

The Department of Geological Sciences Graduate Handbook 2016-2017



1. INTRODUCTION

Welcome. This handbook provides graduate students with a written statement of policies and degree requirements established by the Department of Geological Sciences (DGS). Graduate students that enter the DGS at the start of the Fall 2016 or Spring 2017 semesters are subject to the policies in this handbook. This information is supplemental to the Graduate School Catalog (<http://graduate.ua.edu/catalog/>), which summarizes the general policies and requirements of the University of Alabama (UA) Graduate School. DGS policies have been established by the faculty of the DGS within the guidelines outlined by the Graduate School and the Graduate Council. These guidelines are administered by the Department Chair, the Departmental Graduate Program Committee, and the student's Advisor and Thesis/Dissertation Advisory Committee. Students must consult the Graduate School web site for current policies, deadlines, and required forms (<http://graduate.ua.edu/students.html>).

2. ADMISSION AND RETENTION

Applicants to the M.S. (master's) program are required to have a bachelor's degree in geology or a related discipline (e.g., biology, chemistry, math, physics, or engineering) to be admitted. Applicants to the Ph.D. (doctoral) program should have a M.S. degree in geology or a related discipline; however, applicants with exceptional credentials may be admitted directly into the Ph.D. program. Students who have begun work on their M.S. degree in the DGS may be admitted into the Ph.D. program after completing the M.S. degree. Students who want to continue must apply through the Graduate School website (<http://graduate.ua.edu/>) to the Ph.D. program. In rare circumstances, the student can transfer to a Ph.D. prior to earning the M.S. degree if recommended by their Thesis Advisory Committee. All course credits earned as a M.S. student, with the exception of thesis and non-thesis research credits, will apply to the Ph.D. degree if approved by the student's Dissertation Advisory Committee.

For admission to the DGS graduate program the following classes are required: Physics I and II; Chemistry I and II; and Calculus I and II. An applicant can have only one deficiency. This class will be taken during the first semester as a graduate student in the DGS. This class may be taken pass-fail. These deficiencies cannot be audited. Statistics may be substituted for calculus with approval of the student's Thesis/Dissertation Advisory Committee.

Applicants to the M.S. and Ph.D. programs may be required by the Graduate Program Committee or Thesis/Dissertation Advisory Committee to complete one or more of the core courses in Geology (e.g., Mineralogy, Igneous-Metamorphic Petrology, Structural Geology, Stratigraphy and Sedimentology, and/or Field Geology or comparable field experience) if these classes are lacking in their background. These requirements cannot be fulfilled by audit and must be taken for a letter grade. In addition, DGS Graduate Teaching Assistants (TA's) must have a background in the course they are teaching. Deficiencies are determined by the Graduate Program Committee. To be a 100-level TA, the minimum classes needed are GEO 101 or GEO 102, Sedimentology and Stratigraphy, Mineralogy and one more of the following 7 classes: Geochemistry, Geophysics, Structural Geology, Volcanology, Hydrology, Igneous and Metamorphic Petrology, or Paleontology. These classes must be taken either for a letter grade or Pass/Fail but can never be audited.

Students may be admitted unconditionally if they meet both of the following minimum requirements: (a) their GPA, based on a 4.0 system, is a minimum of 3.0 overall or 3.0 over the last 60 hours in a degree program (international grades are converted by the Graduate School to a 4.0 system), and (b) their GRE score is at least 300 for (verbal plus quantitative sections) and the GRE score for analytical writing is \geq the 50th percentile. Rarely, students may be admitted conditionally if they fail to meet one of these two minimum requirements. These students are the last to be accepted and must have a potential advisor who makes a strong case for their admission. Students admitted conditionally must achieve a GPA \geq 3.0 for the first 12 hours of graduate coursework. Unconditionally admitted students whose GPA drops below 3.0 after earning credit for 12 hours of graduate coursework will be placed on probation. Probationary status must be removed by raising the overall GPA to a minimum of 3.0 during the next 12 hours of graduate work following the semester in which probation was incurred, or they will be dropped from the program.

Non-native English speaking students are eligible for regular admission if they receive a score of at least 79 on the Test of English as a Foreign Language (TOEFL) exam or 6.5 on the International English Language Testing System (IELTS) exam. Scores are valid for two years. Non-native English speakers must obtain a minimum of 24 on the TOEFL Speaking Subtest to be able to serve as a GTA (IELTS Speaking Band score of 7.5). In exceptional circumstances, a non-native English speaker may be permitted to teach with a Speaking Subtest score of 21 or

more. This is subject to a placement test at the UA English Language Institute. In these circumstances (and in all cases where the TOEFL Speaking Subtest score is less than 28 or the IELTS Speaking band score is less than 8.5) a student must enroll in the International Teaching Assistant Program (ITAP) course while teaching and achieve at least a conditional pass to teach in a class without grading responsibilities. Students with a TOEFL Speaking Subtest score below 20 (IELTS Speaking Band score of 6.5) are not permitted to serve as a TA until they have received at least a conditional pass in the ITAP course. Students with a TOEFL score below 79 (or IELTS score below 6.5) may receive a Provisional Language Admission, but they must enroll full-time in the ELI Intensive English Program. Students admitted as a Provisional Language Admissions will not be allowed to take graduate courses until they (a) achieve a TOEFL of at least 79, or (b) complete at least level 4 of the ELI Intensive English Program with a minimum GPA of 3.5.

3. REGISTRATION, COURSE LOAD, AND ADVISING

All students receiving full (0.5 FTE) assistantships, fellowships, or scholarships must be registered as full-time students for at least 6 hours of coursework (or the minimum as required). Most students in their first year register for 9 credits. All students utilizing the assistance of a faculty member or any facility of the UA in relation to a degree program must be registered for at least 1 hour of coursework or thesis/dissertation research credit. M.S. students must be registered for at least 1 credit hour during each semester of their candidacy. Ph.D. students must be registered for at least 3 credit hours of dissertation research during each semester after admission to candidacy, including the semester in which they defend their dissertation. The Graduate School must be consulted when a student is preparing to graduate to determine the hours needed for registration during the graduation semester.

Transfer of Credit

M.S. students may transfer up to 12 hours of graduate coursework from previous institutions. Ph.D. students may transfer up to 24 hours of graduate coursework either from previous institutions or credited from a previously earned graduate degree. Students with a U.S. M.S. degree will can have up to 24 credits transferred once that degree is verified. Transfer credits will be allowed only on credit that was earned during the six-year period immediately preceding admission to the program. However, if the MS degree is older than 6 years and the student has been working continuously in his or her major field, then older classes may be eligible. The student must have earned an overall GPA of 3.0 at the institute where the credit was earned. Only classes with a grade of “B” or higher can be transferred. For transfer of credit from an M.S. program to a Ph.D., consult the Graduate Catalog for the two options (http://services.graduate.ua.edu/catalog/14800.html#transfercredit_phd). The student is responsible for making sure the correct form is filled out and turned in to the Graduate School.

Expiration of Courses

All requirements for the M.S. degree must be completed during the six years immediately preceding the date on which the degree is to be awarded. Coursework older than six years is expired and must be re-taken.

All requirements for the Ph.D. degree must be completed within the seven-year period following admission to the doctoral program. Coursework older than seven years is expired.

Three year rule

After not enrolling in classes for three years, if a student wants to complete their degree, they must reapply to the DGS Graduate Program.

Student Activity Report

At the end of April, all graduate students will be required to submit a report to the DGS detailing their activities throughout the previous year. Activities include abstracts submitted, internships, papers published, conferences/workshops attended, field work and volunteer activities. A form will be provided each year for this report.

Internships

Some graduate students chose to complete an internship during their graduate tenure. You may receive credit for the internship during the semester that you are completing the internship, not after. For example, if you are completing a summer internship, you must pay summer tuition to get credit for that internship. M.S. students may complete a maximum of 3 credits of internship toward their degree. Ph.D. students may complete a maximum of 6 credits of internship toward their degree.

Advising

Students are advised by their Advisor, with whom they have established a relationship prior to acceptance into the DGS. Students who do not have a Thesis/Dissertation Advisor are directed by the Department Chair or another faculty member appointed by the chair until the student identifies a permanent research advisor. All students must meet with their Thesis/Dissertation Advisor or the Department Chair at least 1 week prior to registration each semester to discuss current coursework and courses to be taken the following semester. Students must enroll in the courses agreed upon by their Advisor. M.S. or Ph.D. students may choose to have two faculty members as co-advisors. In this case, credit and responsibility for the student will be shared equally between the two advisors.

Upon appointment of an Advisory Committee, students will have a meeting each semester with their Advisory Committee. Students not in residence must submit a written progress report each semester. Current and future research efforts will be reviewed to determine if satisfactory progress has been made toward completion of degree requirements. If the student has not followed the required timeline (see Appendix A and B), the student's research project will be terminated and the Advisory Committee will be disbanded. In the event of project termination, the student must propose an acceptable new research project and complete a thesis/dissertation prior to the end of the 6-year (M.S.) or 7-year (Ph.D.) candidacy period.

First Semester Class

All incoming graduate students are required to take the 500 or 600 level class entitled "Communicating Geology" for 3 credits. This class must be passed with at least a grade of C. If the class is not passed, it may be taken again once the next fall. Failure to pass this class for the 2nd time will result in termination from the program. This class will focus on development of projects for research, proposal writing and presentation of research results. One professor will teach the class every fall.

Procedure for Changing Advisors

Graduate students must schedule a meeting with the Graduate Program Committee. If the student is an advisee of a member of the Graduate Program Committee, that member will recuse themselves. If the student is funded as a Research Assistant (RA), changing advisors will result in the loss of funding. If the student chooses another advisor, every effort will be made to award a TA if the new advisor consents; however, this is not guaranteed. If the student is funded through a TA and decides to switch advisors, the TA position will continue provided that a new research project has been chosen.

Procedure for Termination from the Program

Grounds for termination include but are not limited to: not adhering to the program deadlines, poor academic performance, not adhering to the UA academic honor code, inappropriate remarks or actions toward staff, faculty, other graduate students, and/or undergraduates, and becoming a danger to others. A meeting with the Advisor, Department Chair, Graduate Program Committee, and the student will be called to initiate termination. If an M.S. student misses more than two deadlines or if a Ph.D. student misses more than three deadlines, termination is automatic.

4. FINANCIAL ASSISTANCE

Students supported by the DGS may not engage in simultaneous employment elsewhere without permission of the Department Chair. Without permission, outside employment will result in employment termination in the DGS.

Terms of Appointment of Assistantships

The initial award of graduate assistantships is for at least 9 months (fall and spring semesters). However, if the student is appointed for the spring semester or the student is admitted without funding, the appointments are one semester. Subsequent reappointment is based on the academic and teaching/research performance of the student, curriculum-based research requirements, availability of funds, and the initial offer letter. Initial award of an assistantship is not a guarantee of continued support. Poor performance in coursework, lack of progress toward degree requirements, or irresponsible behavior in the fulfillment of assistantship duties will result in the termination of the assistantship. Graduate assistants whose appointments are terminated by resignation or

dismissal before the end of the academic term are personally responsible for the payment of all tuition and fees for that term.

All paperwork and the meeting of deadlines is the responsibility of the graduate student, not the Thesis/Dissertation Advisor or Graduate Program Director. Missing deadlines will result in delay and may result in dismissal from the DGS Graduate Program (see section 3).

A graduate student may earn the right to be considered for a TA by taking deficient geology classes as determined by the Graduate Program Committee. See Admission and Retention section for minimum qualifications to be a 100-level TA. At the request of the advisor or proposed future advisor, individual cases will be evaluated by the Graduate Program Committee. An example of an exception is prior excellence in the laboratory that the applicant wants to teach.

Teaching Assistantships (TA) and Responsibilities

TAs are awarded by the DGS based on qualifications, experience, curriculum requirements, and availability of funding. UA regards a full-time TA as 0.5 FTE (full-time equivalent), equal to 20 hours of work per week. Responsibilities of the TA are assigned by the faculty member teaching the course or the laboratory supervisor and are subject to other teaching-related requirements by the faculty (*e.g.*, assistance with field trips, proctoring exams). TAs may be asked to proctor or assist with field trips in other courses. All work by TAs will be supervised by the faculty member teaching the course or by the Lab Supervisor.

One week before registration, students must report to the DGS office for duty assignments. New TA's must attend a Graduate School TA Orientation, Arts and Sciences Legal Training, and the DGS TA Orientation. During registration week, students will work 20 hours on preparing teaching collections, lab handouts, teaching-lab facilities, and other work related to teaching appropriate lab sections. Students with TA positions will attend weekly lab meetings. Missing these meetings will result in the loss of awarded assistantship unless the lab supervisor or head TA has been consulted in advance and agrees with the absence. At the end of the semester, the TA meets with the faculty member supervising the lab to determine final grades. TAs will assist with final exam proctoring.

Research Assistants (RA) and Responsibilities

RA's are chosen and awarded by faculty members with research grants with concurrence of the DGS and are subjected to conditions determined by the responsible faculty member. A full-time RA requires performing some aspect of the sponsored research. This may or may not be related to the student's thesis/dissertation topic. A maximum of 20 hours of work per week can be assigned. The exact number and scheduling of hours is to be determined by agreement between the student and the faculty member. All work done by RA's will be supervised by the faculty member holding the grant that supports the assistantship. One week before registration, students must report to the faculty supervisor for duty assignments. RA's must also attend the DGS orientation.

Fellowships

The DGS is sometimes able to award a sponsored fellowship/scholarship to highly qualified students. No specific duties are required of students receiving these fellowships/scholarships; however, the student is expected to utilize this opportunity to make significant progress toward the completion of the thesis/ dissertation. These fellowships have minimum credit hours attached to them. All guidelines must be followed.

Graduate Council Fellowships, Graduate Council Research and Creative Activity Fellowships, and other classes of Graduate School fellowship are awarded by the Graduate School on a competitive basis. Candidates for these fellowships are nominated by the DGS. Graduate Council Research Fellowships are intended to support thesis/dissertation research in progress. Further information can be obtained in the Graduate School Catalog. Dean's Merit Scholarships are awarded by the College of Arts and Sciences. These are competitive and merit based for new incoming graduate students. Students awarded this class of fellowship must be enrolled in a minimum of 12 credit hours each semester. Recipients of fellowships are expected to use this opportunity to make significant progress on classwork and research, and are not permitted to accept other employment.

5. REQUIREMENTS FOR THE M.S. DEGREE

For students admitted to the M.S. program with funding, the DGS will provide a TA/RA for two years if the student makes adequate academic progress. If an M.S. student misses more than two deadlines as outlined in the table at the end of the handbook, termination is automatic. An additional semester of funding may be granted by the Graduate Program Committee if a TA position is available, adequate progress is being made, and the Advisor provides assurances in writing to the Graduate Program Committee that the degree requirements will be completed during that semester.

Coursework

30 hours of course work is required for graduation with a M.S. degree.

- 24 hours of 400- to 600-level courses
- 6 hours of GEO 599 (Thesis Research), graded pass-fail by the Thesis Advisor. Students are expected to present demonstrable evidence that they have performed thesis research to receive a passing grade.

One class is required – Communicating Geology – in the first semester you start your degree.

No more than 6 hours of 400-level courses may be counted toward degree requirements, and these require prior approval by the Graduate School (form available from the Graduate School). Courses cross-listed at both the 400- and 500-level must be taken at the 500-level.

A maximum of 3 hours of GEO 598 (Non-Thesis Research) may count toward the 24-hour total.

2 hours of GEO 535:536 are required.

At least 18 hours of the 24-hour total must be completed in the DGS. These may include transferred credits (see below). The 6 hours of remaining coursework may be taken in a related field with approval by the student's Thesis Advisory Committee.

A maximum of 12 hours of graduate courses may be transferred from other universities and applied toward the 24 hour total. These courses must be approved by the student's Thesis Advisor. See section 3 for Transfer of Credit procedures.

A $GPA \geq 3.0$ is required for graduate courses, and at least 75% of these hours must be completed with grades of A or B.

A maximum of 20% of the student's required course credit may be taken on a pass/fail basis; 80% must be graded by letter. Taking a class Pass/Fail must be approved by the Thesis Advisor and the instructor of the course.

Classes in which a grade of D was earned do not count towards the 24 hours of required coursework.

Undergraduate courses taken to meet deficiency requirements (see section 2) or as prerequisites for graduate courses do not count toward graduate degree requirements.

Graduate Seminar

All students must attend seminar unless prevented by a class or teaching conflict. Seminar is required for the M.S. degree (GEO 535/536). M.S. students must take seminar two times during their second year in the graduate program, for a total of two credits, which count toward the 24 hours of course work required for the degree. M.S. students may substitute a conference oral presentation made at a national or international meeting for one of the two required seminar credits. If the paper is not accepted for an oral presentation, a poster presentation may be substituted. The faculty member in charge of the seminar will determine if the conference is acceptable and will coordinate the logistics. Students must still enroll in seminar and attend seminar if they are substituting a conference presentation.

Thesis Advisory Committee

Most M.S. students are admitted with a Thesis Advisor. If not, the student must discuss possible thesis topics with several faculty members. The Chair, or a faculty member appointed by the chair, will serve as the advisor until an appropriate advisor is found. The Thesis Advisor, who also serves as Chair of the Thesis Advisory Committee, must be a permanent member of the DGS Graduate Faculty.

Students choose the remaining members of their Thesis Advisory Committee in consultation with their Thesis Advisor during the first semester in residence. Students are responsible for asking the other members of the committee to serve on the committee and a form must be initialed. A DGS Thesis Advisory Committee consists of four members: the Thesis Advisor, two full-time or adjunct faculty members of the UA, and an external member, approved by the Thesis Advisor, who provides additional supervisory expertise. The external member can be from (a) another UA department, (b) another university, (c) the Geological Survey of Alabama, or (d) a geological corporation (e.g., an oil, mining, or environmental company). All members of the Thesis Advisory Committee must be Graduate Faculty members. The external committee member that is not a member of the UA Graduate Faculty must be approved by the Graduate School to act as a temporary member of the UA Graduate Faculty. This requires that a recent curriculum vita from the external member be provided to the Graduate School prior to the submittal of the committee form. If the external member does not have a Ph.D., evidence must be provided of their qualifications to serve on the committee. Normally, the Thesis Advisor will act as liaison between the Graduate School and external member to obtain Graduate Faculty status.

The student will schedule a meeting **each semester** of the Thesis Advisory Committee to review progress. No faculty member is obligated to serve on a particular Thesis Advisory Committee or act as a Thesis Advisor.

Thesis

Purpose

Each candidate must write a thesis representing original work. No length or scope for the thesis is specified; however, the research problem should be designed to be completed in approximately one year. The exact timing of the progress and completion of a thesis is primarily the responsibility of the student. Satisfactory completion of a thesis is evidence that the student has employed research techniques consistent with those utilized by modern professional geoscientists in their field of specialization. The thesis may be written as a manuscript and formatted using the Graduate School's guidelines.

Thesis Proposal and Defense

Once the research plan is defined, in conjunction with their Thesis Advisory Committee, the student prepares a Thesis Proposal. This document includes a title page, a one-page summary of the thesis project, followed by associated objectives, methods, and an estimated timeline for work completion. The M.S. proposal is limited to a maximum of 10 double-spaced pages with 12-point font, including figures and references.

The Thesis Proposal Defense is due in the second semester. Students who are financially aided by the DGS (TA, RA, and/or industry fellowships) or by the UA (e.g., Graduate Council Fellowships) must defend the proposal during their second semester or they will not be eligible for continued support. Students not receiving support in the first two semesters, but seeking aid for subsequent semesters, will not be considered for support until a thesis is successfully proposed in the second semester.

For the Thesis Proposal Defense, the student should schedule a 3 hour time block. The student must distribute the Thesis Proposal to the Thesis Advisory Committee at least two weeks before the planned date of the Thesis Proposal Defense. All members of the Thesis Advisory Committee must certify that the proposal is ready for defense one week before the Defense can take place either by signature on the appropriate form or an email directly to the DGS administrative assistant responsible for the graduate program. The email from the committee member must state that the member has read the thesis and approves the proposal for defense.

The purpose of the Thesis Proposal Defense is to evaluate the thesis research project and to solicit guidance from the Thesis Advisory Committee regarding the research plan, objectives, and relevance of planned coursework. The defense will begin with a short (~25 minute) oral presentation of the Thesis Proposal that is open to the public. Following a short public question and discussion period, the audience is limited to the Thesis Advisory Committee and any other faculty members.

The outcome of the Proposal Defense is decided by majority vote of the Thesis Advisory Committee and attending faculty. Several possible outcomes are possible: (a) A *Full Pass* entitles the student to proceed with the proposed research with no substantial modification of the research goals, objectives, or planned coursework. However, the Committee may request edits to the proposal. (b) A *Conditional Pass* entitles the student to proceed with the proposed research under conditions stipulated by the committee. These may include, but are not limited to, specification of coursework, modification of the research plan, or modification of the research objectives. All changes to the research plan and objectives must be included in a revised Thesis

Proposal. (c) A *Fail* requires the student to repeat the Proposal Defense after substantial modifications to the research plan and/or objectives. The defense can only be repeated once. If failed again, the student is dismissed from the DGS Graduate Program.

The Thesis Proposal is not approved until after a successful Thesis Proposal Defense. After the Thesis Proposal Defense, the student must provide an electronic copy of the approved proposal to each member of the Thesis Advisory Committee. Additionally, the DGS must receive a paper copy and a PDF-formatted electronic copy of the approved proposal to file in the DGS office.

Thesis Preparation and Review

The thesis should be prepared with two sets of guidelines: 1) The Graduate School's "A Student Guide to Preparing Electronic Theses and Dissertations"; 2) A style manual is used as a model for elements including figure captions, bibliographic format, etc. Students may also use the U.S. Geological Survey's "Suggestions to Authors", the Geological Society of America's "Information for Contributors", the American Geological Institute's "Geowriting", or the style followed by a journal that publishes material related to the thesis.

The student will submit drafts of the thesis to their Advisor. Students should allow several weeks revision time. The student and the Advisor will work together and go through several revisions. When it is approved by the Thesis Advisor, it is submitted to the other members of the Thesis Advisory Committee. Review by the Thesis Advisory Committee, and revisions by the student based on their suggestions, may take as much as six weeks. It is critical to account for the revision time when thinking about a graduation date. The Committee may require several rounds of revisions before a Thesis Defense can be scheduled. If a committee member takes longer than six weeks for a review, a formal complaint should be sent to the Department Chair.

When the Thesis Advisory Committee is satisfied with the thesis, a Thesis Defense is scheduled. All four members of the Advisory Committee must sign the relevant form or email their consent directly to the DGS administrative assistant responsible for the graduate program before displaying the thesis in the DGS office. The email from the committee member must state that the member has read the thesis and approve the display of the thesis in the department. The thesis must be formatted in the Graduate School thesis format and displayed one week prior to the Defense to allow reading and revision by the remainder of the faculty. It is a faculty members right and responsibility to comment and provide feedback if the thesis is deficient. When approved for display, the Graduate School must be notified of the time and location of the Thesis Defense. In accordance with the Graduate School rules, only the external member may use video conferencing to participate in the defense. If an internal member is not present on campus, the faculty member may use video conferencing to attend with permission from the Dean of the Graduate School. All 4 members of the Thesis Advisory Committee must be present at the defense. Exceptions are rare but a compromise is determined with the Graduate Program Director in extenuating circumstances. If a member cannot be present in person or the external member cannot attend via teleconference, the student must replace that member, and the appropriate paperwork must be filed.

Comprehensive Exam (Thesis Defense)

The Graduate School requires M.S. students to take a Comprehensive Exam on course material studied while a graduate student. The DGS includes this exam in the Thesis Defense. Questions cover a wider area of geology than the thesis but are generally relevant to the thesis subject. The student should schedule a 3 hour block of time.

The exam will be administered by the student's Thesis Committee, and the exam is open to the public. A 30-40 minute presentation, emphasizing results and conclusions, is given by the student. The exam is then opened for questions from the audience, after which additional questions from the Thesis Committee, Department Faculty and Ph.D.-level Research Staff are given in closed session. All DGS faculty members that attend the exam and subsequent questioning session have the right to vote whether the student passes or fails. This vote is decided by majority and is recorded on a form (available from the Graduate School) that states the student has passed/failed the thesis defense. In the event of a tie, the Department Chair (or designated representative) casts the deciding vote. If not passed during the first attempt, the Thesis Defense may not be retaken.

Final Disposition of Thesis and Thesis Collections

The student must schedule an exit interview with the department chair within one week after defending the thesis. Manuscripts that are already published need to have copyright permission from the publisher before being reformatted and submitted to the Graduate School.

The Committee Acceptance of the Electronic Thesis/Dissertation form indicating acceptance of the final PDF-formatted thesis must include original signatures of all members of the Thesis Advisory Committee. These signatures indicate that the committee has read the final PDF-formatted document and approved all changes in the manuscript and that the standards of the DGS are upheld.

The final PDF of the thesis, formatted following Graduate School specifications must be submitted online to the Graduate School. Deadlines are posted on the Graduate School website. In addition, students are required to provide a bound copy of the thesis and a copy of the PDF-formatted file to the DGS, and a PDF-formatted file to the Advisory Committee. Students whose thesis involves the geology of Alabama and/or adjacent states must also give a bound copy to the Geological Survey of Alabama Library.

Samples, data, computer programs, etc. used in thesis research are the property of the UA unless other arrangements are approved by the Thesis Advisor. As such, samples and copies of data and computer programs must be left with the DGS, and students should check with their Thesis Advisor before taking proprietary data out of the DGS upon graduation. It is the responsibility of the student to determine whether the Alabama Museum of Natural History (Office: 120 Smith) needs a collection of thesis samples. The Thesis Advisory Committee and the Museum will establish which materials (e.g., rocks, fossils, thin-sections, polished sections, rock powders, etc.) must be cataloged.

Deadlines

It is the student's responsibility to meet the Graduate School deadlines regarding the degree program based on the semester the student was admitted. Each semester, a notice of these deadlines is posted on the Graduate School's website. It is not the responsibility of the Advisor, the Graduate Program Director, the Graduate Program Committee, or the Department Chair to insure that the student has filled out and submitted the proper paperwork to meet their deadlines. It is solely the responsibility of the student. If the paperwork is filled out incorrectly or a deadline is missed, the result is a delay in the graduation of the student. If deadlines are not met, funding for the student will be terminated unless granted an extension. To request an extension, a memo with the signatures of the student and the Advisory Committee must be submitted to the Graduate Program Committee. The memo must contain a proposed timeline acceptable to all parties. If an M.S. student misses more than two deadlines, termination is automatic. Once a student has been terminated, they are ineligible for future admission to the DGS Graduate Program.

Sequence and Approximate Time Frame for Completion of the M.S. Degree in Two Years:

1 st Semester	6-9 hrs. coursework	Select research topic and thesis advisor; Organize Thesis Advisory Committee
2 nd Semester	6-9 hrs. coursework	Write and Defend Thesis Proposal, Plan thesis work
3 rd Semester	6-9 hrs. coursework	Thesis research
4 th Semester	1-6 hrs. coursework or thesis research	Complete and defend thesis. The student must consult the Graduate School website for the deadline for completion of all degree requirements.

6. REQUIREMENTS FOR THE Ph.D. DEGREE

Ph.D. students are admitted to the DGS with a Dissertation Advisor already established. For students admitted to the Ph.D. program with funding, the DGS will provide a TA/RA for four years if deadlines in the tables at the end of this handbook are met. If a Ph.D. student misses more than three deadlines, termination is automatic. Additional support past four years may be granted by the Graduate Program Committee if a TA is available, adequate progress is being made, and the advisor provides assurances to the Graduate Program Committee that the degree is close to being completed.

Coursework

UA requirements for the Ph.D. degree are specified in the Graduate School Catalog. These requirements are: (a) a minimum of 48 hours of coursework beyond the baccalaureate degree; (b) successful completion of the preliminary and final examinations; and (c) a dissertation, including 24 credit hours of GEO 699 (Dissertation Research). DGS coursework requirements will be determined by the Dissertation Advisory Committee in consultation with the student.

72 credit hours are required for a Ph.D: 48 hours of 500-600 level courses and 24 hours of GEO 699

The 24 hours of GEO 699 (Dissertation Research) are graded pass/fail by the Dissertation Advisor. Students must present demonstrable evidence that they have performed dissertation research to receive a passing grade. These hours do not count toward the 48-hour coursework requirement.

4 the 48 credit hours must be GEO 635:636

One class is required – Communicating Geology – in the first semester you start your degree unless you completed the same class at UA as a MS student.

A maximum of 12 hours of GEO 698 (Non-Dissertation Research) may count toward the 48 hour total.

A maximum of 24 hours of graduate courses may be transferred from other universities and applied toward the 48 hour total. These courses must be approved by the student's Dissertation Advisory Committee. See section 3 for Transfer of Credit procedures.

An overall GPA ≥ 3.0 is required for graduate courses, and at least 75% of these hours must be completed with grades of A or B.

A maximum of 20% of the student's required course credit may be taken on a pass/fail basis; 80% must be taken for a letter grade.

Undergraduate courses taken to meet deficiency requirements (see section 2) do not count toward graduate degree requirements.

Classes in which a grade of D was earned do not count towards the 48 hours of required coursework.

Ph.D. candidates must enroll for at least 3 hours of Dissertation Research (GEO 699) each semester after admission to candidacy.

Graduate Seminar

All students must attend seminar unless prevented by a class or teaching conflict. Seminar is required for the Ph.D. degree (GEO 635/636). Ph.D. students must take seminar four times during their third and fourth years in the graduate program, for a total of four credit hours, which count toward the 48 hours of course work required for the degree. Ph.D. students may substitute a conference oral presentation made at a national or international meeting for one of the four required seminar credits. If the paper is not accepted for an oral presentation, a poster presentation may be substituted. The faculty member in charge of the seminar will determine if the conference is acceptable and will coordinate the logistics. Students must still enroll in seminar and attend seminar if they are substituting a conference presentation.

Research Skills Assessment

The Research Skills Assessment takes place during the student's first semester in residence. Two-hours are set aside to determine how the student approaches solving thought problems and to identify knowledge deficiencies. The meeting will be attended by the Graduate Program Committee plus the Advisor. This assessment should not be

viewed as an exam but more an evaluation of where a student stands in their scientific development. The committee will approach this assessment with the main question “How do we help this student succeed?” There are multiple possible outcomes: Pass/Identify deficiencies/Reduce to an M.S. degree/Fail. The outcomes are flexible and must be addressed individually. The results of the assessment will be provided by the committee and signed by the Graduate Program Director, Department Chair and the student. The results of this assessment includes requirements that must be met before the preliminary exam in the 5th semester, except in extenuating circumstances such as a particular class was not offered. This assessment will not be readministered. A fail will result in termination of TA/RA funding.

Dissertation Advisory Committee

Ph.D. students are accepted with an Advisor already assigned. It is possible to have a case where the faculty leaves UA after the student accepted. In this case, the Ph.D. student will initially be advised by the Department Chair and will identify an area of specialization and an Advisor in the first semester of residence.

Organization of the Dissertation Advisory Committee must occur during or before the second semester of the Ph.D. program. The Dissertation Advisory Committee consists of 5 members, normally with doctoral degrees, at least one of whom is from outside the DGS. The Chair of the Committee is the Dissertation Advisor, who must be a full member of the DGS Graduate Faculty. At least three members of the Committee must be members of the DGS Graduate Faculty. The external member(s) can be from (a) another UA department, (b) another university, (c) the Geological Survey of Alabama, or (d) a geological corporation (e.g., an oil, mining, or environmental company). All members of the Dissertation Advisory Committee must be Graduate Faculty members. The external committee member whom is not on the UA Graduate Faculty must be approved by the Graduate School to act as a temporary member of the UA Graduate Faculty. This requires that a recent curriculum vita from the external member be provided to the Graduate School prior to submission of the committee form. If the external member does not have a Ph.D., evidence must be provided of their qualifications to serve on the committee. The Dissertation Advisor will act as liaison between the Graduate School and external member to obtain Graduate Faculty status.

Students are required to meet each semester with their Dissertation Advisory Committee, at which time progress toward degree requirements will be evaluated. Students who are not making satisfactory progress will receive a letter from the Dissertation Advisory Committee, advising them how to remedy the matter, or may be expelled from the program.

Dissertation Proposal and Defense

The Dissertation Proposal includes a title page followed by associated objectives, methods, and an estimated timeline for work completion. The title page should identify the student, the major field of specialization, the proposed title of the dissertation, all members of the Dissertation Advisory Committee, and, ultimately, the date of approval by the Dissertation Advisory Committee. The body of the proposal should state the research problem and its significance, provide a concise summary of related previous work, outline the proposed research methods, define the objectives of the research, and discuss the significance of the anticipated results. It is expected that the proposed research will result in at least three publishable manuscripts, and the student must identify three associated projects that will compose the dissertation. The Dissertation Proposal must be no longer than 15 double-spaced pages with 12 point font, including figures. References are not included in the page count.

The Dissertation Proposal Defense must occur in the third semester. Students who are financially aided by the DGS (TA, RA, and/or fellowships) or by Graduate School fellowships, must defend the proposal during their third semester or they will not be eligible for continued support. Students not receiving support in the first three semesters, but seeking aid for subsequent semesters, will not be considered for support until a dissertation proposal is successfully defended.

The student must distribute the Dissertation Proposal to the Dissertation Advisory Committee at least four weeks before the planned date of the Dissertation Proposal Defense. All members of the Dissertation Advisory Committee must certify that the proposal is ready for defense two weeks before the Defense can take place either by signature on the appropriate form or an by email directly to the DGS administrative assistant responsible for the graduate program. The email from the committee member must state that the member has read the proposal and approves it for defense.

The Dissertation Proposal Defense is scheduled by the student, in consultation with the Dissertation Advisor, on a weekday that accommodates the schedules of all 5 members of the Dissertation Advisory Committee. The student should schedule a 3 hour block of time. The purpose of the Dissertation Proposal Defense is to describe plans for the dissertation research and to provide a means to evaluate the potential of the student to plan and carry out the research project. The defense includes an oral presentation of the Dissertation Proposal, focusing on the three projects for the dissertation research. The defense is administered by the Dissertation Advisory Committee, chaired by the Dissertation Advisor, is open to the public, and is 30 minutes long. The open session is followed by a closed session of questioning by the Dissertation Advisory Committee, DGS faculty, and Ph.D.-level Research Staff.

The outcome of the Dissertation Proposal Defense is decided by majority vote of the Dissertation Advisory Committee and attending DGS faculty. Several possible outcomes are possible: (a) A *Full Pass* entitles the student to proceed with the proposed research with no substantial modification of the research goals, objectives, or planned coursework. However, the Committee may request the edits to the proposal. (b) A *Conditional Pass* entitles the student to proceed with the proposed research under conditions stipulated by the committee. These may include, but are not limited to, specification of coursework, modification of the research plan, or modification of the research objectives. All changes to the research plan and objectives must be included in a revised Dissertation Proposal. (c) A *Fail* requires the student to repeat the Proposal Defense after substantial modifications to the research plan and/or objectives. The defense can only be repeated once. If failed again, the student is dismissed from the DGS Graduate Program. Each of the three outcomes require an Action Plan agreed upon by the committee and implemented by the advisor that details a path forward for each student. This Action Plan lays out strengths, solutions for weaknesses, and expectations from the committee in the coming years. A timeline will be included for solving weaknesses identified.

After approval, copies of the Dissertation Proposal must be distributed to the Dissertation Advisory Committee. Additionally, a paper copy and a PDF-formatted electronic copy must be given to the DGS administrative assistant.

Preliminary Examination (1st Manuscript)

The student will submit a draft of their first paper, approved by their advisor, to their Dissertation Committee by the third month of the fifth semester in residence. For this to happen, the research must occur in the third and fourth semesters, with writing of the manuscript prior to and during the 5th semester. The paper must be submitted to the Dissertation Committee 3 weeks before the proposed Preliminary Examination date and signatures must be obtained from the faculty showing that they have received the paper and approve setting up a preliminary examination date. The date will be advertised to the faculty and any faculty that attends must have read the manuscript to be a voting member. In the preliminary examination meeting, a conversation will develop about the paper and questions may arise to make sure the student understands concepts addressed in the paper. The review criteria of the paper will be provided to the student prior to the examination. The student will receive a Pass/Conditional Pass (need to meet stipulations set forth by the Committee)/Fail. The decision will be a majority vote by the committee and eligible voting faculty members. If necessary, this examination may be repeated in the following semester. Failure to pass will result in termination of DGS financial support. All 5 committee members must sign a form that indicates that they have read the manuscript, participated in the examination meeting and either Pass, Conditional Pass, or Fail the student. The student is responsible for obtaining these signatures.

Admission to Candidacy

Applications for admission to candidacy can be filed after successful defense of a Dissertation Proposal and completion of the Preliminary Examination. Acceptance of the application for candidacy by the Graduate School is determined by the removal of any conditions as stated upon admission to the graduate program, completion of all required coursework and the recommendation of the DGS. Students on academic probation cannot be admitted to candidacy.

Students admitted to Ph.D. candidacy are eligible for award of a M.S. degree under Plan II as described in the Graduate Catalog. It is the student's responsibility to file for the degree. Students must follow-up with the Graduate School to be certain that award of the M.S. degree does not cause them to be inadvertently removed from the Ph.D. program.

Ph.D. candidates must enroll for at least 3 hours of Dissertation Research (GEO 699) each fall and spring semester after admission to candidacy until graduation. After Admission to Candidacy, the student is eligible for business cards provided by the Graduate School.

Dissertation

Purpose

The Ph.D. dissertation reports the results of original research that make a significant contribution of knowledge to the geological sciences. The dissertation must demonstrate an ability to conduct independent research as well as skill in organization and presentation.

Dissertation Preparation and Review

The DGS requires the dissertation be at least 3 separate, first-author manuscripts with an introductory chapter and concluding chapter that ties the papers together. At least two of these manuscripts need to be submitted to a journal by the time of the defense. The committee realizes that in rare situations (for example, on research cruises) the chief scientist is granted first authorship no matter who writes the paper. The Graduate Program Committee will take this into account on an individual basis.

The dissertation should be prepared with two sets of guidelines: 1) The Graduate School's "A Student Guide to Preparing Electronic Theses and Dissertations"; 2) A style manual is used as a model for elements including figures captions and bibliographic format, etc. Students may also use the U.S. Geological Survey's "Suggestions to Authors", the Geological Society of America's "Information for Contributors", the American Geological Institute's "Geowriting", or the style followed by a journal that publishes material related to the dissertation.

Preferred Format for dissertation:

Overall Abstract with preliminary pages

Chapter 1: Overall Introduction for Dissertation for all 3 papers - this is the overall theme and problem and ties them all together

Chapter 2: Paper 1, this includes all components of a submitted paper (abstract, intro, methods, data, results, interpretations, and conclusions, references)

Chapter 3: Paper 2: this includes all components of a submitted paper (abstract, intro, methods, data, results, interpretations, and conclusions, references)

Chapter 4: Paper 3: this includes all components of a submitted paper (abstract, intro, methods, data, results, interpretations, and conclusions, references)

Chapter 5: Conclusions for the entire dissertation (answer the questions set forth in Chapter 1).

Appendices

The student submits drafts of the dissertation to their Advisor. Students should allow several weeks revision time. The student and the Advisor will work together and go through several revisions. When it is approved by the Advisor, the dissertation is submitted to the other members of the Dissertation Advisory Committee. Review by the Dissertation Advisory Committee and revisions by the student based on their suggestions may take as much as six weeks. The student must account for this revision time when thinking about a graduation date. The Committee may require several revision rounds before a Dissertation Defense can be scheduled. If a committee member takes longer than six weeks for a review, a formal complaint should be sent to the Department Chair.

When the Dissertation Advisory Committee is satisfied with the dissertation, a Dissertation Defense is scheduled. All five members of the Advisory Committee must sign the relevant form or email their consent directly to the DGS administrative assistant responsible for the graduate program before displaying the thesis in the DGS office. The email from the committee member must state that the member has read the dissertation and approves the display of the dissertation in the DGS department. The dissertation must be formatted in the Graduate School dissertation format and displayed two weeks prior to the Defense to allow reading and revision by the remainder of the faculty. It is a faculty members right and responsibility to comment and provide feedback if the dissertation is deficient. When approved for display, the Graduate School must be notified of the time and location of the Dissertation Defense. It is the responsibility of the Advisor and the student to schedule the Defense so all five members of the Dissertation Advisory Committee and the Department Chair (or a designated representative) can attend. Scheduling the defense during the summer months or between regular academic terms is not permitted. The Dissertation Advisor must request in writing to the Department Chair or Graduate Program Director in the event that an exception must be made. In accordance with the Graduate School rules, only the external member may use video conferencing to

participate in the defense. If an internal member is not present on campus, the faculty member may use video conferencing to attend with permission from the Dean of the Graduate School. All 5 members of the Dissertation Advisory Committee must be present at the defense. Exceptions are rare but a compromise is determined with the Graduate Program Director in extenuating circumstances. If a member cannot be present in person or the external member cannot attend via teleconference, the student must replace that member, and the appropriate paperwork must be filed.

Dissertation Defense (Final Oral Exam)

The Graduate School requires Ph.D. students to take a Final Oral Exam. The DGS includes this exam in the oral Dissertation Defense. Questions may cover a wider area of geology than the dissertation, but are generally relevant to the Dissertation subject. The student should schedule a 3 hour block of time.

The final oral exam will consist of a defense of the dissertation. The exam will be administered by the student's Committee, and the exam is open to the public. A no more than 45 minute presentation, emphasizing results and conclusions, is given by the student. The exam is then opened for questions from the audience, after which additional questions from the Dissertation Committee, DGS Faculty, and Ph.D.-level Research Staff are given in closed session. All DGS faculty members that attend the exam and subsequent questioning session have the right to vote whether the student passes or fails. This vote is decided by majority and recorded in a form that states the student has passed/failed the Dissertation Defense. The Dissertation Defense can only occur once and cannot be repeated if failed.

Final Disposition of Dissertation and Dissertation Collections

An exit interview with the department chair will be scheduled within one week after defending the dissertation. Manuscripts that are already published need to have copyright permission from the publisher before being reformatted and submitted to the Graduate School.

The final PDF-format dissertation approval form must have original signature from all members of the Thesis Advisory Committee. These signatures indicate that the committee has read the final PDF-formatted document and approved all changes in the manuscript and that standards of the DGS are upheld.

The final PDF of the dissertation, formatted following Graduate School specifications must be submitted online to the Graduate School. Deadlines are posted on the Graduate School website. In addition, students are required to provide a bound copy of the dissertation and a copy of the PDF-formatted file to the DGS, and a PDF-formatted file to the Advisory Committee. Students whose thesis involves the geology of Alabama and/or adjacent states must also give a bound copy to the Geological Survey of Alabama Library.

Samples, data, computer programs, etc. used in thesis research are the property of the UA unless other arrangements are approved by the Dissertation Advisor. As such, samples and copies of data and computer programs must be left with the DGS, and students should check with their Dissertation Advisor before taking proprietary data out of the DGS upon graduation. It is the responsibility of the student to determine whether the Alabama Museum of Natural History (Office: 120 Smith) wants a collection of Dissertation samples. The Dissertation Advisory Committee and the Museum will establish which materials (e.g., rocks, fossils, thin-sections, polished sections, rock powders, etc.) must be cataloged.

Deadlines

It is the student's responsibility to meet the Graduate School deadlines regarding the degree program, based on the semester the student was admitted. Each semester, a notice of these deadlines is posted on the Graduate School's website (<http://graduate.ua.edu/>). It is not the responsibility of the Advisor, the Graduate Program Director, the Graduate Program Committee, or the Department Chair to ensure that the student has filled out the proper paperwork and submitted the paperwork to meet their deadlines. It is solely the responsibility of the student. If the paperwork is filled out incorrectly or a deadline is missing, the result is a delay in the graduation of the student. If deadlines are not met, funding for the student will be terminated unless granted an extension. To request an extension, a memo with the signatures of the student and the Advisory Committee must be submitted to the Graduate Program Committee. The memo must contain a proposed timeline acceptable to all parties. If a Ph.D. student misses more than three deadlines, termination is automatic. Once a student has been terminated, they are ineligible for future admission to the DGS Graduate Program.

Sequence and Approximate Time Frame for Completion of the Ph.D. Degree in Four Years:

1 st Semester	6-9 hrs. coursework	Meet with Dissertation Advisor, plan dissertation research, Research Skills Assessment
2 nd Semester	6-9 hrs. coursework	Organize Dissertation Committee; Dissertation Research.
3 rd Semester	6-9 hrs. coursework	Dissertation Proposal Defense
4 th Semester	0-9 hrs. coursework	Dissertation Research, preparation of paper 1
5 th Semester	0-9 hrs. coursework	Preliminary Examination, Admission to Candidacy, submission of paper 1, preparation of paper 2
6 th Semester	3-9 hrs. coursework	Dissertation Research, submission of paper 2, preparation of paper 3
7 th Semester	3-9 hrs. coursework	Dissertation Research, submission of paper 3
8 th Semester	3 hrs. dissertation research	Dissertation Defense

7. MISCELLANEOUS

Student Office Space

Space permitting, each graduate student will be assigned a desk in the Lameroux-Joiner Graduate Student Lounge or the laboratory of the Advisor. Desks are assigned in the following manner:

- a) Teaching Assistants, by seniority.
- b) Research Assistants and Fellows, by seniority.
- c) Unsupported M.S. students in the first four semesters in residence or unsupported doctoral students in the first eight semesters in residence, by seniority.
- d) Unsupported M.S. students in the fifth semester or more of residence or Ph.D. students in the ninth semester or more of residence, by reverse seniority.
- e) In event of a tie, Ph.D. students have precedence over M.S. students.

Equipment

Graduate students, as part of their class work and thesis/dissertation research, have access to labs. If equipment breaks, behaves in an unexpected fashion, or requires maintenance or supplies, the student must inform the proper faculty-staff member immediately. Students must not use a piece of equipment until they have been approved by a faculty or staff member familiar with its operation. UA requires training certification on some pieces of equipment. Failure to comply with this guideline will result in suspension of user privileges.

Keys

Keys for labs in Smith Hall and the Bevill Building can be obtained from the DGS office and must be returned promptly when no longer needed.

Each key is coded specifically to a name; therefore, keys must not be loaned or traded.

Keys are issued on an as needed basis, and all labs must be kept locked when not in use. If keys are misused or facility security is not maintained, access to facilities may be revoked by the Department Chair and keys issued to students must be returned.

Always close and lock the doors in teaching and research laboratories.

Appendix A
Checklist for M.S. Students
Department of Geological Sciences

The final deadlines imposed by the Graduate School are published on the Graduate School website prior to the beginning of each semester. Forms required by the Graduate School are available from the website and from the DGS secretary. This is provided as a guideline only.

Task	Form/Memo Required?	Target Date or Deadline
Meet with advisor to determine deficiency requirements	N	Before first day of classes
Complete Communicating Geology class	N	First semester
Transfer graduate credit (if applicable)	Y*	First semester
Appoint thesis committee	Y*	First semester
Distribute thesis proposal to committee	N	Second semester, at least 2 weeks prior to proposal defense
Prepare thesis proposal approval form	Y	Signed 1 week before proposal defense
Defend thesis proposal; file Master's Comprehensive Examination Form	Y*	By end of second semester
File one paper copy and a PDF-formatted copy of the thesis proposal with DGS	N	By end of second semester
Take GEO 535/536	N	3 rd and 4 th semesters (2 credit hours total)
Submit application for degree	Y**	Before classes begin in the semester that the degree is to be completed (through myBama)
Distribute thesis to advisory committee	N	AT LEAST 1 month prior to defense
Advisory committee approval for defense and display	Y	At least one week prior to thesis defense
Schedule defense with the thesis committee/department	Y*	At least one week prior to thesis defense
Schedule room for thesis defense	N	At least one week prior to thesis defense
Put thesis on display in DGS office	N	At least one week prior to thesis defense
Thesis defense form	Y*	Day of defense
Submit required samples, data and program archives to the Natural History Museum and Advisor	N	Prior to submitting thesis to Graduate School
Get committee acceptance form for electronic thesis signed	Y**	Prior to submitting thesis to Graduate School
Submit PDF-formatted thesis to the Graduate School	Y**	After committee acceptance form is signed
Submit a PDF-formatted copy of thesis to DGS and the advisory committee. Submit bound copy to DGS.	N	Immediately after Graduate School approves thesis
Schedule exit interview with the department chair	N	Within one week after the thesis defense

*Graduate School Form to be completed on paper

**Graduate School Form to be completed online

Summary of Course Requirements:

6 hours of GEO 599

24 hours of 400-600 level courses

- 2 hours of GEO 535:536
- 3 hours of Communicating Geology
- no more than 3 hours of GEO 598
- no more than 6 hours from outside the Geological Sciences discipline
- no more than 12 hours from outside the DGS (including transfer credit)
- no more than 6 hours of 400-level courses may counted (with prior approval by the Graduate School)

Appendix B

Checklist for Ph.D. Students, Department of Geological Sciences

The final deadlines imposed by the Graduate School are published on the Graduate School website prior to the beginning of each semester. Forms required by the Graduate School are available from the website and from the department secretary. This is provided as a guideline only.

Task	Form Required?	Target Date or Deadline
Meet with Advisor to determine deficiency requirements	N	First semester
Research Skills Assessment	Y	First semester, form signed by Graduate Program Director, Department Chair, and student after exam
Complete Communicating Geology class	N	First semester
Transfer of M.S. graduate credit (if applicable)	Y*	First semester
Appoint Dissertation Advisory Committee	Y*	First semester
Outline of Ph.D. program form	Y*	First semester (hold placed on registration if not completed before 30 semester hours are taken)
Distribute Dissertation Proposal to Dissertation Advisory Committee	N	Third semester and at least two weeks prior to proposal defense
Prepare Dissertation Proposal approval form for defense	Y	Third semester and at least two weeks prior to proposal defense
Dissertation Proposal Defense	Y*	By end of third semester, result in Action Plan
File one paper copy and a PDF-formatted copy of the Dissertation Proposal with DGS	N	After successful proposal defense
Required Check to see of all requirements from the Research Skills Assessment were fulfilled	Letter	Letter address to Department Chair detailing how the requirements were fulfilled.
Take GEO 635/636	N	5 th -8 th semesters (4 credit hours, 1 per semester)
Approval of Preliminary Exam	Y	Signatures needed 3 weeks prior to exam
Preliminary Examination (1 st Manuscript)	Y*	During fifth semester
File Admission to Candidacy application	Y*	After completion of Proposal Defense and Preliminary Examination
Submit application for degree	Y**	Before classes begin in the semester that the degree is to be completed (through myBama)
Distribute dissertation to Dissertation Advisory Committee	N	AT LEAST 1 month prior to Dissertation Defense
Advisory committee approval for defense and display	Y	Two weeks prior to Dissertation Defense
Schedule defense with the Dissertation Committee/department	N	Two weeks prior to Dissertation Defense
Schedule room for Dissertation Defense	N	Two weeks prior to Dissertation Defense
Put dissertation on display in DGS office	N	Two weeks prior to Dissertation Defense
Dissertation Defense Form (Final Oral Exam)	Y*	Day of dissertation Defense
Submit required samples, data and program archives to the Natural History Museum and Advisor	N	Prior to submitting dissertation to Graduate School
Get committee acceptance form for electronic dissertation signed	Y**	Prior to submitting dissertation to Graduate School
Submit PDF-formatted Dissertation to the Graduate School	Y**	After Committee signs Dissertation acceptance form
Submit a PDF-formatted copy of Dissertation to DGS and advisory committee. Submit bound copy to DGS.	N	Immediately after Graduate School approves dissertation
Schedule exit interview with the department chair	N	Within one week after the dissertation defense

*Graduate School Form to be completed on paper

Summary of Course Requirements:

24 hours of GEO 699

48 hours of 500-600 level courses

- 4 hours of GEO 635:636

- no more than 12 of GEO 698 or GEO 598

**Graduate School Form to be completed online

- no more than 24 from outside the Geological Sciences discipline
- no more than 24 from outside the DGS (including transfer credit)