Graduate Program Handbook

Jackson School of Geosciences

Contents

٩.	Prea	amble	5	
3.	Gen	neral Guidelines	6	
F	repai	ratory Coursework	6	
7	ransf	fer Credit	6	
	a.	Master's Degree:	6	
	b.	Doctoral Degree:	6	
F	full-T	ime Graduate Student Status/Course Load	7	
(Grades			
	a.	Credit/No Credit	7	
	b.	Grades and GPA	7	
	c.	Incomplete Grades	7	
F	Regist	tration	8	
	a.	Continuous Registration	8	
	b.	Late Registration	8	
	c.	Adding a Course	8	
	d.	Dropping a Course	9	
Ι	Leave	of Absence	9	
F	amil	y Friendly Policy1	0	
(Clearing Bars to Registration			
	a.	Advising Bar	1	
	b.	Financial Bar	. 1	
	c.	Nonfinancial Bar	. 1	
	d.	School/Departmental Bar	. 1	
F	rogre	ess Reports	. 1	
Check-out				
Z.	Doc	etoral Degree	2	

Required Coursework		
a.	Major Area:	12
b.	Supporting Work:	12
c.	Additional Course Requirements:	13
Addi	tional Requirements	13
a.	Field Training:	13
b.	Publication:	13
c.	Progress Reports:	13
d.	Presentation in a Public Seminar:	14
e.	Additional Requirements:	14
Previ	ous Graduate Coursework (from outside UT Austin)	14
Com	mittees	14
a.	Mentor, Supervisor, Examining Committee, and Dissertation Committee	14
b.	Examining Committee	15
c.	Dissertation Committee	15
Plan	for Doctoral Program	15
Quali	ifying Examination	16
a.	Overview	16
b.	Research Proposal	16
c.	Scheduling of Qualifying Exam	16
d.	Conduct of the Exam	17
e.	Evaluation of the Exam	17
f.	Outcome of the Exam:	18
Appli	ication for Candidacy	19
Disse	ertation Coursework Following Admission to Candidacy	19
Disse	ertation Committee Meeting in Advance of PhD Defense	19
The I	Ooctoral Dissertation	19
Co	ntent	19
Or	ganization	20
Fo	rmat	20
Pu	blications	20
Re	ferences	20
Pro	ocedure	21
PhD	Oral Defense	21
Dead	lines, Candidacy Extensions, and Monitoring of Student Progress	21
a.	Annual Progress Reports	21

	b.	Completion of Degree	22
	c.	Candidacy and Program Extensions	22
	d.	Check-Out	22
	PhD I	Program Timeline	22
D	. Ma	ster's Degree Program	24
	Maste	er of Science Degree (MS)	24
	Maste	er of Science Degree in Geological Sciences	24
	a.	Required Coursework	24
	b.	Residency	25
	c.	Thesis	26
	d.	Admission to the PhD Program Following Completion of the MS	27
	Maste	r of Arts Degree (MA)	27
	Maste	r of Arts Degree in Geological Sciences	28
	a.	Required Coursework	28
	b.	Residency	28
	c.	Report	28
E.	Gra	duate Student FAQ	30
F.	Uni	versity Rules and Regulations	33
	Grade	s	33
	Unive	rsity Travel	33
	Drivin	ng for Official UT Business	33
	Audit	ing a Course	33
	Life a	s a Graduate Student:	33
	a.	The Graduate Program at the Jackson School	33
	b.	Mentors and Supervisors	34
	c.	Graduate Student Executive Committee (GSEC)	34
	d.	Deadlines and Required Forms	34
	e.	Recruiting and Career Services	35
	f.	Summer Support and Internships	35
	g.	Dealing with Two Campuses	35
	h.	Computers and Software	35
	i.	Graduate Student Offices	35
	Gradu	ate Student Support	35
	a.	TA Appointments	36
	b.	Guaranteed Support	36
	c.	Independent Study Semester	36

d.	Professional Development	36
e.	Off Campus Research	37
f.	Scholarships and Fellowships	37
g.	Matching Funds for Student Research Grants	37
h.	Analytical Fees	37

Preamble

A. Preamble

The Jackson School of Geosciences endeavors to offer a premier *graduate program* in the geosciences. This document outlines the formal requirements and informal guidelines for the graduate program in Geological Sciences, and it articulates departmental policies and university requirements. Each student is responsible for becoming familiar with the university rules and requirements in the Graduate Catalog and General Information Catalog. Deadlines for the completion of requirements and the filing of forms are enforced by the department and by the Graduate School; the student bears sole responsibility for meeting these deadlines. This document represents the initial source of information about the graduate program, but the Graduate Studies Committee and the Graduate School are the final authorities on most matters that affect graduate students.

Program Information

B. General Guidelines

Preparatory Coursework

All students admitted to the graduate program are expected to have completed a minimum of:

- 1) Two courses in calculus, or one course in calculus and one course in college-level statistics:
- 2) At least four college-level courses in science or engineering, covering at least two of the following four categories: (a) physics, (b) chemistry, (c) biology, and (d) computer science or math courses beyond those used in requirement 1.

These courses must be completed with a grade of C or better.

In addition, students are required to have field training appropriate for the subject of interest. Advanced Program (AP) credit may be counted if it appears on a college transcript with the appropriate credit hours. Students lacking any of these required courses must complete them within their first year of graduate school unless there are extraordinary extenuating circumstances. These courses can be taken at UT or any other accredited university, college, or community college. Committees may require additional prerequisite coursework.

Transfer Credit

a. Master's Degree:

- No course counted toward a previous degree at another institution may be counted toward a master's degree, either directly or by substitution.
- A maximum of 6 semester hours of graduate coursework not used for a previous degree, in which the grade is A or B, may be transferred from another institution by petition to the Graduate Studies Committee and with the approval of the graduate dean (the Dean of the Graduate School). These rules are subject to any changes implemented by the Graduate School.

b. Doctoral Degree:

- The Graduate School requires 30 credit hours for the PhD Program of Work. Six of those hours may be transferred from another institution, provided those courses were not used for another doctoral degree.
- Any coursework taken toward a master's degree at the University of Texas or other institutions can be counted toward a subsequent PhD Program of Work provided it is acceptable to the supervising committee and the graduate adviser, and providing it has not already been used toward another doctoral degree.

Full-Time Graduate Student Status/Course Load

Graduate students working as a Teaching Assistant (TA), Graduate Research Assistant (GRA), or Assistant Instructor (AI) must be registered for and remain registered for a full-time load. Students holding a fellowship or scholarship administered through the Graduate School must also be registered for a full-time load, but students with some other fellowships (e.g., Geology Foundation fellowship) only need to register for 3 hours unless otherwise stipulated by the fellowship. A student is considered full time when registered for 9 hours (long semester) or 3 hours (summer semester, any session). Enrollment in University Extension courses does not count toward the full-time enrollment status.

Grades

a. Credit/No Credit

Some coursework can be taken on a Credit/No Credit basis; the requirements and methods of evaluation are the same as those for students taking the course for a grade. A performance at the level of C or above is required to earn credit (CR). Students may take no more than 20% (typically 6 semester hours) of the semester course hours required for the degree (not including thesis/dissertation or Tech Sessions) on a Credit/No Credit basis. A student who wishes to take a course for Credit/No Credit may elect this option at the time of registration, and may change the grade status of a course by the 40th class day (long semester). After the online registration period, any changes require a form to be completed and signed by the graduate adviser.

b. Grades and GPA

A student must earn a grade of C (not C-) or better to include a course in their Program of Work for a graduate degree. Credit by examination is not accepted for graduate degrees, but may be used to meet requirements for preparatory coursework. A student must have a cumulative graduate grade point average (GPA) of at least 3.00; the GPA is calculated from the graduate and upper-division undergraduate courses in which the student earns a letter grade while enrolled in the Graduate School. A student whose cumulative graduate GPA falls below 3.0 at the end of any semester or summer session will be warned by the Graduate School that their continuance in the Graduate School is in jeopardy. During the next semester or summer session in which the student is registered, they must attain a cumulative GPA of at least 3.0 or be subject to dismissal. During this period the student may not drop any course or withdraw from the university without the approval of the graduate adviser and graduate dean. A graduate student cannot be appointed as a Teaching Assistant (TA), Graduate Research Assistant (GRA), or Assistant Instructor (AI) while on probation; any exception must be petitioned to, and approved by, the graduate dean.

c. Incomplete Grades

If a student does not complete all requirements before the end of the course, the instructor may report the symbol X (incomplete) to the registrar in place of a grade. The student must then complete the course requirements by the last class day of the next long-session semester of enrollment. The instructor must report a final grade by the end of the grade reporting period in that semester. If these deadlines are not met, the symbol X is

converted to the symbol I (permanent incomplete). The symbol I <u>cannot be converted to a grade</u>, and when the symbol I is recorded, the symbol X also remains on the student's record. Incomplete grades and certain other grades can negatively affect employment (including TA, GRA, or AI appointments). Employment conditions are summarized online: https://gradschool.utexas.edu/finances/student-employment/conditions.

Registration

a. Continuous Registration

All graduate students are expected to enroll and pay tuition and fees in the fall and spring semesters of each academic year until graduation. If the student has been admitted to candidacy for a doctoral degree, registration in the dissertation course, the equivalent, or International Independent Study and Research is required. To assist doctoral candidates in meeting the continuous registration requirement, the Graduate School will automatically register eligible students for the fall and spring semesters, although all students must clear their registration bar. The only alternative to continuous registration is a leave of absence. If the student fails to register and has not been granted a leave of absence by the 12th class day, the student must apply to be readmitted and pay a readmission application fee (see Readmission for Graduate Students). If a doctoral candidate misses one or more semesters without an approved leave of absence, and is readmitted, the student must pay the tuition due for all missed semesters.

b. Late Registration

The period of late registration is announced in the Course Schedule. A fee is assessed for registering late for any given semester. Please refer to the Course Schedule for that particular semester: https://registrar.utexas.edu/schedules. Registration from the 5th through the 12th class day of a long semester (third and 4th class days of a summer session) requires the permission of the graduate dean. Registration after the 12th class day (4th class day of a summer session) is permitted only in unusual circumstances.

To avoid cancellation of their registration, students must pay their fee bills by 5:00 p.m. on the day their late registration is processed. Students who receive financial aid or who have a "zero amount due" must complete their registration online, or by submitting their fee bill showing a "zero amount due" to the Cashier's Office by 5:00 p.m. on the day their late registration is processed. Failure to complete registration will result in cancellation.

c. Adding a Course

During the first four days of a long semester, students may add courses online. If the course is full or restricted, the student must have department approval to add the course. During the 5th through the 12th class day, students must have the approval of the department offering the course. The 12th class day is the last day to add a course. After this date, students may not add a course, except for extenuating circumstances as approved by the graduate adviser and graduate dean. To add a course after the 12th class day, the graduate adviser must write a petition to the graduate dean and attach a completed *Graduate Add/Drop Form* with all required signatures. Rules are similar for summer, but with shorter deadlines.

d. Dropping a Course

With the required approvals, a student in good standing may drop a course through the last class day of a semester. A student may drop a course through the 4th class day of the fall and spring semesters (the second class day of a summer session) online and receive a full refund. A student may drop a course with a full refund from the 5th through the 12th class days of the fall and spring semesters (the third and 4th class days of a summer session) through the department offering the course. International students, in addition to obtaining the required approvals, must be advised by Texas Global before dropping a course, if their remaining course load will be fewer than 9 hours in a long term (or 3 hours, if registered, during the summer session). Students employed as Assistant Instructors, Teaching Assistants, and Graduate Research Assistants may not reduce their course load to a level less than full-time status.

Q-Drop: From the 13th through the 20th class day of the fall and spring semesters (the 5th through the 10th day of a summer session), a student may drop a course with the approval of the graduate adviser and the graduate dean, but without a refund. A *Graduate Add/Drop Form* signed by the graduate adviser must be submitted to the graduate dean for approval. Courses dropped during this period will appear on the student's transcript with the symbol Q. They are not included in the student's GPA. After the 20th class day of the fall and spring semesters (the 10th day of a summer session) through the last class day, the instructor will determine whether the symbol Q or a grade F will be recorded. Courses assigned the symbol Q appear on the transcript, but are not included in the student's GPA.

Leave of Absence

Graduate students may apply to the Graduate School for a Leave of Absence of no more than two semesters during their Program of Work:

https://gradschool.utexas.edu/academics/policies/leaves-of-absence.

Granting a request for a Leave of Absence for a master's student, or a PhD student not in candidacy, is at the discretion of the graduate adviser and the Graduate Studies Committee (GSC). If the student has been admitted to candidacy for the doctoral degree, the application requires a petition from the graduate adviser and will be approved only in unusual circumstances. A student on an approved leave may reenter the graduate program by filing an Application for Readmission with the Graduate and International Admissions Center. No readmission application fee is required. Failure to secure advance approval of a Leave of Absence means the student (1) will not be guaranteed readmission and (2) will be assessed an application fee for readmission.

A student on leave may not use university facilities and is not entitled to receive advice from faculty or GSC members. A Leave of Absence does not alter the time limits for degrees or course work.

Pertaining to the graduate student time-to-completion policy within the Jackson School of Geosciences (JSG), if a student formally requests a Leave of Absence from the UT Graduate School for medical reasons or to care for a close relative or domestic partner, the period of absence (up to two semesters per qualifying event) will not be counted in the nominal time to completion of a JSG graduate degree. This policy will be in effect

whether or not the formal Leave of Absence request is approved by the graduate adviser or graduate dean.

In exceptional cases, UT Graduate School restrictions may make it infeasible to take a formal leave. In such cases, a student may petition the JSG graduate adviser to grant a stay of up to two semesters on the nominal time to completion without having previously applied to the Graduate School for a formal Leave of Absence. This petition must include clear explanations for why the formal leave was not sought, why more time is warranted (for medical or family reasons, as above), and how positive degree progress will be reinitiated after the delay. The petition must be filed within 30 days of the onset of the qualifying event. The graduate adviser may approve the petition or may decline the petition and instead require that the student apply for a formal Leave of Absence so as to bring the student in compliance with the above policy.

Family Friendly Policy

The Jackson School supports its graduate students outside of the lab and classroom with family friendly policies. The Jackson School acknowledges that there are personal circumstances that may require accommodations for a student, including, but not restricted to:

- students who start or expand their families while enrolled in our graduate program (e.g., childbirth, new-born care, and adoption, a.k.a., parental duties);
- students that become caregivers of a child, or a disabled, elderly, or ill family member;
- students who experience new, significant disability or illness.

There are several UT-wide options available for graduate students, listed here. These policies are intended to support students who are balancing their scholarly and parenting or care-giving responsibilities.

- 1. Flexible Work Arrangements (FWA, https://hr.utexas.edu/current/fwa);
- 2. Family Medical Leave Act (FMLA, https://hr.utexas.edu/current/leave/family-medical-leave-act);
- 3. Leave of Absence (a.k.a. Unpaid Status, https://policies.utexas.edu/policies/leave-absence-without-pay).

Further details about these and other options available to students through the Jackson School's family friendly policy can be found at https://www.jsg.utexas.edu/people/jsg-community/graduate-students/parental-leave-accommodations-for-jsg/. Students and supervisors are encouraged to discuss these accommodations as soon as a personal circumstance arises. Students are also encouraged to contact the graduate coordinator and graduate adviser to discuss these options.

Clearing Bars to Registration

A bar is a code placed on a student record that prevents registration. Any bars will be listed on the student registration information sheet (RIS). Types of bars include:

a. Advising Bar

All students in the graduate program in the Jackson School will have a registration bar every semester, and must be advised by their mentor/supervisor or the graduate adviser before registering for classes.

b. Financial Bar

In most cases, financial bars may be paid in cash or by check at the cashier's office in Main Building room 8, or cleared online at the *What I Owe* webpage.

c. Nonfinancial Bar

A nonfinancial bar must be resolved in person at the administrative office that imposed it.

d. School/Departmental Bar

Financial and non-financial school/departmental bars may be placed on a student's record for unreturned equipment, incomplete paperwork, or other items overseen by the school/department and must be cleared with the appropriate office.

Progress Reports

All graduate students are required to submit progress reports annually on the form provided. The student must obtain their supervisor's signature as approval before submitting the original to the graduate adviser and copies to all members of their supervisory committee. Approved annual progress reports are due during the spring semester, typically in mid-April. Students who fail to meet this requirement will be barred from further registration until the requirement is met.

Check-out

Each student must comply with a check-out procedure that ensures that all requirements have been fulfilled, that all borrowed books, keys, and equipment have been returned, and that thesis copies and materials have been appropriately archived. Before submitting the final thesis, students should obtain a *Check-out Form* from the graduate coordinator's office, obtain all necessary signatures, and return the form to the graduate coordinator's office.

Doctoral Degree

C. Doctoral Degree

The doctoral degree combines formal coursework with a research project carried out under the supervision of a member of the Graduate Studies Committee (GSC) that culminates in the completion of a doctoral dissertation. The goal of the doctoral research is the achievement of fundamental research and new knowledge. Every doctoral student is required to prepare work of publishable quality and to submit it to a peer-reviewed journal. Geoscience practice increasingly requires work beyond presumed boundaries between disciplines and that addresses problems quantitatively. However, students also are expected to have significant depth within their discipline or specialization.

A student is considered a PhD *aspirant* after they have been admitted by the Department of Earth and Planetary Sciences and have enrolled in graduate courses. After coursework and other requirements are completed, and after successful completion of a qualifying examination based on a dissertation research proposal, the aspirant makes formal application to the Graduate School for admission to candidacy for the degree. After the committee approves the dissertation, and any additional dissertation requirements set forth below are met, the PhD degree is awarded.

Required Coursework

The Program of Work for the Doctor of Philosophy degree must have a minimum of 30 semester hours of advanced coursework, including dissertation hours.

The doctoral program is intended to be flexible, and to be tailored to the student's area of research, with courses divided into the major area and supporting work. The Program of Work should show evidence of formal study in those areas that are relevant or necessary to provide an adequate background to carry out the proposed research. The supporting work in contrast should demonstrate that the student has not specialized too narrowly and is able to bring the discoveries, techniques, and theories of another discipline to bear on the dissertation topic.

a. Major Area:

A minimum of 15 semester hours must be taken in the major area for a letter grade. This can be as graduate courses taken in the Department of Earth and Planetary Sciences, or appropriate graduate courses taken toward a previous master's degree at UT or another institution. Each student should design their program of courses in consultation with the research supervisor and the examining committee. All of the completed coursework that is included in a degree program at the time of admission to candidacy must have been taken within the preceding 6 years.

b. Supporting Work:

At least 6 semester hours of courses taken outside of the major must be included in the Program of Work. These courses usually are taken outside of the department, but

graduate-level coursework (taken for a letter grade) inside the department, but clearly outside of the student's primary field of study, can be approved by the student's examining or dissertation committee to meet this requirement. The Graduate Adviser must give final approval for such exceptions on a case-by-case basis, and students are urged to seek approval <u>prior</u> to taking such courses. Courses taken outside of the department may be upper-division or graduate-level; lower-division courses may not be included in this total. Courses taken for a previous master's degree may be counted toward this requirement.

c. Additional Course Requirements:

All graduate students are required to take GEO 398T (Supervised Teaching in the Geological Sciences) in their first semester. (Students who began in prior years fulfilled this requirement by taking the combination of GEO 298T (Supervised Teaching in the Geological Sciences) and GEO 193 (Technical Sessions).) Because GEO 398T, GEO 298T, and GEO 193 are only offered on a CR/NC basis, they do not count toward the 24 hours of formal coursework. Doctoral students are encouraged, but not required, to take additional semesters of GEO 193.

Additional Requirements

a. Preparatory Training:

Students are expected to have sufficient background training to accomplish their PhD research; depending on the project, this may mean field, laboratory, coding, or other training. Background is most easily demonstrated through relevant coursework, but other experience may be deemed sufficient. The examining committee will determine whether the coursework or other experience of a student is appropriate for their project, and may require additional coursework or other training to fill in any perceived gaps.

b. Publication:

PhD candidates must submit at least one first-authored publication to a peer-reviewed journal prior to the dissertation defense. That paper must be related to research conducted while a PhD student in the Jackson School of Geosciences. Documentation of submission should be provided to the graduate coordinator at the time the student applies to graduate. Students must provide this paper (and any others that will comprise part of the dissertation) to the committee at the time of submission for peer review. Students are encouraged to engage with their committee earlier, especially when a committee member has expertise important to the research. Committee members are strongly encouraged to provide feedback during the manuscript review and revision period. Any papers to be used for the dissertation submitted/accepted/published before the committee is formed, or before a change in committee membership, must be shared with prospective members when they are asked to join.

c. Progress Reports:

All graduate students are required to submit progress reports annually. The student must obtain their supervisor's signature as approval before submitting the original to the graduate adviser and copies to all members of the committee. Approved annual progress reports are due during the spring semester, typically in mid-April. Students who fail to

meet this requirement will be barred from further registration until the requirement is met.

d. Presentation in a Public Seminar:

In addition to the PhD defense, each student is required to present an oral report of the dissertation research. The student may present in any normally scheduled and advertised seminar within the Jackson School of Geosciences. Satisfaction of this requirement is determined by the student's committee, who may also approve an oral presentation outside of UT as a substitute, such as at a national or international conference.

e. Additional Requirements:

The supervising committee may also place additional requirements for completion of the degree. Demonstrated competency in a foreign language or programming language are examples.

Previous Graduate Coursework (from outside UT Austin)

All PhD students must earn at least 30 credit hours at the University of Texas for the degree. A student entering with a master's degree from another institution may, with the approval of the student's examining committee and the graduate adviser, *apply* any of the courses taken as part of that degree toward their PhD degree requirements; applied course work does not count towards to the 30-hour requirement. Up to 6 credit hours of graduate coursework may be *transferred* from a previous institution and can be counted toward the 30-hour requirement; the transferred hours cannot have been used to meet requirements for another degree.

Committees

a. Mentor, Supervisor, Examining Committee, and Dissertation Committee

All incoming students are admitted with a designated mentor who is responsible for guiding the student through orientation, advising the student on course selection, signing relevant paperwork, explaining policies and procedures, introducing them to relevant members of the community, and assisting with the selection of members of the examining committee. The mentor retains these responsibilities until the student files the *Notification of Supervisor and Committee Form*.

Each student must identify a research supervisor who will oversee the student's Program of Work, direct the student's dissertation research, and serve as chair of the student's dissertation committee. A Research Scientist or Research Professor who is not a member of the Graduate Studies Committee (GSC) may serve as research supervisor when a GSC member is appointed as co-supervisor.

The examining committee consists of five members responsible for overseeing the student's coursework and for conducting the qualifying examination. After the qualifying examination, the examining committee will be partially reconstituted into the dissertation committee. The dissertation committee is responsible for overseeing the student's research efforts and for evaluating the dissertation.

b. Examining Committee

The examining committee consists of five members: the research supervisor, two permanent members, one examining member selected by the student and supervisor, and a second examining member (the fifth member) selected by the graduate adviser. The fifth member is assigned by the graduate adviser from a rotating list of Graduate Studies Committee (GSC) members whose area of expertise is outside of the student's research area. The fifth member is designated as the Chair of the examining committee. The examining member of the committee chosen by the student may be any qualified scientist who is approved by the graduate adviser, but only in extraordinary circumstances can a person who does not hold the PhD degree be appointed to the committee. The fourth and fifth members of the examining committee are referred to as 'examining members' and only the fifth member is required to rotate off the committee after the Qualifying Exam has been passed.

c. Dissertation Committee

The dissertation committee consists of at least four members: the research supervisor, two permanent members, and one additional scientist. The supervisor (or at least one cosupervisor) and two additional committee members must be members of the Graduate Studies Committee (GSC) in Geological Sciences. At least one committee member must be a non-GSC member from outside the faculty of the Department of Earth and Planetary Sciences.

There is no requirement that out-of-department committee members come from outside the university, although that is permitted. A scientist from outside the university must submit an acceptable curriculum vitae and provide a signed letter stating that they agree to serve without financial remuneration. Only in extraordinary circumstances can a person who does not hold the PhD degree be appointed. The graduate dean (the Dean of the Graduate School) gives final approval of the Dissertation Committee.

Plan for Doctoral Program

By no later than the second semester (third semester for a student without a master's degree) of enrollment the student and mentor/supervisor should discuss the formation of an examining committee and the establishment of a plan for the doctoral program. The following steps are taken:

- i. The student discusses the planned project with their mentor or prospective supervisor. This starts the process of identifying a research supervisor and potential dissertation topic.
- ii. The student and supervisor identify the two permanent members and one examining member of the examining committee. Then the student files a *Notification of Supervisor and Committee Form* with the graduate coordinator. The graduate adviser will designate the fifth member of the examining committee.
- iii. The student schedules a planning meeting at which all five members of the examining committee must be present to: (1) discuss the proposed research project, (2) discuss the student's previous coursework and identify specific courses to be taken before (or after) the qualifying examination, (3) agree how the field training, supporting work, and any other requirements will be met, and (4)

schedule the date on which the research proposal will be defended. At this meeting, the committee completes and approves the *Plan for Doctoral Program Form*.

iv. The approved plan is given to the graduate coordinator; the student is responsible for making sure this happens.

Qualifying Examination

a. Overview

The qualifying exam is intended to:

- i. Establish that the student has the preparation, intellectual capacity, and professional attitude to complete a PhD program successfully.
- ii. Demonstrate that the student can identify a research problem, propose a testable hypothesis around that research problem, and design a pathway to tackle it.
- iii. Explore deficiencies in the student's background and training, in order to plan additional course work that may be needed. Such exploration is not the primary purpose of the examination, however, and the examination is *not* primarily a test of knowledge attained in the geosciences.

The exam consists of two parts: (1) a written proposal similar in style to an NSF proposal, and (2) an oral defense of the proposal before the examining committee.

b. Research Proposal

The research proposal must be no longer than 15 pages (12 pt. font, single-spaced) including figures, but not including references, budget, or the proposal summary. It may be written with the support, input, and review of the supervisor. The research proposal should demonstrate that the student can identify a research problem, propose a testable hypothesis around that research problem, and design a pathway to tackle the research problem. The proposal should include a proposal summary, a Program of Work including a timetable, and a budget. The proposal must be submitted to the graduate coordinator and the examining committee at least two weeks before the scheduled qualifying exam. If the student fails to meet this deadline, the exam must be rescheduled. The examining committee chair will poll the committee one week prior to the exam and a majority must find the proposal acceptable before conducting the oral exam.

c. Scheduling of Qualifying Exam

In ordinary circumstances, students entering with a master's degree will complete the qualifying exam before the end of the third semester of residence, and students entering without a master's degree will complete the qualifying process before the end of their fourth semester in residence. If special circumstances exist, the examining committee may consent to scheduling the exam for a later semester; the supervisor must petition the graduate adviser for approval of the delay. The semester in which the exam is to be taken must be specified in the *Plan for Doctoral Program Form* filed with the graduate coordinator. If a student finds that they are unable to take the exam in the specified

semester, the supervisor must submit a written explanation to the graduate adviser no later than two weeks before the end of the specified semester.

The following guidelines govern the choice of a specific day for the qualifying examination:

- i. It must be scheduled at a time when all five members of the examining committee will be present. It is the responsibility of the student to ensure that all members attend the examination. Virtual attendance by committee members is allowed.
- ii. It must be held on campus during regular university hours. At least one week prior to the exam the graduate coordinator must be advised in writing of the aspirant's name, the members of the examining committee, the dissertation topic, and the date, time, and place of the exam. This permits the graduate coordinator to advertise the exam so that interested GSC members may plan to attend. The student is responsible for making sure the graduate coordinator is notified.
- iii. It must be conducted during a formal semester (defined as beginning of registration through the last day of final exams); this includes the summer semester, but there is a strong preference that the exam be conducted during the long semesters (fall, spring).

d. Conduct of the Exam

The Examination will be oral and about 2.5 hours in length. An introductory oral presentation of the proposed work is limited to 20 minutes. The Qualifying Examination is chaired by the outside (5th) member. The student should consult with the Chair of the Committee if they have any questions on exam procedure or philosophy.

The committee typically asks questions to explore whether the student can identify a research problem, propose a testable hypothesis around that research problem, and design a pathway to tackle the research problem. Committees will normally devote at least half the time to the proposal and ancillary questions. Questioning should focus on potential pitfalls of, and topics directly related to, the proposed research. Example questions (some of which should be addressed in the original proposal) include "What is the hypothesis being tested?" "Will the experimental design lead to valid tests of the hypotheses?" "How would you interpret the following hypothetical results?" and "What is the significance of your research?" Time should be reserved for general questions unrelated to proposals, and attention should be given to deficiencies in background.

e. Evaluation of the Exam

The primary objective of the evaluation is to determine whether a student has the preparation, intellectual capacity, and professional attitude to complete a PhD program successfully. The committee's evaluation will be based upon the quality of the submitted proposal, the oral presentation and defense, as well as the student's background preparation. The committee will assess the following and make necessary recommendations:

- i. The preparedness of the student to be a PhD candidate. The preparation and defense of the research propositions will serve as the primary means of assessing the student's ability to complete a PhD program.
- ii. The student's command of the necessary background to carry out the proposed work.
- iii. The student's ability to communicate verbally and in writing.

f. Outcome of the Exam:

At the conclusion of the examination, the committee will first take a non-binding vote on whether the student passed the exam, discuss the student's performance, and then cast the binding vote. A failure is recorded is two or more members of the committee vote to fail. Passage or failure of the exam will be based upon the evaluation points outlined above.

The Chair of the Committee will bring to the exam a copy of the *Report on Doctoral Qualifying Examination Form*, to be obtained from the graduate coordinator in advance of the exam. Results will be recorded on that form. Immediately after the exam, the entire committee must meet with the student and discuss the results of the exam. At that time, all committee members and the student should sign the form and a copy of the form should be made available to the student.

If the student successfully passes the exam, but demonstrates deficiencies, the committee may indicate additional work to be performed. Additional work may be specified as required work or as recommended work. Requirements will have to be completed before the student can advance to doctoral candidacy. Completion of requirements is monitored by the Chair of the Committee, who must secure the approval of all members of the committee that the student has met the requirements. Compliance is verified by the graduate coordinator and graduate adviser; upon verification, the responsibilities of the Chair of the Committee end. If the committee makes recommendations for additional work, the student is eligible to advance to candidacy, and the supervisor is responsible for ensuring compliance with recommendations; responsibilities of the Chair of the Committee end with the exam.

If the student fails the exam, the committee may recommend termination the doctoral program, or recommend that that student repeat the Qualifying exam at a later date. If the examining committee recommends a re-examination, it must take place within two semesters. The Chair of the Committee should turn in the completed and signed form to the graduate coordinator. The Chair also must notify the graduate coordinator in writing when the re-examination is scheduled.

Upon successful completion of the exam (including, where relevant, completion of requirements placed upon the student by the committee), the student applies for doctoral candidacy with the Graduate School (see below). After the application is submitted, the Chair of the Graduate Studies Committee (GSC) will then advance the student to candidacy, or call for a vote of the entire GSC. If a vote of the entire GSC is needed, the graduate coordinator will notify the student in writing of the Committee's action.

Application for Candidacy

After the qualifying examination has been passed and the dissertation committee is formed, the PhD aspirant must file an application for candidacy with the Graduate School. All departmental and Graduate School requirements should be completed prior to filing an application for candidacy. The only exception is that a student may apply for candidacy without having completed one semester of GEO 193 (Technical Sessions) and/or one out-of-program course. The application to candidacy is available online: https://gradschool.utexas.edu/academics/forms. Students should contact the graduate coordinator's office for additional details of the application process or questions regarding the process.

The application for candidacy starts a *process* that takes some time to complete; students should not expect immediate advancement. Once submitted, it must be approved by the student's supervisor, the graduate adviser, the Chair of the Graduate Studies Committee (GSC), and the graduate dean. As part of the signature process, Program of Work and completion of requirements must be verified.

Dissertation Coursework Following Admission to Candidacy

Once a student has been admitted to PhD candidacy, the next semester they must register for x99W. The student can register for the 3-, 6-, or 9-hour section depending on their hourly requirements for that semester. A total of 6 hours of dissertation course must be completed for the doctoral degree.

Dissertation Committee Meeting in Advance of PhD Defense

A single meeting of the entire dissertation committee is required prior to the PhD oral defense. This meeting must occur after the qualifying exam, after the student has advanced to candidacy, and at least one long semester prior to the PhD oral defense. The meeting provides an opportunity for the student to obtain detailed feedback and recommendations from the dissertation committee prior to the final stages of their Ph.D. program. As an outcome of this meeting, the committee and PhD candidate must complete and submit the *Meeting of Ph.D. Dissertation Committee Form*, which outlines the dissertation topics and committee recommendations.

The Doctoral Dissertation

The dissertation is the archival record of a completed PhD research project, a signature achievement in the career of a scientist. It establishes the doctoral student as an independent scientist and expert in the field. A dissertation has value to the student and the scientific community as an important professional document. It is also a well-recognized fact among the members of the Jackson School of Geosciences (JSG) that published peer-reviewed papers, and typically not dissertations, are the modern standard by which students are evaluated after graduation. There is a clear desire to encourage students to publish their PhD research and to uphold the ideal that a dissertation is more than a collection of individual research papers. Below are JSG dissertation guidelines.

Content

The dissertation must demonstrate the student's ability to conduct original, independent research, and the results must constitute a novel contribution. The contents should be

thematically consistent, presenting a coherent research program rather than disconnected projects. Under most circumstances a dissertation should comprise at least three substantive papers suitable for publication in a peer-reviewed journal, or some reasonable equivalent, as judged by the dissertation committee.

Organization

The dissertation must be organized as follows (**bold and italicized** items are required, others are recommended):

- a) Title page
- b) Signature page
- c) Abstract (approximately 1 page if single spaced, see below)
- d) Acknowledgements and dedication
- e) Table of contents
- f) List of tables and figures
- g) First chapter: Introduction
- h) Dissertation chapters presenting the research
- i) Last chapter: Synthesis and conclusions
- j) As appropriate: appendices, data, or other supplementary material

Format

The dissertation must be formatted as follows (**bold and italicized** items are required; others are recommended):

- a) Internally consistent font style and size
- b) Consistent margins at least 1" wide
- c) Consistent line spacing (dissertation committee may require double spaced)
- d) Pages numbered sequentially from start to end
- e) Figures presented in the chapters in which they are referenced
- f) Figures in text, centered, with captions beneath
- g) Section numbers and figures numbers prefaced by chapter number

Publications

The dissertation may incorporate published papers (formatted as above) as research chapters without alteration of content, provided (1) that the papers are first-authored by the student and related to the PhD topic, (2) the student receives permissions from the publisher for reproducing copyrighted material, and (3) the dissertation includes appropriate citation of such material. If the paper includes coauthors, student contributions to the paper should be clearly defined in the introduction or elsewhere.

Papers that will be used for dissertation chapters should be sent to dissertation committee members for review prior to submission for publication.

Unpublished chapters may be written as stand-alone manuscripts that would be suitable for submission to peer-reviewed journals.

References

The student may organize reference lists either by chapter or combined in a single section at the end of the dissertation.

Procedure

The dissertation must be read and approved by all members of the dissertation committee, and all members of the dissertation committee should be consulted during the writing of the dissertation. It is expected that preliminary editing of all dissertations/chapters will be done by a student editor, who should read the draft, check for accuracy, and provide stylistic and organizational suggestions. The dissertation/chapter is submitted first to the supervisor, whose preliminary approval is obtained before circulating to the rest of the committee. The committee must be given at least 30 days to read and comment upon the final version of the dissertation before the dissertation defense. Committee members should provide comments within that 30-day window. Students should ascertain in advance whether committee members are available and willing to evaluate dissertation chapters during the summer months.

An electronic copy of the final approved dissertation in PDF format must be uploaded to the Graduate School; students should consult the Graduate School's Electronic Dissertation website for the latest information. The student must provide one unbound paper copy of the final dissertation with original signature page to the Geology Library.

PhD Oral Defense

Before the final dissertation is submitted, it must be successfully defended in a public oral examination conducted by the dissertation committee. The following regulations govern the scheduling of the oral defense:

- a. It must be scheduled at a time when at least 3 members of the dissertation committee, including the dissertation supervisor, can be present. A virtual-presence option (e.g., via video conference) is available; refer to the Graduate School website for information. It is the responsibility of the student to ensure that the committee members attend the defense.
- b. It must be held in a JSG building during a formal semester, after the beginning of the registration period and on or before the last day of final examinations. Exceptions require unanimous consent of the dissertation committee and approval by the graduate adviser; they are granted only in extraordinary circumstances.
- c. A *Request for Final Oral Examination Form* must be signed by members of the committee and filed with the Graduate School at least two weeks prior to the event, so that a notice of the defense can be published in the official University Calendar, and the graduate coordinator can notify the JSG community. By signing this form, the committee members acknowledge that they have received a review copy of the dissertation. Interested students, research staff, and faculty members are encouraged to attend the dissertation defense.

Deadlines, Candidacy Extensions, and Monitoring of Student Progress

a. Annual Progress Reports

Graduate students are required to submit progress reports annually. The student must obtain their supervisor's signature before submitting the original to the graduate coordinator and copies to all members of their PhD committee. Approved annual progress reports are due during the spring semester, typically in mid-April. Students who

fail to meet this requirement will be barred from further registration until the requirement is met.

b. Completion of Degree

Completion of the PhD degree typically requires no more than three years after the qualifying examination has been passed. If three years or more have elapsed since the qualifying examination was passed, the research supervisor has the option to resign. This will cause the student's committee to be dissolved, and the student must then re-qualify for admission to candidacy.

c. Candidacy and Program Extensions

The Graduate School requires that candidacy be extended annually beginning the third year after advancement to candidacy. Candidacy will be extended with supervisor approval if the student is still within the 10-semester normative time. Graduate Studies Committee (GSC) involvement is not required. For any JSG students at the end of their 5th year in program, the dissertation committee will meet with the student and prepare a plan for completion; all parties will sign the plan. The plan and accompanying request for an extension for 6th year are sent to the graduate adviser for approval. GSC involvement is not required. For any student at the end of their 6th year in program, the dissertation committee will meet with the student and prepare a revised plan for completion; all parties will sign the plan. The plan and accompanying request for an extension for 7th year are sent to the graduate adviser for transmission to the GSC. The GSC must discuss and vote to approve or deny extension. At the end of the 7th year in program, the dissertation committee will meet with the student and prepare a revised plan for completion; all parties will sign the plan. The plan and accompanying request for an extension for 8th year are sent to the graduate adviser for transmission to the GSC. The GSC must discuss and vote to approve or deny extension. If approved, the student will receive a final one-year extension. At the end of the 8th year, candidacy is terminated by vote of the GSC.

d. Check-Out

Each student must comply with a check-out procedure that ensures that all departmental requirements have been fulfilled, that all borrowed books, keys and equipment have been returned, and that dissertation copies and materials have been appropriately archived. After submitting the final dissertation, students should obtain a *Check-out Form* from the graduate coordinator, obtain all necessary signatures, and return the form to the graduate coordinator.

Final approval for award of the degree cannot be granted until this check-out procedure is completed. To allow adequate time for processing, this procedure must be complete at least three working days before the final deadline set by the Graduate School for completion of the PhD degree.

PhD Program Timeline

- Year 1, Fall Semester:
- o Identify a research supervisor.

 Take required coursework, including 398T (Supervised Teaching in Geological Sciences).

• Year 1, Spring Semester:

- Select members of the examining committee and hold a planning meeting
 with the committee to prepare the *Plan for Doctoral Program Form*; proposed
 coursework and any other requirements are identified by the committee
 members at this time.
- Take required coursework.

Year 2:

- Fall Semester (for students holding a master's degree) or spring semester (for students with a Bachelor's degree): Student prepares a written proposal and defends the proposal in an oral qualifying examination.
- After passing the qualifying examination, student files for candidacy on-line and forms a dissertation committee.
- o Take required coursework.

• Annually:

O Submit a report of progress to the graduate coordinator and your committee.

• Every long semester:

- O Submit Graduate Support Application Form.
- Submit Advising Bar Form.

• Penultimate Year:

Student schedules a meeting with entire dissertation committee, at least 2 semesters prior to the PhD oral defense, to provide a dissertation outline, obtain recommendations from the dissertation committee, and prepare the Meeting of Ph.D. Dissertation Committee Form.

• Final Year:

- o Check with graduate coordinator to make sure you are on track to graduate.
- Submit at least one first-authored publication to a peer-reviewed journal prior to the dissertation defense.
- o Schedule and complete the final defense of the dissertation.
- Present the results of the dissertation in a departmental seminar or other qualifying presentation.
- File all required forms and documents for graduation (e.g., department *Check-Out Form*, title page, copyright form, etc.).

Master's Degree Program

D. Master's Degree Program

The master's degree is intended to train the next generation of practitioners in the field and it is one possible stepping stone towards the doctoral degree. We envision that our master's degree graduates will become leaders in geosciences in industry, education, and government service.

Master of Science Degree (MS)

The Master of Science degree is obtained through a combination of coursework and research. A core component of the MS is the pursuit of an independent research project that ultimately culminates in a thesis. Every MS student is required to prepare work of publishable quality and a strategic goal should be that all MS students present their work in national or international conferences and publish their work in peer-reviewed journals. Geoscience practice increasingly requires that we work beyond traditional boundaries between disciplines and that we address problems quantitatively. However, we must at the same time train our students to have significant depth within their sub-discipline. The MS degree is intended to balance these goals through in-program courses, out-of-program courses, and thesis research.

Master of Science Degree in Geological Sciences

The Master of Science (MS) degree combines formal coursework with a research project carried out under the supervision of a member of the Graduate Studies Committee that culminates in the completion of a master's thesis.

a. Required Coursework

The MS degree requires a minimum of 24 semester hours of formal coursework (i.e. not thesis or research hours) plus at least 6 semester hours of credit for thesis preparation in GEO 698A and 698B. The distribution of this coursework between courses in Geological Sciences and other subjects is determined jointly by the student and the supervisor, subject to these regulations:

In-Program Coursework:

- At least 18 semester hours in the Department of Earth and Planetary Sciences are required for the MS degree.
- All courses taken in the Department of Earth and Planetary Sciences and counted toward the MS degree must be at the graduate level.
- All courses in Earth and Planetary Sciences counting toward the Program of Work must be taken for a letter grade, and the student must earn a grade of C or better. The exception to this rule is if a student uses GEO 398T as part of their 18 semester hours in the Department of Earth and Planetary Sciences (see "Additional Course Requirements" and "Exclusions" below).
- An overall GPA of at least 3.00 must be maintained by all graduate students.

Outside-of-Major Coursework:

- At least 6 semester hours must be taken outside of the major. MS students should have breadth and be able develop techniques, tools, and intellectual approaches outside their discipline in order to further their practice of geosciences. There is a wealth of high-quality and exciting courses outside the Jackson School and we urge our students to explore them.
- These courses are normally taken outside of the department. On a case-by-case basis, the graduate adviser may approve up to 6 semester hours of graduate-level coursework (taken for a letter grade) inside the department, but clearly outside of the student's primary field of study.
- Courses taken outside of the department can be either upper-division undergraduate or graduate level; lower-division courses do not count toward the Program of Work.
- The specific courses taken must be approved by the student's supervisor.
- All courses must be completed with a grade of C or better, or CR (Credit).

Additional Course Requirements:

All graduate students are required to take GEO 398T (Supervised Teaching in the Geological Sciences) in their first semester. (Students who began in prior years may have fulfilled this requirement by taking the combination of GEO 298T (Supervised Teaching in the Geological Sciences) and GEO 193 (Technical Sessions).) GEO 398T, GEO 298T, and GEO 193 are only offered on a CR/NC basis. As a result, they may only count toward the 24 hours of formal coursework under the conditions described in "Exclusions" below. MS students are encouraged, but not required, to take additional semesters of GEO 193.

Exclusions:

- Individual instruction or supervised research courses (e.g., GEO 394) do not count toward the required total number of semester hours for the degree.
- Courses counted toward another degree (MS or BS) may not be counted toward the MS degree.
- Credit by examination is not accepted for credit toward graduate degrees.
- Courses taken by correspondence through this or any other university may not be counted toward a graduate degree, but can be counted toward completion of the required college-level coursework in calculus, physics, biology, chemistry, or computer sciences.
- Students may use the combination of GEO 193 and GEO 298T, or GEO 398T, as three semester hours toward the 18 hours of inside-the-major coursework described above. In this case, however, because these courses are only offered as CR/NC, and the Graduate School only allows a certain percentage of courses in the Program of Work to be taken as CR/NC, at least one of the outside-the-major courses (3 semester hours) must be taken for a letter grade.

b. *Residency*

Generally, all coursework for the MS degree is taken at the University of Texas. Under some circumstances, a maximum of 6 semester hours of graduate coursework in which the grade is A or B may be transferred to the Program of Work from another institution,

but only on the basis of a petition by the Graduate Studies Committee and with the approval of the graduate dean (the Dean of the Graduate School), and only if it was not used toward either a Bachelor's degree or a previous graduate degree.

c. Thesis

Supervisor and Committee: The MS committee typically includes at least three members, of which at least one must be a member of the faculty in the Department of Earth and Planetary Sciences. The other members may be any qualified scientist who is approved by the graduate adviser, but at least one of them must be a member of the Graduate Studies Committee (GSC) in Geological Sciences. Only in extraordinary circumstances can a person who does not hold the PhD degree be appointed to a committee. Each student must identify a member of the GSC to assume responsibility for overseeing the student's Program of Work, to direct the student's thesis research, and to serve as chair of the student's committee. A Research Scientist who is not a member of the GSC may serve as "research supervisor" if a member of the faculty or the GSC is appointed as co-chair of the committee.

Identification of Research Topic, Supervisor, and Committee: During the second semester in residence, every MS student must file with the graduate adviser the *Notification of Supervisor and Committee Form* identifying a supervisor, committee, and thesis topic. This form must be submitted at least one week prior to the beginning of registration for the following semester.

Thesis Proposal: MS students are required to prepare a three-page (total) thesis proposal to be circulated to the committee for comment and revision. The proposal should be circulated soon after the committee is formed, and no later than the end of the second semester.

Annual Progress Reports: All graduate students are required to submit progress reports annually on the form provided. The student must obtain their supervisor's signature as approval before submitting the original to the graduate coordinator and copies to all members of the committee. Approved annual progress reports are due during the spring semester, typically in mid-April. Students who fail to meet this requirement will be barred from further registration until the requirement is met. In addition, all MS students must provide a written, two-page report outlining progress on the thesis research, and listing all publications and presentations; that report should be distributed to the committee and the graduate coordinator during the third semester.

Presentation on Master's Thesis Day: Each student is required to present on Master's Thesis Day a satisfactory oral report of results of their thesis research. It is recommended but not required that a draft of the thesis be distributed to the committee prior to the presentation. The student's Masters Committee may allow an oral presentation in a different venue to satisfy this requirement.

Thesis Preparation: The Graduate Studies Committee recommends that all MS theses be composed and formatted to be consistent with manuscript(s) submittal to full-length, externally peer-reviewed journal(s) to be agreed upon by the student and supervisor. The

thesis should include, where relevant, an appendix with all relevant data, whether published or not.

Thesis Evaluation: The thesis must be evaluated by all members of the Committee, and all members of the committee should be consulted during the writing of the thesis. Preliminary editing of the thesis should be done by a student editor, who should read the draft, make routine checks for accuracy, and provide stylistic and organizational suggestions. The thesis is submitted first to the supervisor, whose preliminary approval is obtained before the thesis is circulated to the other members of the committee. All members of the committee must be given at least 30 days to read and comment upon the final version of the thesis before being asked to approve it by signing the title page. Students should ascertain well in advance whether or not committee members are available and willing to evaluate the thesis during the summer months. The student must provide a copy of the completed thesis with original signature page to the Geology Library.

d. Admission to the PhD Program Following Completion of the MS

A student admitted to the graduate program in Geological Sciences as a MS aspirant may, with approval of their mentor, change to a PhD Program of Work within the first two long semesters in residence. After that time period, the student must complete all requirements for their MS degree, including submission of a thesis, in order to become eligible to enter the PhD program.

A student that wishes to enter the PhD program, immediately after completing an MS degree, does not need to reapply to the University. The student will submit a new statement of purpose for the PhD, and the MS supervisor and committee members must submit formal letters of recommendation to the graduate coordinator supporting the student's admission to the PhD program. In addition, a statement must be included from a member of the Graduate Studies Committee agreeing to supervise the student's PhD program (this person may be, but is not required to be, a member of the MS committee) and provide financial support. If financial support will be coming from someone else other than the proposed PhD supervisor, that individual must also submit a letter stating that. All letters should be based upon an evaluation of at least a first draft of the student's thesis. Admission to the PhD program (and any resultant change in a student's support status) will not be effective until all MS degree requirements are fulfilled. The deadline to submit these materials is as soon as possible after the student submits the first draft of their thesis to their MS committee.

Master of Arts Degree (MA)

The Master of Arts degree program requires 30 hours of coursework including a three-hour Master's Report (GEO 398R); it is designed for students who wish to enhance their technical education. The Master of Arts degree program is designed in coordination with the student's faculty supervisor and requires approval of the graduate advisor.

Master of Arts Degree in Geological Sciences

The Master of Arts (MA) degree consists primarily of formal coursework, combined with a final report, carried out under the supervision of a member of the Graduate Studies Committee.

a. Required Coursework

The MA degree requires a minimum of 30 semester hours of formal coursework, including GEO 398R (Master's Report). The distribution of this coursework between courses in Earth and Planetary Sciences and other subjects is determined jointly by the student and the supervisor, subject to these regulations:

- At least 18 semester hours in the Department of Earth and Planetary Sciences are required for the MA degree.
- All courses taken in the Department of Earth and Planetary Sciences and counted toward the MA degree must be at the graduate level.
- An overall GPA of at least 3.00 must be maintained by all graduate students.
- All graduate students are required to take GEO 398T (Supervised Teaching in the Geological Sciences) in their first semester. (Students who began in prior years may have fulfilled this requirement by taking the combination of GEO 298T (Supervised Teaching in the Geological Sciences) and GEO 193 (Technical Sessions).) GEO 398T, GEO 298T, and GEO 193 are only offered on a CR/NC basis.
- All other courses other than GEO 398R and GEO 398T counting toward the Program of Work must be taken for a letter grade, and the student must earn a grade of C or better.

Exclusions:

- Individual instruction or supervised research courses (e.g., GEO 394) do not count toward the required total number of semester hours for the degree.
- Courses counted toward another degree may not be counted toward the MA degree.
- Credit by examination is not accepted for credit toward graduate degrees.
- Courses taken by correspondence through this or any other university may not be counted toward a graduate degree, but can be counted toward completion of the required college-level coursework in calculus, physics, biology, chemistry, or computer sciences.

b. *Residency*

Generally, all coursework for the MA degree is taken at the University of Texas. Under some circumstances, a maximum of 6 semester hours of graduate coursework in which the grade is A or B may be transferred to the Program of Work from another institution, but only on the basis of a petition by the Graduate Studies Committee and with the approval of the graduate dean (the Dean of the Graduate School), and only if it was not used toward either a Bachelor's degree or a previous graduate degree.

c. Report

Supervisor and Committee: Each MA student must identify a member of the Graduate Studies Committee (GSC) to assume responsibility for overseeing the student's Program of Work and to serve as chair of the student's committee. The committee must have two

members, and can be up to three. Only in extraordinary circumstances can a person who does not hold the PhD degree be appointed to a committee. All members of the committee must approve the Master's Report. The Graduate Adviser must approve the supervisory structure.

Identification of Supervisor and Committee: During the second semester in residence, every MA student must file with the graduate adviser the *Notification of Supervisor and Committee Form* identifying a supervisor, committee, and report topic. This form must be submitted at least one week prior to the beginning of registration for the following semester.

Annual Progress Reports: All graduate students are required to submit progress reports annually on the form provided. The student must obtain their supervisor's signature as approval before submitting the original to the graduate coordinator and copies to all members of the committee. Approved annual progress reports are due during the spring semester, typically in mid-April. Students who fail to meet this requirement will be barred from further registration until the requirement is met.

Graduate Student FAQ

E. Graduate Student FAQ

1. Is summer support included in my support package?

No. There are however many opportunities for summer internships, TA appointments, research appointments, or other forms of support.

2. Does my medical insurance continue into the summer?

If you are appointed as a TA in the spring semester and will have an appointment in another benefits-eligible position (TA, RA) in the following fall semester you will have insurance in the intervening summer. If you have some elective benefits coverage, you may be charged for those coverages on your June 1 paycheck. If you have a summer appointment as a TA or RA, then your spring insurance continues as usual.

3. Can I take a GEO course for credit/no credit?

Not if you want to have it count toward your Program of Work (required hours). If you are taking a course beyond your required hours, or if you plan to take another course to substitute for the CR/NC class, you can take it CR/NC.

4. I am graduating in August. Do I need to register for summer semester?

Yes, you must be registered for your last semester in one of the following, depending on your degree: x99W (PhD), 698B (MS), or 398R (MA).

5. Do I need to be continuously registered – does that include summer?

Only if you are graduating in August. See #4.

6. I have a calculus deficiency. Can I take that course at ACC?

Yes. Most basic course like calculus taken at ACC are accepted at UT directly, without petition. See the graduate coordinator to determine which courses are acceptable.

7. Can I take a GEO course for my out-of-program requirement?

For PhD students, the examining committee may allow GEO course(s) to meet the out-of-program requirement. For MS students, this can be done by petition only, and will be evaluated on a case-by-case basis by the graduate adviser. Of the two required out-of-program courses for the MS, only one can be a GEO course.

8. Can I take an engineering course and have it count as an in-program course?

No. Only GEO courses count as in-program.

9. If I TA a summer course, does that count against my support guarantee?

No. If you are supported for the summer, it does not count as a semester of support. This is also the case for a GRA appointment.

10. If I am not employed by UT during a long semester, how many credit hours do I need to take?

You must be continuously registered for at least 1 semester hour every long semester, or summer if you are graduating in August, unless you are on an approved Leave of Absence. The exception to this is if you are in doctoral candidacy or expected to graduate that semester. Students in doctoral candidacy must take x99W in every long semester until they graduate. Master's students must be in 698B in the semester they graduate.

11. Can I drop a course after the 12th class day?

Yes. You can drop a course up to the last day of the semester, but there could be complications depending on your situation (warning status, employment). Check with the graduate coordinator to explore the situation if you need to drop a course.

12. Do I have to pay income taxes on my fellowship?

Yes. All forms of income (RA, TA, Fellowship, Independent Study) are subject to withholding and income tax. Domestic students should contact a tax advisor with questions. International students should contact an advisor with Texas Global.

13. Can I change supervisors if I don't like my situation?

Yes. You are free to work with any qualified JSG scientist. It is most efficient for your program to settle on a permanent supervisor by the second semester, but you can change your supervisor as long as you find someone willing to supervise you. Your support guarantee does not change, but your source(s) of future support may (e.g., you may be a TA instead of a GRA). You are obligated to complete performance requirements for your GRA or TA appointment in a given semester, even if you plan to switch your supervisor.

14. Can I have a research scientist at the BEG (or UTIG, or EPS) who is not a member of the Graduate Studies Committee (GSC) act as my research supervisor?

Yes, but officially they can only be listed as a Co-Supervisor, and a current member of the GSC must also be listed as a co-supervisor with that research scientist.

15. I have a master's degree from another university. Can I use those courses toward my PhD Program of Work?

Yes, with the approval of your supervisor and committee. They will determine how much of the coursework from a previous master's degree can be used to meet the requirements of the PhD. This should be discussed and resolved during the committee meeting when you complete the *Plan for Doctoral Program Form*.

16. When do I need to choose a supervisor and committee?

This is typically done during the spring (second) semester of your first year, although earlier is fine. Doctoral students who do not hold a master's degree have until their third semester to choose a supervisor and committee.

17. Do I need to get permission from UT to travel to a conference or field trip?

Yes. You must fill out a *Request for Travel Authorization (RTA) Form* any time you travel on university business, but not for personal travel. The form is available online

and must be turned in *at least two weeks prior* to your departure date. International travel requires additional approvals from the university.

18. I was on a field trip and was not able to turn in my support application on time, is this a problem?

Yes, this is a problem. Failure to turn in your paperwork on time could result in a determination that you are no longer a student in good standing. That means JSG provides no support for you until you are reinstated with good standing. Deadlines for filing paperwork are provided well in advance and must be met — do not procrastinate. If you foresee problems turning in materials on time, please be prepared and talk to the graduate coordinator in advance.

19. If I was admitted with support, but am not a TA during my first semester, do I have to take GEO 298T or GEO 398T?

Yes. All incoming students are required to take GEO 298T or GEO 398T their first semester. These courses go beyond teaching methods. Various topics regarding how to succeed in graduate school (and beyond) are discussed.

F. University Rules and Regulations

Grades

Students must maintain a B average (3.00 GPA) in all upper-division and graduate courses in both the major (GEO courses) and the minor (supporting work in other departments). No more than 20% of credit hours may be taken on a Credit/No Credit basis.

University Travel

Graduate students traveling on university business must fill out a *Request for Travel Authorization (RTA) Form* at least 2 weeks before the start of travel. For course-related field trips, a blanket RTA can be submitted to Financial Services.

Cash advances are possible for student travel, but requests must be accompanied by documentation pertinent to the trip or event. A cash advance requires a three-week lead time to ensure all document processing. The cash advance request will be signed by the dean and the request will be forwarded to the Office of Accounting for processing.

Driving for Official UT Business

Driving university or rental vehicles may be a necessary part of your TA, RA, or research duties. Graduate students are encouraged to obtain their Texas driver's license upon arrival. The use of personal vehicles for official business is strongly discouraged. University policies and regulations that govern driving are summarized online: http://www.utexas.edu/policies/hoppm/12.B.02.html. For further policies on use of UT vehicles for research or teaching, contact the front desk of your JSG unit. Driving of 12 passenger vans requires additional training and authorization.

Auditing a Course

Permission to audit a course entitles the student to attend classes but not to hand in papers, take part in discussion, or receive evaluations. A student auditor does not receive credit for the course audited. A course cannot be later repeated for credit after the student has audited it.

A student who wishes to audit a course obtains a Class Auditor Permit from the Office of the Registrar and secures the consent of the course instructor and the student's dean. A nonstudent must obtain the Class Auditor Permit and consent of the instructor. Nonstudents under the age of 65 are charged an audit fee of \$20 a course. Auditors are permitted only when space is available. An instructor or dean may refuse any request to audit a course. Nothing in these rules prohibits an instructor from permitting guests and visitors in a class.

Life as a Graduate Student:

a. The Graduate Program at the Jackson School

As a graduate student you are part of two organizations within the University of Texas: the Jackson School of Geosciences (JSG) and the Graduate School. From the university's perspective, your "College" is the Graduate School, and many rules outlined in this

document originate with the Graduate School or the UT Handbook of Operating Procedures (HOP). But you are also a member of the JSG family, and the Department of Earth and Planetary Sciences, consisting of undergraduate and graduate students working with educators, researchers, and staff members. In the Jackson School, the graduate program is under the authority of the Graduate Studies Committee (GSC). It is common practice in the Jackson School for the graduate adviser to also serve as the chairperson of the GSC, but this is not required. Ultimately, the GSC administers most program decisions and sets governing rules, as the Graduate School has granted such authority to that group.

b. *Mentors and Supervisors*

In the JSG, all students accepted into the graduate program are initially assigned to work with a *mentor*, a member of the Graduate Studies Committee in Geological Sciences, and typically the person the student was communicating with during the application process. The mentor is an initial point of contact for the student, and the new student becomes a temporary member of the mentor's research group. During the second semester most students select their thesis/dissertation supervisor, and notify the graduate coordinator of that choice.

The policy of the Jackson School is that graduate students are free to work with whomever they wish. Often the initial mentor becomes the student's permanent research supervisor for their thesis or dissertation, but that is not automatic, and the student is not obligated to work with their initial mentor. It is not uncommon for students to take advantage of their "free agent" status the first semester to talk to other faculty and scientists to see what kinds of research is going on, and develop a thesis topic. At any time, the student can change mentors, after talking about it with both the initial and the new mentor, by notifying the graduate coordinator.

Typically, at the end of the second semester the student and their mentor agree on a thesis topic and a research committee and supervisor, and the student completes the committee form and turns that in to the graduate coordinator.

c. Graduate Student Executive Committee (GSEC)

This committee is composed of graduate students in good standing with the Jackson School and the Graduate School and are elected by the JSG graduate student body. GSEC serves as a liaison between graduate students and the administration of the Jackson School. Students who experience challenges in the Jackson School are welcome to talk to members of GSEC about finding resolutions.

d. Deadlines and Required Forms

This document outlines many rules, with reference to many required forms and deadlines. You will be notified of upcoming deadlines via e-mail messages from the graduate coordinator, or they will be explained to you during orientation, or they are referred to in this document. It is YOUR responsibility to know these deadlines and submit your forms, applications, etc. on time and to the right office. Failure to submit materials on time may result in late fees, loss of access to research funds, or negative impacts to your supervisor's funding situation. We strive to provide guidance and reminders, including

copies of key forms, but ultimately it is your responsibility to follow procedures and meet all deadlines.

e. Recruiting and Career Services

Extensive Career services for our graduate students are provided by the Jackson School Career Services Center.

f. Summer Support and Internships

Generally, support is not guaranteed for our students during the summer. However, many of our students are supported on research projects or fellowships. In addition, many students intern with companies and governmental agencies during the summer.

g. Dealing with Two Campuses

The Jackson School of Geosciences is located both on main campus and at the Pickle Research Campus (PRC). The Department of Earth and Planetary Sciences is located on the main campus; this is where most classes are held and where the departmental and dean's offices are located. The Bureau of Economic Geology and Institute for Geophysics are both located at the PRC, and if you have an office there, you will need to commute between the two locations to get to classes or other meetings. The commute time can vary from 20-40 minutes, depending on the time of day and route. Various city bus routes travel between the two locations. Allow sufficient time for transit. We are trying to minimize the impact of split campuses. There is a representative of the dean's office at the PRC most days, and if you have questions, you can contact that person during regular business hours. There is also a video conference facility so that you can set up meetings with interactive audio, video, and computer display capabilities.

h. Computers and Software

Extraordinary computing support is provided for all of our graduate students. Jackson computing services are summarized online:

https://www.jsg.utexas.edu/about/offices/information-technology/.

i. Graduate Student Offices

Graduate student offices are assigned during the fall semester orientation period. Although not always possible, we strive to organize students into logical research groups, often grouping students with shared mentors or supervisors. It is possible to move offices later, but it will involve approval of several parties. Office space in the JGB or EPS buildings is prioritized for students holding teaching appointments that require a location for office hours. Thereafter priority is provided to students on Fellowships, or research assignments in one of those buildings. For those with research assignments and mentors at the PRC, it is possible that your office will be at PRC, with no main campus office.

Graduate Student Support

Standard offers of admission guarantee support from Jackson School resources (fellowships, teaching assistantships, grants and contracts) for established durations, as set forth below, are subject to the requirements of satisfactory work performance and satisfactory academic progress toward a graduate degree. Admission without support from Jackson School resources will be reserved for special instances, including students who seek the MA with report degree, those who do not seek support because they have

independent funding (such as international students with industry or home country support), and the rare student who would not be eligible for support under university rules but whom we desire nonetheless to recruit.

a. TA Appointments

Qualified teaching assistants (TAs) must be appointed each semester in sufficient number to staff courses, and such appointments receive priority. For students supported by grants, contracts, or fellowships, at least one semester of TA service is encouraged during their time as a student.

The appointment of TAs supported by research grants or fellowships must be designed to minimize impact on research programs and time to degree. This is best served by advance planning of TA duties between the student and the Department of Earth and Planetary Sciences (EPS). If necessary, the EPS Chair will work with UTIG or BEG directors or individual faculty to move selected persons from GRA positions or fellowships to TA positions. In order to ensure a qualified pool of potential TAs, all students admitted with support must also complete the International TA Certification process if applicable. This responsibility rests with the student and the mentor/supervisor, although funds may be available within the Geology Foundation to pay for the certification process.

b. Guaranteed Support

The duration of institutional guaranteed support underwritten by the Jackson School of Geosciences is as follows:

- MS Program 4 semesters (fall and spring).
- PhD Program 10 semesters (fall and spring).

For students who earn a MS at the Jackson School and decide to continue for a PhD, they are guaranteed an additional 8 semesters of support to complete the PhD degree.

c. Independent Study Semester

Independent Study Semester Fellowships are intended to support graduate students who have completed significant service as a Teaching Assistant in order for them to focus on their research. The Fellowships are awarded on the basis of academic justification and performance as a TA to a limited number of students (~10 per academic year). All students in the Jackson School graduate program who have served as a TA for at least two semesters and are within their support eligibility period may apply. Fellowship applications are evaluated by the Graduate Admissions and Support Committee. Students may apply more than once, but can receive only one such Fellowship.

d. Professional Development

The Jackson School encourages students to engage in professional development activities such as presenting papers and posters at professional meetings and participating in workshops and fieldtrips. The School will provide professional development support to all graduate students admitted with support.

- Students pursuing an MS degree will be provided a maximum of \$1,000
- Students pursuing a PhD will be provided a maximum of \$3,000.
- These funds will be disbursed based on approval by the supervisor/mentor. The student must complete a Request for Professional Development Funds, obtain the

approval of their supervisor, and submit the form and a Request for Travel Authorization (RTA) to the Business Office. These should be submitted *at least 2 weeks before the proposed travel*. Approvals are based on the following:

- The merit of the student's participation in the activity. It is preferred, but not required, that students requesting funds for attendance at professional meetings should present a paper or poster.
- The status of the student's progress toward completing their degree.
- The amount of funding requested based on the student's timeline to graduation. It is not in the student's best interest to approve a large request during their first semester.
- The amount of funding provided to the student does not usually cover 100% of the costs, as the student and/or supervisor are expected to also provide funds.
- Once funds are exhausted, students may not receive additional funds from the School for professional development.

e. Off Campus Research

Students conducting research off campus may apply for partial support from the Jackson School to help with expenses. Applications are made to the Graduate Admissions and Support Committee (GASC) for off-campus research (OCR) funding, although supervisors are expected to actively help fund the student's research. It is solely the student's responsibility to submit OCR requests in advance of announced deadlines.

f. Scholarships and Fellowships

There are several graduate scholarships and fellowship opportunities. Calls for applications occur throughout the year and the students should stay in contact with the graduate coordinator to receive notice of application deadlines.

g. Matching Funds for Student Research Grants

The Jackson School encourages its students to apply for external research grants to supplement their academic careers. Currently, and subject to change, the JSG will provide matching funds up to \$1,000 per academic year (September–August) for external research grants received by our students.

h. Analytical Fees

When funds are available, students may apply to the Graduate Admissions and Support Committee (GASC) for partial support for fees charged for analytical work needed to complete their research. Deadlines are announced by the graduate coordinator, normally toward the end of spring semester, and application forms are made available.