be recorded and placed in the student's file. The title page of the proposal must be in the format as shown for the final thesis (see Guidelines for Master's Theses and Doctoral Dissertations on the Graduate School website).

The proposal should be completed by the start of the 3rd semester. While many students are tempted to wait until near the end of their thesis to write the proposal, evidence shows that writing this document sooner leads to more timely completion to degree. The proposal need not correspond exactly to the approach and findings in your MS thesis. Rather, it is meant to demonstrate your understanding of the research question, awareness of the literature and intended research path.

Thesis: Thesis research and writing takes place during the second, third, and sometimes part of the fourth semester of residence. The completed thesis should be submitted to the advisor, who has three weeks to read and comment on it. Revisions are then made and the thesis is re-submitted to the advisor. Further revisions may warrant submission to the entire committee, or to the advisor again, at the discretion of the advisor. The committee members ultimately have three weeks to read and comment on the thesis. When the thesis is considered by all committee members to be defensible, even if not in its final, 'perfect' form, the student can schedule a thesis defense. Please be aware that the time frame of writing, reading, and revision will usually take several months, so plan accordingly.

Public Lecture: Each student is required to give a presentation of his or her research at least once during tenure as a graduate student. This is normally done as part of GEO 701 "Professional Seminar", which every grad student must register for during all their semesters as an active student. Presentation of results at a scientific meeting is also encouraged, although not required for graduation. [Form M.4](#) should be submitted to the Graduate Program Director after completion of this task.

Thesis Defense: The thesis defense must be scheduled at least two weeks after all committee members agree that the thesis is defensible. When scheduling the thesis defense, keep in mind that the completed thesis, associated forms, with all necessary fees and signatures, must be submitted to the Office of Degree Requirements by the posted deadline for your target official graduation date. You can find the deadlines listed on the MS Checklist [posted at the graduate school website](#).

- At least two weeks before defense: Scheduling information must be given to the Department Secretaries who will make up notices that will be posted. Information that must be supplied includes: 1) thesis title, 2) name of M.S. candidate, 3) date and time of defense, and 4) thesis committee chair (advisor) and members. Note: Some people also submit the degree eligibility form, described below, to the GPD at this time.
- One full work prior to defense: A copy of the thesis must be placed in the Department Office for perusal by the faculty.

The thesis defense will include a 30-40 minute presentation of the results of the thesis research. The audience and the student's thesis committee will have the opportunity to ask questions following the presentation. Generally, we allow public questions first followed by questions by the committee, though the advisor has discretion on the management of questions. All questioning is open to the public. Everyone is permitted to stay through all of the questions until the start of the committee deliberations. Only the committee and graduate faculty can participate in the deliberation on the MS thesis defense outcome. After the successful defense of the thesis, [Departmental M.S. Form 5](#) must be completed, with all signatures from the advisor, and submitted to the Geosciences Graduate Program Director.

The final approved thesis with all signatures should be submitted directly to the graduate school. While submitting the thesis is a glorious achievement, keep in mind that it is not the official milestone that grants M.S. degree completion. That milestone is met with the completion of the Degree Eligibility form described below.

PROJECT OPTION CHRONOLOGY

Selection of Examination Committee: While developing the Program of Study, described below, an examination committee should be established. The student and his or her advisor suggest five faculty members to act as members of the examination committee, but the final choice of the committee rests with the faculty as a whole. Complete [M.S. Form 1](#), included in this manual, and give to the Graduate Program Director when you have established your examination committee.

Program of Study: A proposed Program of Study must be approved by the faculty, generally by the end of the second semester of residence. The program should outline a suitable breadth of course work and should state a research topic; it also should include the approved examination committee. The proposal, together with summary of undergraduate and graduate courses taken and planned for the future, must be provided to the faculty at a faculty meeting for vote by the entire faculty. Note: at least 12 credits of the total 30 must be numbered 600 or above.

Public Lecture: Each student is required to give a presentation of his or her research project at least once during tenure as a graduate student. This is normally done as part of GEO 701 "Professional Seminar", which every grad student must register for during all their semesters as an active student. Presentation of results at a scientific meeting is also encouraged, although not required for graduation. [Form M.4](#) should be submitted to the Graduate Program Director after completion of this task.

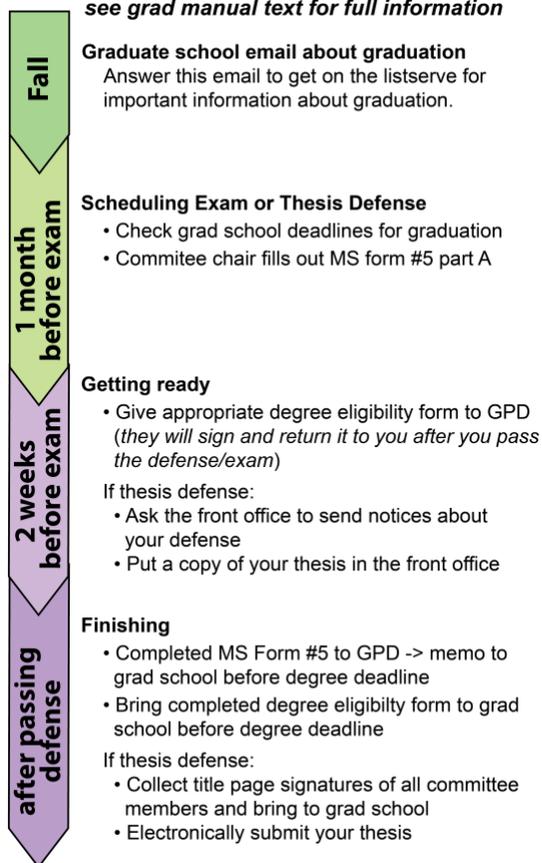
The Comprehensive Exam: An oral comprehensive exam is required and is normally taken in the spring semester of the second year of residence, near the end of completion of the research project. Questions from each examiner can range across the fields of geology, but are typically focused on the field of expertise of the faculty member. The time and place of the exam must be announced to the Department

Faculty at least one week ahead of time. Fill out [form M.5](#) before and after the exam and the advisor submits it to the Graduate Program Director after completion of the exam.

FINAL STEPS FOR BOTH THESIS AND NON-THESIS

Last Semester MS Overview

see *grad manual text for full information*



When cleared you will get an email: "Congratulations, you got your degree and it is noted on your transcript."

the completed form to you. The eligibility form with all necessary fees and signatures, must be submitted to the Graduate School's Office of Degree Requirements by the posted deadline for your target official graduation date.

When you are cleared for graduation you will receive an email from the graduate school. If you don't get this email, it can be worthwhile to follow up with them about any missing information/forms/memos.

Department Check-Out: Final processing of the degree will depend upon 1) returning all departmental equipment, 2) cleaning all laboratory or other workplaces, 3) archiving or discarding all samples. Obtain all necessary signatures on [M.S. form 6](#) and submit the form to the Grad Program Director.

Degree Eligibility Form: The Master's Degree Eligibility Form, [available from the Grad School web page](#), must be completed by the master's candidate. The graduate school has separate versions for thesis and non-thesis M.S. The graduate student should verify the accuracy of the information that is put on this form from his or her permanent record. You can obtain an unofficial copy of your record in the Graduate Records Office or online in Spire. The completed form should be turned into the Geoscience Graduate Program Director at least two weeks prior to the posted degree deadline. On the timeline at left we recommend that you submit this form two weeks before your exam or thesis defense. If you are doing a thesis, this is also the time that you notify the front office.

When all of the degree requirements are met (e.g., [M.S. Form 5](#) completed and thesis approved if appropriate) the GPD will sign and forward the degree eligibility form to the Department Head for their signature before returning

TRANSITIONING FROM M.S. TO PH.D. STUDIES

Students within the M.S. and M.S./Ph.D. program should by the 3rd semester initiate a conversation with their advisor about continuing at UMass for Ph.D. studies. This decision should be reached through discussions between the student and their advisor/committee that consider both the scope of Ph.D. work and availability of external funding. When a decision is reached, the advisor should inform the GPD of the decision. If a decision has not been reached by the start of the 4th semester, the student is considered to be on track for a terminal M.S. degree.

Students within the M.S. program who want to continue with Ph.D. studies need to transfer into the M.S./Ph.D. program. To do so, the student applies for the Ph.D. program through the graduate school's application process. The graduate school waives the application fee for current M.S. students. The admissions committee within input from the advisor decides on admission of the student to the MS/PhD program.

If you pursue a Ph.D. in the Geosciences program, you have two ways to reach your goal.

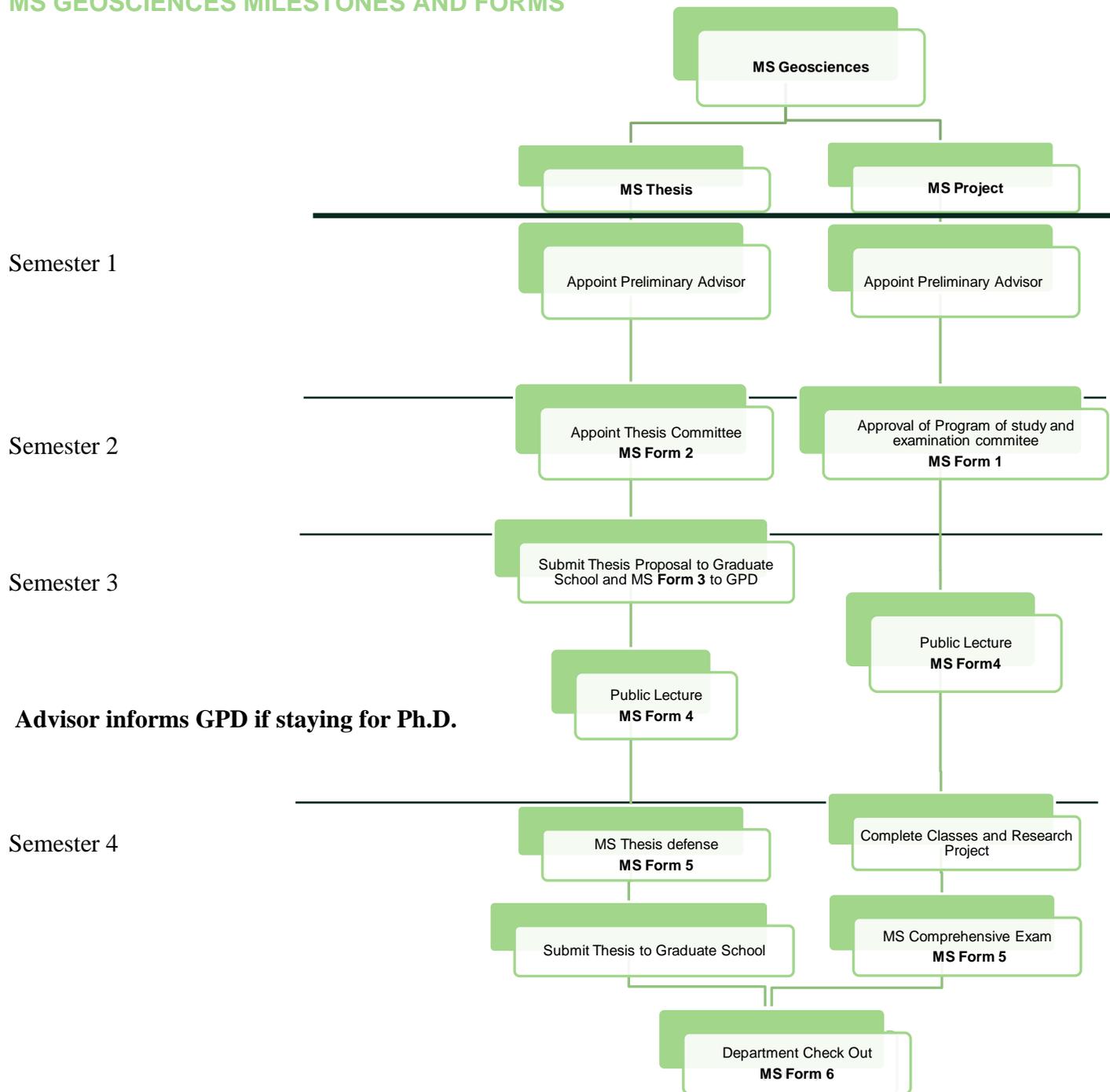
Option 1: You can complete your M.S. Thesis and start your Ph.D. upon successful defense and completion of your M.S. Thesis.

Option 2: The second option involves some paperwork but provides a way for you to potentially start on your Ph.D. a little sooner. The UMass Geosciences department does not admit students into the Ph.D. program if they do not already have a M.S.. For these students, this option 2 may expedite their entry into the Ph.D. program. All UMass Geosciences M.S. students intending to continue for a Ph.D. complete independent research that is published in peer-reviewed journals. For this option, you complete a M.S. research *project* instead of a *thesis* and your Ph.D. Preliminary Exam both serves to admit you to the Ph.D. candidacy and also serves as your final M.S. comprehensive examination.

Note: research associated with M.S. projects use independent study credits and M.S. thesis credits (Geo-sci 699) do not count towards the 30 credits required for M.S. project students. This option benefits students who are planning to write professional paper(s) on their M.S. research but may want to avoid having to format the work into a M.S. thesis and have a formal M.S. thesis defense.

Students who pursue their M.S. and Ph.D. within the Geoscience program are required to give at least two oral presentations of their work, one on the MS (MS form #4) and one on the PhD (either presented in Geo-Sci 701 or as an email to the GPD with details of the public presentation)

MS GEOSCIENCES MILESTONES AND FORMS



The various forms for the M.S. degree are included on the following pages and are downloadable from the moodle page. Print them out and when completed, turn in to the GPD. The GPD then submits the forms to the graduate school.

You, the student, are responsible for submitting the signed thesis proposal and the signed thesis directly to the graduate school.



GEOSCIENCES M.S. FORM 1:

Program of Study and Evaluation Committee for M.S. Project

The program of study should be developed in consultation with your advisor and faculty associated with your project as early as possible, preferable during the first semester in residence. The program should include 1) past and planned coursework (show clearly how M.S. project course requirements will be met), 2) a description of the intended research project, and 3) a listing of the examination committee. This consists of five faculty members selected in consultation with your advisor that have agreed to serve on your committee.

Submit this with your program of study to your advisor. Your advisor will bring the program of study to the faculty for approval and then submit to the GPD. This process should be completed by the start of your second semester.

Student Name: _____

Examination Committee

Chair: _____

Member: _____

Member: _____

Member: _____

Member: _____

Member: _____

Program of Study and committee Approved by the Geosciences faculty

Date

Graduation Program Director



GEOSCIENCES M.S. FORM 2:

Selection of Thesis Committee for M.S. Thesis

The thesis committee (at least 3 members) should be selected in consultation with your advisor and their approval sought as soon as a topic has been chosen.

Submit this completed form by the start of your second semester to the Graduate Program Director.

Student Name: _____

Examination Committee

Chair: _____

Member: _____

Member: _____

Additional Member: _____

Approved:

Date

Advisor



GEOSCIENCES M.S. FORM 3

M.S. (Thesis) Form #3: Submittal of Thesis Proposal

The thesis proposal must be approved by the thesis committee and the Department Head and submitted to the Graduate School at least 4 months prior to the expected date of the defense. Attach a **copy** of the signed proposal to this form and submit to the Graduate Program Director. Deliver the signed **original** to the Graduate School, where it will be logged in on their computer. Remember to keep a copy for yourself, as well as proof that it has been recorded at the Grad School

Student Name _____

Date Submitted _____



GEOSCIENCES M.S. FORM 4

M.S. Form #4: Completion of Public Lecture

Each student is required to give an oral presentation concerning the progress of research toward the project. This is usually done in Geosciences 701 "Professional Seminar", but a talk at a professional meeting can also be used to fulfill the requirement. Fill out this form, have it signed by your advisor, and submit it to the Graduate Program Director.

Student Name _____

A lecture on the topic:

was presented on

Date

at

_____.

This lecture satisfies the requirement for an oral presentation of the preliminary results of research for the M.S. project.

Signed: _____

Advisor

Date



GEOSCIENCES M.S. FORM 5

M.S. Form #5: M.S. Thesis Defense or Comprehensive Examination

The date of the M.S. examination will be scheduled by the candidate in consultation with the guidance or thesis committee.

Student Name _____

a. Scheduling of Exam

Date and Time _____

Location _____

Approved: _____
Date Committee Chair

b. Announcement of approved examination date placed in faculty mailboxes at least TWO WEEKS prior to exam:

c. Result of examination: _____

_____ Date Committee Chair

Examination Committee Members: _____

Have your advisor return this form to the Graduate Program Director after your examination is finished.



GEOSCIENCES M.S. FORM 6

M.S. Form #6: Department Check-Out

Final processing of the degree will depend upon fulfilling the remaining obligations to the Department and the Graduate School. Obtain the signatures on the form below and bring it, along with an original and one copy of the completed "Yellow Sheet", to the Graduate Program Director and Department Head for final clearance. Bring the signed original yellow sheet to the Graduate School.

Student Name _____

a. If any Departmental equipment has been borrowed, it is all returned.

_____ _____
Date Advisor

b. Laboratory or other workspace has been cleared.

_____ _____
Date Advisor

c. Samples have been properly archived or discarded per advice from advisor.

_____ _____
Date Advisor

PH.D. STUDENT MANUAL

The Geosciences Ph.D. program provides students with the opportunities to acquire and practice the skills needed to begin careers as geoscientists and scholars. These include foundational knowledge in the discipline, oral and written communication, acquisition of advanced, specialized and new knowledge, mentoring in professional practices, and development of teaching, mentoring and research skills.

The culminating feature of the Ph.D. program is the production of a doctoral dissertation. To satisfy the University's criteria for a Ph.D. degree, the dissertation:

- 1) should demonstrate the candidate's intellectual competence and maturity in the field of concentration;
- 2) should make an original and valid contribution to human knowledge;
- 3) should be an individual achievement and the product of independent research.

Additionally, *“the dissertation in its completed form will be judged largely upon the ability of the candidate to review and make critical use of the literature; to formulate a problem, plan a method of attack, and work systematically toward a solution; to summarize the material or data, and draw conclusions based thereon. Scholastic attainment in writing and presenting the results of the study will be crucial. The goal of the dissertation is to make a contribution to knowledge. It should be of publishable quality.”*

Note: Ph.D. students in human geography should see guidelines in the section of this document entitled [Ph.D. Student Manual – Human Geographers](#) which supersede requirements listed in this more general chapter. The [UMass Geography blog](#) also hosts helpful information.

1. REQUIREMENTS FOR PH.D. DEGREE IN GEOSCIENCES

The degree requirements for the Ph.D. in Geosciences include:

- A minimum of 10 GEO-SCI 899 “Ph.D. Dissertation” research credits.
- 2 consecutive semesters in residence during which the student is registered full-time, which equals enrolled for at least 9 credits.
- a 3.0 Grade Point Average (GPA) or higher each semester.
- completion of GEO-SCI 701 “Professional Seminar” each semester in residence.
- delivering at least one oral presentation of your dissertation research in GEO-SCI 701
- completion of GEO-SCI 797A *Reading, Writing and Reviewing in the Geosciences* during the first Fall semester in the Ph.D. program. (*Human Geography Ph.D. students are exempt*)
- setting up a Guidance and Exam Committee during the first two months in the Ph.D. program.
- successful completion of the Preliminary Comprehensive Exam.
- setting up a Dissertation Committee by the end of the semester following passing the Preliminary Comprehensive Exam
- annual timelines submitted to the student's Dissertation Committee describing research activities and products anticipated over the next year in the program.
- Draft of prospectus submitted to dissertation committee at the end of the third semester.
- successful defense of the Prospectus at the start of the fourth semester.

- submission of a Dissertation Prospectus approved by all members of the Dissertation Committee to the Graduate School.
- successful completion of an oral defense of the dissertation research
- submission to the University of a dissertation document approved by all members of the Dissertation Committee
- submission of a completed Doctoral Degree Eligibility Form in time for University graduation deadlines

2. SATISFACTORY PROGRESS TOWARDS COMPLETION OF DEGREE

2.1 SATISFACTORY PROGRESS

Primary responsibility for continued satisfactory progress towards completion of dissertation research and degree requirements rests with the student. All students are expected to maintain high standards of excellence in scholarship while demonstrating progress towards completion of degree requirements as rapidly as possible.

Satisfactory progress includes all of the following components:

- achieving an overall 3.0 GPA for each semester
- completing all requirements and milestones of the program by the stipulated deadlines
- maintaining continuous progress in dissertation research
- submitting an annual timeline to the Dissertation Committee and GPD before the Fall Semester each year, beginning YR2 in the program.

2.2 ANNUAL TIMELINE AND UPDATES

Starting in year 2 of the program, each Ph.D. student is required to submit a 12-month timeline and workplan to their Dissertation Committee and the GPD. This timeline and workplan should describe the research activities and products anticipated over the next year. Annual timelines must be submitted prior to the start of the fall semester. Failure to submit an annual timeline before the start of each fall semester will be regarded as lack of satisfactory progress towards degree.

3. RESIDENCY, CANDIDACY, ENROLLMENT AND STATUTE OF LIMITATIONS

3.1 RESIDENCY REQUIREMENT

The University residency requirement states that each graduate student must complete one continuous academic year (i.e. two consecutive semesters) in full-time graduate work. A semester of full-time graduate work is defined as taking at least 9 credits in graduate courses (500-level or higher). These credits may include GEOSCI 899 “Dissertation Research” credits. Consecutive semesters may be Fall-Spring or Spring-Fall; summer enrollment does not qualify.

3.2 CANDIDACY

Once a student successfully passes the Preliminary Comprehensive Exam and meets the course requirement of completing GEO-SCI 797A and at least one semester of GEO-SCI 701 (see sections 6.2 and 7. below), the GPD can nominate the student for candidacy. The student’s adviser and the GPD

complete the form “**Doctoral Candidacy Nomination Form**” found on the Policies & Forms section of the Graduate School website, and the student submits this to the Graduate School. Once this form is registered by the Graduate School, the student's statute of limitations will be set to 5 years, with an expected graduation term five full academic years following the semester when advanced to candidacy.

3.3 CONTINUOUS ENROLLMENT

Graduate students are required by University regulations to maintain continuous enrollment in their graduate program. Enrollment is achieved by registering for course credits. In addition, students can maintain continuous enrollment by registering for GRADSCH 999 “Continuous Enrollment” in lieu of enrolling in GEO-SCI or other courses following their advancement to candidacy. A student who is not enrolled by the end of the Late Registration Period (Add/Drop) will be automatically withdrawn from the University. Reinstatement requires the approval of the GPD and Graduate Dean, as well as payment of missed Continuous Enrollment and other fees.

3.4 FULL-TIME AND PART-TIME STATUS

Students are automatically considered full-time for a given semester if registered for 9 or more credits, and are considered part-time if registered for 8 or fewer credits. In addition, the GPD can certify students on Continuous Enrollment as full-time for that semester if the student is actively pursuing dissertation research. Full-time status is not automatic for students on Continuous Enrollment; if full-time status is desired (e.g. for loan deferment or international student visas) students must request that the GPD certify full-time status for each semester the student is on Continuous Enrollment.

3.5 STATUTE OF LIMITATIONS (SoL) AND SoL EXTENSIONS

The statute of limitations (SoL) is the period within which all degree requirements must be completed. Ph.D. students are admitted with a six-year statute of limitations. Once advanced to candidacy, a student's statute of limitations is set to five years. Students who fail to complete all degree requirements within the statute of limitations will be automatically withdrawn from the program. Student may request one-year or two-year extensions to their statute of limitations, repeated SoL extension requests are allowed. Each SoL extension request must include a timeline for completion of remaining requirements and a justification for the extension from the student's adviser. SoL extension requests are submitted to the GPD, who then may recommend to the Graduate Dean that the extension be approved; final approval of SoL requests rests with the Graduate Dean. Note that a student whose SoL has expired will be unable to register for classes or Continuous Enrollment, and will be automatically withdrawn from the program if an SoL extension is not approved by the end of the Late Registration Period (Add/Drop). Thus, it is crucial that students be aware of their SoL and expected graduate terms, and request SoL extensions in advance to prevent them from being withdrawn from the program. Students who have been withdrawn from the program due to an SoL expiration may petition the Graduate School for reinstatement and approval of an SoL extension request.

4. COURSE REQUIREMENTS

4.1 GEO-SCI 701 “PROFESSIONAL SEMINAR”

Students must register for GEO-SCI 701 for each semester they are in residence, i.e. enrolled in full-time graduate work through course credits or GEO-SCI 899 dissertation research credits. This is a pass/fail seminar, and attendance is required. Unexcused absences will be regarded as lack of satisfactory progress towards the degree. Part-time students and students on GRADSCH 999 “Continuous Enrollment” are encouraged but not required to attend GEO-SCI 701.

In addition, each student in the Ph.D. program must deliver an oral presentation of research related to their dissertation at some time following their advancement to candidacy. Students do not need to be enrolled in GEO-SCI 701 to present in this seminar. This requirement can be waived on request to the GPD by any student who demonstrates proof they have delivered an oral presentation of research related to their dissertation at an off-campus scientific meeting. PhD students entering with a MS are often asked to present their MS research in GEO-SCI 701. This is a great way for the community to learn about new students but does not count as presenting dissertation research.

4.2 GEO-SCI 797A “READING, WRITING AND REVIEWING IN THE GEOSCIENCES”

This seminar allows students to hone some critical skills for successful careers in Geosciences. The ability to critically analyze scientific literature spanning a variety of disciplines is an important skill necessary for careers in many fields (e.g. academia, industry and government) and is also a required skill for successfully completing a Ph.D. GEO-SCI 797A is a seminar that guides students on the reading, writing, review and critical analysis of papers and research proposals in the Geosciences. The course also prepares Geosciences Ph.D. students for taking the Preliminary Comprehensive Exam and for writing the Dissertation Prospectus. The seminar also touches on aspects of science communication, thriving in graduate school and career preparation. Students must enroll and successfully complete GEO-SCI 797A during the first fall semester they are in the Ph.D. program. Ph.D. students may also enroll in subsequent semesters until their dissertation prospectus (see section 6 below) has been accepted.

4.3 GEO-SCI 899 “DISSERTATION RESEARCH”

10 cumulative credits of GEO-SCI 899 are required for the Ph.D. Students may enroll in GEO-SCI 899 for up to a maximum of 9 credits per semester. Enrollment and assignment of credit loads for GEO-SCI 899 require adviser permission and cannot be done via SPIRE.

4.4 OTHER COURSES

There are no other formal course requirements in the Geosciences Ph.D. program. However, individual faculty may require a student to complete a course or courses in Geosciences or other departments as a condition for serving as the student’s adviser, or as the result of conditional pass of the Preliminary Comprehensive Exam.

5. THE PRELIMINARY COMPREHENSIVE EXAM

The Department of Geosciences Preliminary Comprehensive Exam is a two-part examination conducted by a student’s Guidance & Exam Committee during the first year in the Ph.D. program. Under exceptional

circumstances, a student may defer the Preliminary Comprehensive Exam by one semester contingent on approval by the Guidance & Exam Committee and GPD.

5.1 THE GUIDANCE AND EXAM COMMITTEE

Each student must establish a Guidance & Exam Committee comprising at least 5 Geosciences faculty **within the first two months** of their first semester as a full-time student in the Ph.D. program. External faculty from other UMass departments or other universities are not required or preferred. Typically, the Guidance & Exam Committee will be set up on consultation between the student and faculty during incoming graduate student orientation before the start of the student's first semester. Otherwise, students must communicate in writing to the GPD their selection of the Guidance & Exam Committee using [FORM #1](#). The Guidance & Exam Committee will assist the student with choosing first semester courses, and will conduct the student's Preliminary Comprehensive Exam (see sections 7.2 - 7.4 below). While changes/modifications to the Guidance & Exam Committee are allowed prior to the end of the student's first semester, failure to set up a Guidance & Exam Committee within two months following start of a student's first semester will be regarded as lack of satisfactory progress towards degree.

5.2 PRELIMINARY COMPREHENSIVE EXAM: PART ONE

Part One of the Preliminary Comprehensive Exam (literature critique) is an exercise in critical thinking and scientific writing completed between a student's first and second semester in the program.

By Dec. 1 of the first semester (or April 15 if entering the program in the Spring semester), the student's Guidance & Exam Committee will assign the student a paper to read and critique. Recent research papers are strongly preferred over review papers or older literature. In some cases, books or book chapters may replace the papers. Papers will be chosen by the guidance committee to reflect student's interests and research in that sub-discipline in the Geosciences. Successful critique of any research requires substantial background knowledge in the discipline. We expect students to read the associated literature of the selected paper and draw on this knowledge in their critique.

Students will then have several weeks to complete a 2-3 page written critique of each paper that consists of the following labeled sections:

- identify the main research question that this paper addresses
- explain how the main research methods are used to address this question
- summarize the main findings of the paper
- answer the question "Do these findings adequately answer the research question?"
- identify one or more unknowns related to the main research question that still remain after completion of this study
- answer the question "are there any short-comings or ambiguity in the methods or interpretation in this paper?"
- describe next steps in this topic of research that would investigate the unknowns and short-comings

Students will submit their written critique to their Guidance & Exam Committee no less than 2 days before the date scheduled for Part Two of the Preliminary Comprehensive Exam.

5.3 PRELIMINARY COMPREHENSIVE EXAM: PART TWO

Part Two of the Preliminary Comprehensive Exam (oral examination) is an evaluation of the outcomes of Part One. Part Two (oral examination) must be held before the end of the Late Registration Period (Add/Drop) for the Spring Semester of the student's first year for students entering in fall, and by June 1 for students entering in spring. In exceptional circumstances (e.g. fieldwork that cannot be re-scheduled, faculty sabbatical) a student may petition the Guidance & Exam Committee and GPD in writing to take the exam at a different time. The GPD must receive this request a minimum of 2 months in advance, and will work with the Guidance & Exam Committee and GPD to determine when the exam will be re-scheduled. Note that Guidance & Exam Committee members can participate in the oral examination remotely (e.g. audio or video conferencing). Barring approval of an exception, failure to complete the Exam before the start of the Spring semester (for students entering in fall) or by June 1 (for students entering in spring) will be regarded as lack of satisfactory progress towards degree. It is the student's responsibility to schedule Part Two (oral examination) with their Guidance & Exam Committee; as faculty commonly have many competing obligations for their time and may use time outside the semester for fieldwork or other travel, students should work to schedule this exam as soon after the Guidance & Exam Committee has been identified as possible.

The Part Two (oral exam) will be a two-hour session during which the student and the Guidance & Exam Committee use Part One (literature critique) as a launching point for questions to probe the student's preparation in the science and the critical thinking skills needed to pursue a Ph.D. Students will be expected to support and justify their critiques, to demonstrate sufficient background knowledge on the topic, and to exhibit the capacity to acquire new knowledge and skills necessary to conduct and evaluate scientific research. Students may bring resources and reference materials in to the Exam, including figures and tables from the paper within a presentation file (e.g. ppt). The student can launch the exam with a short overview of the paper and critique that is limited to 5 minutes. The student will be evaluated on the discussion that follows this brief introductory presentation. The role of the overview presentation is to launch the discussion by drawing everyone's attention to the main points of the paper and the critique. Faculty should not ask any questions during the overview presentation. The primary advisor should monitor the time of the starting presentation and after 5 minutes should notify the student to transition to the discussion phase of the exam. If the student uses presentation software for the overview, only 4 slides should be used for this initial overview; additional slides that may be useful for the discussion can be added after the 4 overview slides.

Students must prepare for the Preliminary Comprehensive Exam independently. The student shall not discuss the article(s), book(s) or book chapter(s) with faculty or other students nor should the student receive any assistance in preparing the written critique.

5.4 OUTCOMES OF THE PRELIMINARY COMPREHENSIVE EXAM

The outcomes of the Preliminary Comprehensive Exam include Pass, Pass with Conditions, or Fail. Conditions may include: a retake of the Exam starting with new papers and new written critiques; a re-write of the written critique only, recommendations for future coursework or other preparation needed to develop and conduct dissertation research; reevaluation of research interests and dissertation topics. In the case that the Preliminary Comprehensive Exam needs to be re-taken or the critique re-written, this must be completed before the end of the student's second semester although the Guidance & Exam Committee may set an earlier deadline. An exam result of Fail will result in academic dismissal from the graduate

program. The advisor communicates the results of the Preliminary Comprehensive Exam to the GPD, who records the results. Advisors often forget to do this and students should prompt their advisors to relay the information.

Students who receive a result of “Pass” on their Preliminary Comprehensive Exam and meet the course requirement of completing GEO-SCI 797A can next be advanced to candidacy. The student’s adviser and the GPD complete the “**Doctoral Candidacy Nomination Form**” found on the [Policies & Forms section of the Graduate School website](#), and the student submits this to the Graduate School. If you are a MS/PhD student and your preliminary exam is also serving as the Comprehensive Exam for your MS, you need to submit [MS Form 5](#) to the GPD.

Students who receive a result of “Pass with Conditions” on their Preliminary Comprehensive Exam must satisfy those conditions before the department will recommend advancement to candidacy.



6. DISSERTATION COMMITTEE AND DISSERTATION PROSPECTUS

6.1 THE DISSERTATION COMMITTEE

No later than the end of the semester following successful completion of the Preliminary Comprehensive Exam (typically 1st year, Spring semester), the student should recommend to the Graduate Program Director the members of his/her Dissertation Committee by submitting [FORM #2](#) signed by the adviser. This committee consists of at least three (ideally 4-5) UMass faculty members: a dissertation chair, who is the student’s main Ph.D. adviser, at least 1 but up to 3 additional members of the graduate faculty in Geosciences, and 1 member who is graduate faculty in another UMass Amherst department. All members of the Dissertation Committee must agree not only to assist in the supervision of the dissertation project, but also be present in person to conduct the Dissertation Prospectus Defense and the Final Oral Examination (i.e. the Dissertation Defense).

‘External’ members (i.e. Ph.D.-holding research collaborators from other institutions, industry or government) are neither required nor preferred by the Graduate School. In exceptional cases, students and advisers can petition, through the GPD, that an external member be appointed with one-time status to the Geosciences Graduate Faculty. External committee members cannot serve to replace the required Geosciences or outside committee members. External members can serve as either voting or (preferably) non-voting Dissertation Committee members.

Failure to set up a dissertation committee by the end of the semester following successful completion of the Preliminary Comprehensive Exam will be regarded as lack of satisfactory progress towards degree.

6.2 THE DISSERTATION PROSPECTUS

The Dissertation Prospectus is a written proposal submitted by the candidate to the Dissertation Committee. The Dissertation Prospectus is typically based on the format of an NSF-style research proposal (~15 pages of text with embedded figures and tables, plus references and a cover page), but the Dissertation Committee may require a different format in some cases. Following on NSF style proposals, we require students to include a discussion of broader impacts in their prospectus. The broader impacts can describe learning or outreach activities the student plans to accomplish or how their research benefits our society. We recognize that outreach activities broaden student's Ph.D. training and can augment science communication skills. By including broader impacts in the prospectus, the committee may have helpful suggestions on how the student can most effectively reach both their research and broader impacts goals.

The Dissertation Prospectus is a document that describes the research *to be* conducted, analyzed, and presented in the dissertation; it is not acceptable for this document to be a status report or summary of dissertation research already conducted. The student should develop the Dissertation Prospectus independently without advance review of the document from their Dissertation Committee. Drafts of the document can be shared with other graduate students, postdocs and faculty who are not on the Dissertation committee. While developing their Dissertation Prospectus, students may benefit from discussing some research ideas/approaches with their advisor and committee but these discussions should be general in nature to allow the student to independently develop the details of their research plan. If the student is funded to work on one their advisors' successful research proposal, the Dissertation Prospectus should explore avenues of research that are distinct from the advisor's original proposal. Because we learn as our research progresses, we never perform exactly what was proposed years prior. Students can take advantage of opportunities that have been realized since the advisor wrote the original proposal and build these into their Dissertation Prospectus.

The first draft of the Dissertation Prospectus must be submitted to the student's Dissertation Committee by the end of the student's third semester in the program (Fall of year 2 for students entering in Fall, Spring of year 2 for students entering in spring). Failure to submit a first draft of the Dissertation Prospectus to the Dissertation Committee members before this time will be regarded as lack of satisfactory progress towards degree.

6.3 THE DISSERTATION PROSPECTUS DEFENSE

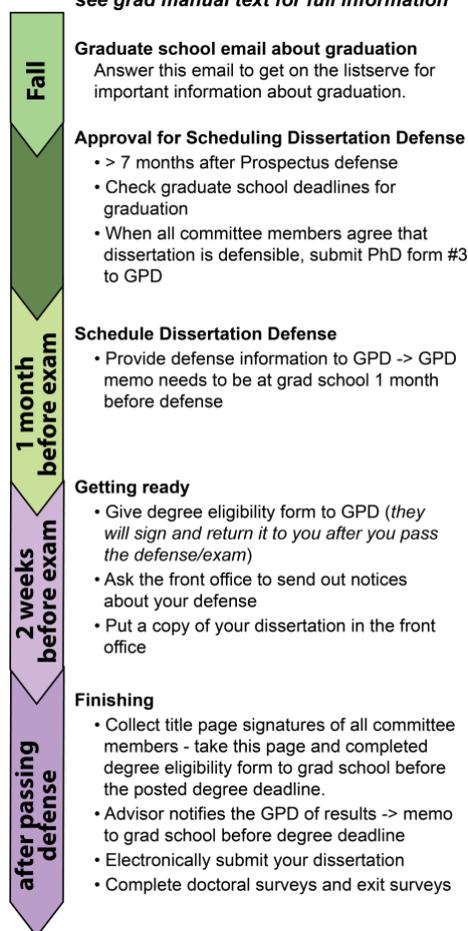
The Dissertation Committee will review the first draft of the Dissertation Prospectus during Winter Break (for students entering in fall) or summer (for students entering in spring), and each committee member will return a written review of the Prospectus to the student by the start of the following semester. Students will schedule an oral defense of the Prospectus, outlining the proposed research and responding to committee reviews, to be held prior to March 1 of year 2 (for students entering in fall), or Nov. 1 of year 2 (for students entering in spring). Notice of the Prospectus Defense (prospectus title, name of student and committee members, date, time and location) must be sent to all Geosciences graduate faculty no less than one week prior to the defense date. The Prospectus Defense is open to all Geosciences graduate faculty and must be attended by all Dissertation Committee members. Dissertation Committee members may supply additional comments on the prospectus and proposed research during the Prospectus Defense.

The Dissertation Committee will vote on outcomes of the Prospectus Defense. These include Pass, Pass with Conditions, or Fail. Students who Pass the exam may directly submit their Dissertation Prospectus to the Graduate School. Those who Pass with Conditions must meet those conditions (normally, some revision and editing) before receiving approval to submit their Dissertation Prospectus, while those who Fail will not have their Dissertation Prospectus approved and will be dismissed from the program. The student's adviser must notify the GPD about the results of the Dissertation Prospectus Defense.

A final version of the Dissertation Prospectus must be completed by the end of the spring semester in year 2 (for students entering in fall) or fall semester in year 2 (for students entering in spring), and approved/signed by all Dissertation Committee members and submitted to the Graduate School by June 1 of year 2 (for students entering in fall)/Dec. 1 of year 2 (for students entering in spring). The cover sheet must be formatted as described in the Graduate School document "Guidelines for Master's Theses and Doctoral Dissertations", and signed by each member of the Dissertation Committee to indicate approval of the topic and its plan of execution. The Graduate Program Director or Department Head/Chair signs and forwards the prospectus to the Graduate Student Service Center. Failure to submit a Dissertation Prospectus that has been approved by all Dissertation Committee members before June 1 of year 2 (for students entering in fall)/Dec. 1 of year 2 (for students entering in spring) will be regarded as lack of satisfactory progress towards degree.

Last Semester PhD Overview

see grad manual text for full information



When cleared you will get an email: "Congratulations, you got your degree and it is noted on your transcript."

7. THE DISSERTATION AND THE FINAL ORAL EXAMINATION

7.1 THE FINAL ORAL EXAMINATION

Following approval of the Dissertation Prospectus, students are expected to dedicate their time and efforts towards conducting their dissertation research. Ultimately, this will result in students preparing a written document termed the dissertation. Typically, the dissertation will go through several iterations of editing between the students and Dissertation Committee members. Once the Dissertation Committee is satisfied that the dissertation is sufficiently prepared to be 'defensible', the student may schedule a Final Oral Examination, commonly known as the dissertation defense.

The Final Oral Examination may be scheduled **no less than 7 months** after submitting the Dissertation Prospectus; this is a University regulation that can only be waived under exceptional circumstances that require approval of the GPD and Graduate School Dean. The Final Oral Examination is an oral presentation of the dissertation research scheduled once the student and Dissertation Committee agree that the body of scholarship is ready to be presented in final form. All committee members must provide preliminary approval of the written dissertation before the defense can be scheduled; this approval is established by submitting [FORM #3](#).

The Graduate School Office of Degree Requirements must receive written notification of the Final Oral Examination, including candidate name, Dissertation Committee membership, dissertation title, and the date, time and location of the exam **at least four weeks** prior to the date of the exam. This is a University regulation and can only be waived under exceptional circumstances that require approval of the GPD and Graduate School Dean. Students should consult the “**Doctoral Oral Examination Checklist**” found on the [Policies & Forms section of the Graduate School website](#) for the information they must provide the GPD, who will then notify the Graduate School about the upcoming exam. Note that all items on this checklist must be completed before the GPD will approve scheduling of the Final Oral Examination. Notice of the Final Oral Examination will then be posted online by the UMass news office inviting all members of the campus community to attend the defense. Additionally, candidates must provide a copy of the dissertation to the Geosciences Department Office **at least one week** prior to the defense, where it will be made available to the entire department.

The results of the Final Oral Examination include Pass, Pass with Conditions, and Fail. Following successful passing of the Final Oral Examination, the student’s adviser must notify the GPD who will then submit results of the exam to the Graduate School.

7.2 THE DISSERTATION

The dissertation document must be formatted as described in the Graduate School document “*Guidelines for Master’s Theses and Doctoral Dissertations*”. The dissertation must be approved and signed by all members of the dissertation committee and the Department Head/Chair and then submitted electronically through the University of Massachusetts Amherst dissertation submission site at ScholarWorks@UMass Amherst. Many dissertations include research that has been published or is in review in scientific journals; these papers may constitute chapters in the dissertation as long as formatted according to UMass style guidelines. Students are strongly encouraged to familiarize themselves with these style guidelines before writing. The graduate school also provide a template document that you can use. Requirements for a body of scholarship sufficient to merit a dissertation vary widely, but a typical Geosciences dissertation would include at least 3 published or publishable chapters, together with background/introductory material and a synthesis chapter at the end describing relevance and next steps.

8. DOCTORAL DEGREE ELIGIBILITY

Once the student has successfully completed the Final Oral examination, and all Dissertation Committee members approve the written dissertation, the student should consult the “**Doctoral Degree Checklist for Ph.D. and EdD Degrees**” found on the Policies & Forms section of the Graduate School website the Graduate School. Students must submit all required materials described on this checklist. Deadlines for submission of these materials are set by University regulations without exception. Importantly, this includes the “**Doctoral Degree Eligibility Form**” [available from the Grad School web page](#). The graduate school states that the completed form should be turned into the Geoscience Graduate Program Director at least two weeks prior to the posted degree deadline. Our students find it helpful to submit this form to the GPD when they provide a copy of the dissertation to the Geosciences front office one week before the defense. The GPD will then check that the student has completed all the degree requirements. After the successful defense of and signing off on the dissertation, the GPD and the Geosciences Department Head sign the degree eligibility form and return this form to the student so that they can submit to the graduate school with their signed dissertation title page.

When you are cleared for graduation you will receive an email from the graduate school. If you don't get this email, it can be worthwhile to follow up with them about any missing information/forms/memos.

9. PH.D. FORMS

The three departmental forms follow this page. Keep in mind that some Ph.D. milestones involve the student to submit materials to the graduate school and for the student's primary advisor to notify the GPD.



PH.D. FORM #1:

Membership of Ph.D. Guidance and Examination Committee

Student Name _____

Guidance & Exam Committee (print names):

committee chair _____

member _____

member _____

member _____

member _____

approved by (signatures):

committee chair _____

date _____

GPD _____

date _____



**PH.D. FORM #2:
Membership of Ph.D. Dissertation Committee**

Student Name _____

Dissertation Committee (print names):

Geosciences committee chair _____

Geosciences member #1 _____

Geosciences member #2 _____

Geosciences member #3 _____

UMass grad faculty member _____

approved by (signatures):

committee chair _____

date _____

GPD _____

date _____



PH.D. FORM #3:

Approval of Dissertation Draft

Student Name _____

By signing below, I certify that I have reviewed a draft of the above student's doctoral dissertation, and I approve that this student may proceed with scheduling the Final Oral Examination (dissertation defense).

Dissertation Committee (signatures, with printed names):

Geosciences committee chair _____

date _____

Geosciences member #1 _____

date _____

Geosciences member #2 _____

date _____

Geosciences member #3 _____

date _____

UMass grad faculty member _____

date _____

received by GPD (signature) _____

date _____

PH.D. STUDENT MANUAL – HUMAN GEOGRAPHERS

Note: This section is currently undergoing revision. Please consider the following material to be in draft form

For human geography students the completion of a Ph.D. in Geosciences entails fulfillment of required coursework, the passing of the Ph.D. preliminary comprehensive exam, approval of a dissertation prospectus by the dissertation committee, and completion of the dissertation and a successful defense of it.

Beyond the M.S./MA degree; additional time in particular is needed by those who enter without a Geography M.S./MA degree and by those who carry out extensive research (in some geography sub-fields research typically requires a year or more for fieldwork and additional time for processing and analysis). In the case of international fieldwork additional time may be required for language training and other preparation.

1. PRELIMINARY ADVISER AND COMPREHENSIVE EXAM COMMITTEES

All human geographers will be supervised by preliminary adviser appointed at the time they enter the Ph.D. program by the Geography GPD and/or Program Head. The preliminary adviser will assist the student with planning coursework and with constituting a Comprehensive Exam Committee. Students may request a change in preliminary adviser at any time, in consultation with the GPD for geography.

The comprehensive exam committee consists of three faculty members, at least two of whom should be faculty in the Geography Program. The choice of faculty members for the comprehensive exam committee should be made in consultation with the preliminary adviser. The student is responsible for discussing the exam with each potential member of the committee and inviting possible committee members to join the committee. The committee must be approved by the preliminary adviser and the GPD for geography.

2. REQUIRED COURSEWORK

The Ph.D. in Geosciences requires a minimum of 10 graduate credit hours of graduate level coursework (500 level or above courses). This can include independent studies and credits for dissertation work.

The requirements for individual students are determined at the time of their entry into the program following a review of their backgrounds by the preliminary adviser in consultation with other geography faculty and the geography GPD. Entering students should expect to attend one meeting with their preliminary adviser and the geography faculty prior to the start of the first semester of coursework. These meetings are usually held at the end of the week before the start of the fall semester. Students who enter with an M.S. or MA in Geography may be held for additional coursework requirements to fill gaps in their backgrounds. Students who enter without an M.S. or MA in Geography will be required to develop a background equivalent to that degree, which will require a minimum of 1 year of coursework and independent study, and may require serving as a teaching assistant for introductory geography courses. The course of study for those without a background (MS or MA) in geography must include Geography 604,

Geographic Theory and Analysis, which emphasizes critical reading, reflection, and writing in Geography.

3. PRELIMINARY COMPREHENSIVE EXAM AND ADVANCEMENT TO CANDIDACY

The preliminary comprehensive exam in human geography consists of two parts -- a written exam carried out over a multi-day period and a follow-up oral exam. This exam is carried out either in the second semester of the program for students who enter with a Geography M.S./MA degree or in the fourth semester (or later) for those who do not. Under exceptional circumstances, a student may defer the Preliminary Comprehensive Exam by one semester contingent upon approval by the Guidance Committee and the GPD.

A Ph.D. in human geography requires developing appropriate breadth and depth in one or more sub-fields of geography beyond the level of expertise expected for an M.S. degree. This requires a high level of understanding of theory, concepts, literature, current scholarly dialogs and debates, and methods in one or more geography sub-fields, command of which informs the dissertation research (and which may require study in cognate fields). Ph.D. preparation for many students also requires developing expertise on a world or US region, including requisite language skills. The background gained in Ph.D. studies cannot be gained through course work alone. Typically one to two semesters (sometimes longer) of intensive, focused reading and thought is required, often in close consultation with faculty members.

Long experience in Geography Ph.D. programs has found that students' commitment to gaining Ph.D. level background in their sub-field(s) is enhanced by the challenge of a written and/or oral comprehensive qualifying exam. The purpose of the preliminary comprehensive exam is to ensure students develop a level of breadth in geography as well as depth of understanding in one or more sub-fields beyond that expected of an M.S. student prior to formulating their thinking about their dissertation research. Preparation for the qualifying exam, with associated mentoring by one's adviser and interaction with the examination committee, is a vital intellectual experience that establishes the core scholarly foundation for dissertation research and postdoctoral careers. It is both a rite of passage and one of the intellectual highpoints of graduate education, as it provides a unique learning opportunity through intense, focused engagement with theory, conceptual frameworks, seminal literature, and case studies. During this process the student becomes familiar with current issues, dialogs, and debates in an individualized way and to a much greater degree than is possible in graduate coursework. The experience considerably enriches the student's level of scholarly engagement and is invaluable for helping her/him formulate dissertation thinking and career directions.

It is expected that students will focus on exam preparation for at least a semester (during which time she/he can opt to enroll in independent studies related to the exam preparation). The exam accordingly should be taken no earlier than the second semester of the Ph.D. program for students who have already earned an M.S./MA in Geography. For students who do not enter with a Geography M.S./MA more time and coursework will be required. However, except with the approval of the student's examination committee, the exam should be taken no later than the end of the fifth semester in the program.

The qualifying exam must be passed before forming a dissertation committee and developing a Ph.D. proposal. A "pass" on the qualifying exam requires that a majority of the examination committee members vote in favor of a pass.

The qualifying exam will consist of a written exam and a follow-up oral exam as follows

WRITTEN EXAM

The written exam will consist of three parts: 1) an exam on at least one subfield of geography, 2) an exam on a theoretical or methodological approach in geography, and 3) an exam on a thematic topic or region. An exam in a second subfield can be substituted for either the exam on theory or methodology or the exam on a thematic topic or region.

The exam questions will be set by the exam committee members, and can be prepared in consultation with the student. The chair of the exam committee is responsible for ensuring the exam is of appropriate breadth and depth and that all committee members participate in its design and implementation.

The written exam typically will be held over three days within a one week period, with one day devoted to each of the three exams. Each of the three component exams will last three or more hours. The exam committee member(s) responsible for each of three component exams will also decide the format in terms of the number of questions, the time allotted, and whether or not the exam is open or closed “book” and materials. The three component exams do not need to follow the same format.

Establishment of any preparatory requirements for the exam, such as background papers or bibliographies is up to the exam committee members.

The written exams will be evaluated on a pass/fail basis within one week of the completion of the component exams. If the student fails to receive a pass from the committee member(s) responsible for a component exam she/he may retake that component exam one time, at a time to be determined by the adviser and the student. The guidance committee will require a student to retake any exam that is not passed. A student may retake any of the written exams one time without penalty. No student will be allowed more than one retake.

ORAL EXAM

The oral follow-up exam will be scheduled as soon as possible following the evaluation of the written exam. All exam committee members must participate. This exam is evaluated on a pass/fail basis, with a majority of pass votes by the committee members required to successfully complete the qualifying exam. In the event of failure to pass the oral follow-up exam the student can retake the exam once again at a time to be determined by the student and her/his adviser.

The oral exam will consist of follow-up questions and clarifications on the written exam and will be evaluated on a pass/fail basis.

4. DISSERTATION COMMITTEE

The dissertation committee is established no later than one semester following successful completion of the preliminary comprehensive examination. The chair and members of the committee are recommended by the student to the Graduate Program Director. The committee must have at least three UMass faculty members: two human geographers from the Dept. of Geosciences and another member from another UMass Amherst department. The committee can also have additional faculty members. The chair of the committee must be a Dept. of Geosciences human geography faculty member. Geography affiliate faculty can serve as

members in lieu of one of the other Dept. of Geosciences human geographers or as an outside member. All UMass non-Dept. of Geosciences faculty members who are members of the Graduate Faculty can serve as the outside member. Faculty from other universities can serve on committees if they are approved by the UMass graduate school as appointees to the Graduate Faculty.

5. ANNUAL TIMELINE AND UPDATES

Each Ph.D. student is required to submit an annual 12 month timeline and workplan to their dissertation committee beginning with the year following their completion of the preliminary comprehensive exam. This document, to be filed before the start of Fall semester, will outline dissertation-related plans for the coming academic year. Failure to file the annual timeline before the start of Fall semester will be regarded as lack of satisfactory progress towards the degree.

6. DISSERTATION PROSPECTUS

The dissertation in human geography is an original intellectual achievement. This means that the project is conceived by the student, designed by her/him, and carried out independently. The adviser, committee members, and others can provide guidance, but the dissertation candidate is responsible for conceptualizing the dissertation project and drafting the prospectus.

The dissertation prospectus (the university term for the “dissertation proposal”) is a substantive document developed and written by the student with advice from the adviser and other committee members who comment on drafts. The final draft must be approved by the dissertation committee, and any necessary IRB authorization must be secured, before research can begin.

There is no required template for a dissertation prospectus in human geography. Questions of structure, content, format, and length are left to the adviser. However, the prospectus should address such key matters as issues of positionality, contextuality, and situated knowledges; significance within one or more geography sub-fields as well as within current scholarly dialogues and debates; relation to cognate fields, if any; contributions, if any, to society in terms of informing law, policy, planning, or practices; research design; methodology, including positionality and possible cross-cultural and inter-subjectivity concerns; and ethics, including provisions for meeting anticipated Institutional Review Board (IRB) review requirements and -- when working with Indigenous peoples and local communities or in their territories -- provisions for gaining authorization and meeting anticipated protocols.

7. SATISFACTORY PROGRESS, PROBATION AND MODIFICATION OF DEGREE TIMELINES

Progress in the program will be reviewed by the students’ committee each spring semester and their recommendation will be considered by the **Geography faculty** in completing the annual evaluations of all geography graduate students.

To maintain satisfactory progress in the program students must meet the following deadlines or be granted an extension by the geography faculty

Preliminary comprehensive exam committee established (by the beginning of the second semester).

Preliminary comprehensive exam (end of second semester for students entering with M.S./MA in Geography, end of fourth semester for other students -- or other deadline approved by the Geography faculty as a whole).

Submission of annual timelines and workplans before each Fall semester in the years following successful completion of the preliminary comprehensive exam

Approval of a Dissertation Prospectus (end of fourth semester, for those entering with a Geography M.S./MA; end of fourth year -- or later with the approval of the Geography faculty as a whole -- for those entering without a Geography M.S./MA).

Failure to complete these requirements will be regarded as lack of satisfactory progress. This will result in the student being put on departmental probation for the subsequent semester. If the missed requirement is not fulfilled within the probation semester the student will be removed from consideration for all subsequent TA or RA support (citing lack of satisfactory progress toward degree).

However, in case deadlines have been missed due to circumstances beyond the student's control or due to exceptional circumstances, the student must contact the guidance committee (or dissertation committee) and the Graduate Program Director in advance and submit a revised timeline for the coming semester or year. The revised timeline must include updated deadlines for progress towards the Ph.D. degree. If these deadlines are subsequently missed the student will be placed on departmental probation for a semester and will not be considered for subsequent TA/RA support.

Failure to meet more than one deadline, requests for more than one Revised Timeline, and failure to fulfill missed requirements during probation will be considered to be grounds for the department to pursue Academic Dismissal from the Ph.D. program due to unsatisfactory or unreasonable progress.