GRADUATE MANUAL (2017) DEPARTMENT OF GEOLOGY & GEOPHYSICS UNIVERSTY OF UTAH

http://www.earth.utah.edu/

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1.0 ADMISSION TO GRADUATE PROGRAMS IN GEOLOGY & GEOPHYSICS

1.1 Application to Graduate School

In accordance with University policy, successful applicants to any graduate program in the Geology & Geophysics (GG) Department must meet the following minimum criteria: (1) must have earned a bachelor's degree from a regionally accredited college or university; (2) must have an undergraduate GPA of at least 3.0 based on all undergraduate work. (If the overall undergraduate GPA is below 3.0, an alternative GPA will be calculated from the last 60 semester hours or last 90 quarter hours of undergraduate work.); (3) must be recommended for acceptance by the Graduate Affairs Committee of the GG Department. Note that the Department makes recommendations to the University, and the final decision on admission is made by the University Admissions Office.

Applications for admission to the Graduate School of the University must be submitted online through the Apply Yourself application system (https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=utahgrad), except in cases where the applicant is a previous University of Utah graduate student who applying for readmission (http://admissions.utah.edu/apply/graduate/). The application for admission requires, in addition to personal and educational information, that the applicant provide (a) scanned copies of transcripts of all previous academic work, both graduate and undergraduate, (b) contact information for three referees, preferably former professors or other persons familiar with the applicant's academic record, who will provide letters of recommendation, (c) results of the Graduate Record Examination (self-reported scores can be entered in Apply Yourself by the applicant, an official score report must be requested and sent directly from the testing company to the University Admissions Office), and (d) a brief personal statement of educational and professional goals. These four things are considered by the GG Graduate Affairs Committee, which is responsible for making recommendations for admission into all graduate programs in the GG Department. All students who apply for admission will be notified of acceptance or non-acceptance.

The normal deadline for applications for admission to the GG graduate program in the fall semester (beginning in August) is January 15. The normal deadline for applications for admission to the GG graduate program in the spring semester (beginning in January) is September 15.

Further details on policies regarding admission and other aspects of graduate programs at the University of Utah may be obtained from the web site of the University of Utah Graduate School: http://www.gradschool.utah.edu.

1.2 Readmission to Graduate School

Former students of the University returning after an absence of one or more semesters are required to submit an "Application for Readmission" at least 60 days in advance of registration. Students who have attended other higher educational institutions since attending the University of Utah are required to submit an application and to have complete transcripts of their work sent from each of those schools to the Admissions Office.

1.3 Expectations of Students Entering a GG Master's Program

- **1.3.1** Although an undergraduate GPA of at least 3.00 is mandatory for admission into a graduate program, an undergraduate GPA of 3.25 or higher is normally expected of successful applicants to master's degree programs in the GG Department.
- **1.3.2** Although no minimum numerical score on the Graduate Records Exam (GRE) is specified for acceptance into the GG Department, successful applicants are expected to have achieved excellent scores on the GRE. Note that the department requires no GRE specialty exam.

1.3.3 All students entering the graduate program are expected to have met the core course requirements for a B.S. degree in the GG Department. Students who lack this background may be admitted to the graduate program with the stipulation that they must make up certain course deficiencies required for a B.S. degree in this department. Undergraduate courses will not be counted towards a graduate degree, and tuition costs that are charged to make up undergraduate course deficiencies normally will not be covered by the graduate student tuition benefit program.

1.4 Expectations of Students Entering a GG Doctoral Program

- **1.4.1** Although an undergraduate GPA of at least 3.00 is mandatory for admission into a graduate program, a GPA of 3.50 or higher in undergraduate and/or previous graduate coursework is normally expected of successful applicants to doctoral degree programs in the GG Department.
- **1.4.2** Although no minimum numerical score on the Graduate Records Exam (GRE) is specified for acceptance into the GG Department, successful applicants are expected to have achieved exemplary scores on the GRE. Note that the department requires no GRE specialty exam.
- **1.4.3** Only demonstrated scholars will be considered for the Ph.D. program. Applicants for the Ph.D. program are expected to have demonstrated their ability to conduct original research at the undergraduate and/or master's levels.
- **1.4.4** A student who completes a master's degree in the GG Department and wishes to advance directly into a doctoral program in the Department must submit a written request for reclassification into the Ph.D. program. The student also must submit a letter of recommendation from the faculty chair of his/her M.S. supervisory committee. It is desirable for the student to submit a copy of his/her master's thesis. If that is not possible, the student may submit a summary of the research undertaken for the master's degree. The request for reclassification as a Ph.D. student will be reviewed by the GG Graduate Affairs Committee, which will decide whether or not to approve the request.

1.5 Renewal of Application for Admission

Students who do not register in the semester which they were accepted for admission, but who wish to register in a subsequent semester, must file a Renewal of Application form in the University Admissions Office. Normally, entry into the graduate program may be deferred for one semester beyond that in which that student was accepted. After that, the student must submit a new application for admission.

1.6 Proof of Immunity Requirement

The University requires all new, transfer, and readmitted students to provide proof of immunity for measles, mumps, and rubella. As recommended by the American College Health Association, the Federal Centers for Disease Control and Prevention (CDC), and the Utah State Health Department, students fulfill the requirement by providing evidence of immunity or the dates of having been vaccinated against the diseases. Appropriate vaccinations include two MMR vaccinations or two doses measles, one dose mumps, and one dose rubella vaccine. All new, transfer and readmitted students born after December 31, 1956, are required to submit proof of immunity to the Student Health Service. Instructions and forms will be mailed to new, transfer, and readmitted students after admission to the University and must be returned to the Student Health Service by the second Friday of their first semester (Madsen Health Center, Level 1, 555 Foothill Blvd., Salt Lake City, UT 84112). Questions regarding compliance requirements may be directed to the Student Immunization Office (801-585-6009).

2.0 REGISTRATION

2.1 Graduate-level Courses

Courses numbered 6000 or higher are considered to be graduate-level courses, although courses numbered between 5000 and 5999 also may count towards a graduate degree. Enrollment in courses numbered 7000 or higher is restricted to Ph.D. candidates. In courses that have multiple numbers (e.g., 5000-, 6000- and 7000-level for the same course), master's degree students should register for the 6000-level number, and Ph.D. students should register for the 7000-level number.

2.2 Minimum Continuous Registration for Students Working Toward Graduate Degrees

All graduate students must maintain minimum registration (see Section 2.3 or 2.4 for definition of minimum registration) from the time of formal admission through completion of all requirements for the degree they are seeking, unless they are granted an official leave of absence. If students do not comply with this continuous registration policy and do not obtain an official leave of absence, their supervisory committee will be terminated and their records will be inactivated. To reactivate a student's file at a later time, the student is required to reapply for admission to The Graduate School.

Continuous registration refers only to registration during the regular academic year and is not terminated or interrupted by non-registration during summer semester. However, students who take courses or exams during summer term must be registered in the summer semester. Students who are not on campus and not using University facilities are not expected to register for summer semester. Graduate students maintaining minimum continuous registration have library privileges, health insurance options, and access to athletic facilities.

2.3 Master's Degrees

Students in an M.S. degree program that requires a thesis should maintain minimum registration by either (1) registering and paying applicable tuition and fees for at least three credit hours (Thesis Research, GEO 6970, may be used to fulfill this requirement) per semester during the academic year from the time they are admitted to The Graduate School until they have completed all requirements for the degree (up to 10 hours of GEO 6970 may be counted toward the master's degree); or (2) registering for three credit hours of Faculty Consultation (GEO 6980) during any semester in which they are not otherwise enrolled. Minimum continuous registration requirements apply to M.S. candidates until the thesis is successfully defended. Students who pass their thesis defense after the final examination period of a semester and before the next semester begins are not required to register for the next semester. They will graduate in the semester in which all Graduate School requirements are fulfilled.

Students in an M.E. degree program that does not require a thesis should maintain minimum registration by either (1) registering and paying applicable tuition and fees for at least three credit hours per semester during the academic year from the time they are admitted to The Graduate School until they have completed all requirements for the degree, including the submission of a final paper or project; or (2) registering for three credit hours of Faculty Consultation (GEO 6980) during any semester in which they are not otherwise enrolled. The requirements apply to non-thesis degree candidates until the final paper or project is submitted and approved by the department.

Only GEO 6970 (M.S. Thesis Research) may be counted as thesis hours in fulfillment of the degree requirements. GEO 6980 (Faculty Consultation) does not count toward fulfillment of degree requirements. Continuing Registration (GEO 6990) cannot be used for verification of half-time or full-time enrollment in order to qualify for deferment of student loan repayments or to receive student loan funds. The Registrar's office places a limit of four semesters for use of GEO 6990.

2.4 Doctoral Degrees

Students in a Ph.D. degree program should maintain minimum registration by registering and paying applicable tuition and fees for at least three credit hours per semester during the academic year from the time they are admitted to The Graduate School until they have been formally advanced to candidacy (usually after completion of all course work, the Ph.D. qualifying examination, and the language requirement). Doctoral students who have been admitted to candidacy should maintain minimum registration by either (1) registering and paying the applicable tuition and fees for a minimum of three credit hours if the candidate is in residence, uses University buildings, consults regularly with his/her supervisory committee, or otherwise uses University facilities. All candidates taking their final oral examination ("dissertation defense") during the semester in question must be registered for three credit hours; or (2) registering for Continuing Registration (GEO 7990) if the candidate is not using faculty time or University facilities except the library. No students may register for more than four semesters of 7990. Doctoral students who successfully defend their dissertations are no longer required to register; however, those who wish to check out books from the library must register for Continuing Registration (GEO 7990).

Only GEO 7970 (Ph.D. Dissertation Research) may be counted as dissertation hours in fulfillment of degree requirements. GEO 7980 (Faculty Consultation) does not count toward fulfillment of degree requirements. Doctoral students who have been admitted to candidacy may maintain minimum registration by registering and paying the applicable fee for Continuing Registration (GEO 7990) if the candidate will not be using University facilities or faculty time, but Continuing Registration cannot be used for verification of half-time or full-time enrollment in order to qualify for deferment of student loan repayments or to receive student loan funds. The Registrar's office places a limit of four semesters for use of GEO 7990.

2.5 Leave of Absence

Students who wish to discontinue their studies for one or more semesters (other than summer semester) must submit a Request for Leave of Absence form to the chair of their M.S. or Ph.D. supervisory committee and the GG department chair, along with a copy filed with the chair of the GG Graduate Affairs Committee. The form must be approved by the supervisory committee chair and department chair before being forwarded to the Registrar's Office for final approval. Requests for a leave may be granted in the following circumstances: (1) Leaves of absence generally are granted and reviewed on a yearly basis for reasons relating to illness, military service, pregnancy and/or child care, residence outside the state of Utah, and work in process in which students are not in continual contact with their supervisory committee or other members of the faculty. (2) Leaves also may be granted on a yearly basis to students who, in the judgment of their department chair, are engaged in work considered beneficial to their academic goals, such as temporary teaching or professional employment that allows the students ultimately to complete the degree. (3) Leaves for other reasons may be granted and reviewed on a yearly basis when the student's department chair believes the leave is in the best interest of both the student and the University.

Students must apply for leaves of absence for a current semester before the last day of classes of that semester. They also must officially withdraw from classes in any semester for which a leave is granted. Failure to formally withdraw will result in the reporting of E or EU grades for all classes. The period during which a leave of absence is granted does not count toward the period allowed to complete the degree. Leaves are granted for a maximum of one academic year at a time. The leave of absence is void if a student registers for classes in a semester for which a leave was granted.

2.6 Full-Time Status

Graduate students are considered to be full time if they are registered for nine or more credit hours. After the Utah residency requirement has been met (i.e., two consecutive semesters of nine hours or more), graduate students are considered to be full time if they are registered for three credit hours of one of the following courses: GEO 6970, 6980, 7970, or 7980. A schedule of nine hours is generally considered to be a full load for masters and doctoral degree candidates. No candidate for a graduate degree is permitted to register for more than 16 credit hours in any single semester.

2.7 Withdrawal from the University

If a graduate student finds it necessary to withdraw from the University, he/she should file an application to withdraw from school in the Registrar's Office. Otherwise his/her eligibility for readmission to the University may be jeopardized.

2.8 Resident Status

Students who are not residents of the State of Utah when they enter the University should take the necessary steps to obtain resident status for in-state (resident) tuition purposes at the earliest allowable date. Details of the residency policy can be found at the web site of the University Admissions Office: http://www.sa.utah.edu/admiss/

A non-resident U.S. citizen in graduate school at the University of Utah may apply for resident status after earning 40 semester credit hours at the University in not less than twelve months. The graduate student should register to vote in Utah and/or obtain a Utah driver's license and/or register a vehicle in Utah at least 90 days prior to the first day of classes of the semester in which Utah residency is requested. The student should submit an application for resident reclassification to the University admissions Office (Room 250, Student Services Building) by July 1 for the fall semester or by December 1 for the spring semester. A complete packet includes the application and all required supporting documentation. Please note that all materials submitted with the applicant is advised to submit photocopies of all supporting documentation.

Personnel of the United States Armed Forces who had Utah residency immediately prior to their deployment to active duty outside of Utah, and who reestablish residency in Utah no later than 90 days after the termination of active duty status, are immediately eligible, together with the immediate members of their families residing with them in Utah, to apply for resident student status for tuition purposes.

Foreign nationals who are present in the United States on a student, visitor or other visa that authorizes only temporary presence in this country are classified as non-residents for tuition purposes, and they may not obtain resident status. Foreign nationals who have been granted legal immigrant or permanent U.S. resident status by the federal government are classified for purposes of resident status according to the same criteria applicable to U.S. citizens. The Utah residency law allows a foreign national to be exempt from paying the non-resident portion of the University tuition if he/she was legally admitted to the United States, and attended high school in Utah for three or more years, and graduated from a high school in Utah or received the equivalent of a high school diploma in Utah.

3.0 FINANCIAL SUPPORT FOR GRADUATE STUDENTS

Various forms of financial support are available for graduate students, including assistantships (which generally require some level of academically related service to the department as a teaching or research assistant) and fellowships (which generally do not involve a service function to the department, with the exception of the WEST and TGLL Fellowships). Assistantships and

fellowships come with a monetary stipend and a tuition benefit. In addition the department encourages all graduate students to be active in pursuing external sources of support. Many funding agencies, foundations, and professional societies offer competitive graduate fellowship programs that provide stipend and/or research support at or above the level provided by internal Departmental/University sources. Information on these programs can be obtained through sources such as the Pathways to Science website: http://www.pathwaystoscience.org/Grad.asp.

3.1 Graduate Assistantships and Fellowships

All financial assistance for graduate students in the GG Department is awarded on a competitive basis. Teaching Assistantships (TA's) and various Graduate Fellowships are awarded by the GG Graduate Affairs Committee after careful consideration of the academic qualifications of all eligible applicants. Research Assistantships (RA's) are awarded by individual faculty members, who serve as principal investigators of particular research grants, contracts or consortia. WEST ("Water, Environment, Science and Teaching") Fellowships are awarded by the multi-departmental WEST Advisory Committee. TGLL ("Think Globally, Learn Locally") Fellowships are awarded by the multi-departmental TGLL Advisory Committee. Graduate Research Fellowships (GRF's) and University Teaching Assistantships (UTA's) are awarded by the Graduate School of the University on the basis of campus-wide competitions.

Master's degree candidates normally receive at least two years of stipend support in the form of teaching or research assistantships and/or fellowships. Doctoral degree candidates entering the Ph.D. program with a Master's degree are normally supported for at least three years. Doctoral degree candidates entering the Ph.D. program without a Master's degree are normally supported for at least five years. In all cases the continuation of support is contingent on the availability of funds and the student's satisfactory progress in their degree program. The Department will make every effort to provide continuing support for students who demonstrate continued satisfactory progress. Under certain circumstances involving pre-arranged outside funding or self-funding, students may be admitted to a GG graduate program with no offer of Department/University financial support.

Master's and doctoral candidates must be fully registered as full-time students to be eligible for assistantships and fellowships and to qualify for the University's tuition benefit program. Students may not have any additional gainful employment on-campus or off-campus while being supported on an assistantship or fellowship.

3.2 Graduate Tuition Benefit

The Graduate School of the University provides a tuition benefit program for graduate students, which is summarized on the web site:

http://www.gradschool.utah.edu/tbp/guidelines.php

It is the student's responsibility to be familiar with the details of this program as outlined by The Graduate School. The tuition benefit program is available only to full-time graduate students who are receiving departmental funding in the form of a TA, RA or Fellowship. Full-time status for this purpose is registration for at least nine credit hours per semester during the regular academic year. Undergraduate courses, credit/no credit (CR/NC) courses, and audited courses count toward the registration requirement of nine hours per semester, but such courses do not qualify for a tuition benefit. Students whose necessary course work is less than nine hours should make up the difference by registering for GEO 6970, 6980, 7970, 7980, or other appropriate graduate credit. Non-matriculated students, part-time students, and students on probationary status are ineligible for the tuition benefit program.

For TA's and Fellows, the tuition benefit is valid for a minimum of nine and a maximum of twelve graduate credit hours per semester in fall and spring semesters. For RA's, the tuition benefit

is valid for a minimum of nine and a maximum of eleven graduate credit hours per semester in fall and spring semesters, plus an additional three credit hours in summer semester. (Students need to be aware that during the fall and spring semesters, the tuition benefit will cover up to 12 hours for TA's and Fellows but only up to 11 hours for RA's.) In the case of RA's who have exceeded 84 accumulated credit hours, resident (in-state) tuition only is included in the tuition benefit program. This condition will be implemented in the semester that cumulative registration exceeds 84 credit hours as a University of Utah graduate student.

Students may receive the tuition benefit for a limited number of semesters. Students who enter their graduate programs with a bachelor's degree are limited to two years (four semesters) of tuition benefit support for the completion of a master's degree and are limited to five years (ten semesters) of tuition benefit support for the completion of a doctorate. Students who enter a doctoral program with an "in-subject" master's degree may receive up to three years (six semesters) of tuition benefit support if their master's degree was awarded at the University of Utah and up to four years (eight semesters) of tuition benefit support if their master's degree was awarded at another insititution. In cases where a student enters a doctoral program with an "out-of-subject" master's degree, or where the department believes the student requires additional preparation, then the student may receive up to five years (ten semesters) of tuition benefit, provided that a petition is made during the first year of a student's program and approved by the Dean of The Graduate School.

Students need to be aware that if they add and/or drop courses after the semester's published add/drop deadlines, they are responsible for any and all charges incurred. If a student's registration falls below 9 credit hours at any time during the semester, the student becomes ineligible for participation in the tuition benefit program and will be billed for the full amount of tuition for that semester.

3.3 Funding for Graduate Student Research

Some (but not all) graduate students will have part or all of the routine expenses for carrying out their thesis/dissertation research projects funded by way of research grants or contracts that are administered by their faculty advisor. Instead, or in addition, some money may be available to cover modest thesis/dissertation expenses from other sources within the Department, such as discretionary funds in the Department Chair's office. Graduate students in need of funding for research expenses should communicate those needs to their faculty advisor, who may be able to suggest possible avenues for obtaining funds from intra- or extra-departmental sources.

Many professional societies (e.g., AAPG, AGU, GSA, SEG, SEPM, etc.) offer student research grants for thesis/dissertation work. Graduate students should check into the possibilities with each of the relevant societies (generally described on their respective web pages) and apply for student grants wherever possible.

4.0 GRADUATE DEGREE REQUIREMENTS

4.1 Master of Science (M.S.) Degree

The GG Department offers M.S. degrees in Geology, Geophysics and Geological Engineering, all of which require an M.S. thesis that represents an original contribution to science or engineering.

4.1.1 Four-year Time Limit for an M.S. Degree. All work for the M.S. degree must be completed within four consecutive calendar years (not including official leaves of absence). Students who find it impossible to complete all the requirements within the four-year limit must request an extension in writing prior to the end of the fourth year. The request should explain the reason for the delay and provide a timetable for timely completion of all remaining requirements. The request must be approved by the supervisory committee chair, GG Director of Graduate Studies

and GG Department Chair before being submitted to the Dean of the Graduate School for final approval. Otherwise, the student will be dropped from the program at the end of the four-year interval. If a student who has been dropped from the program desires to return at a later time to finish the degree, he/she needs to re-apply for admission and then re-constitute the supervisory committee. The Department may decide to re-admit such a student but is not obligated to do so.

4.1.2 M.S. Supervisory Committee ("Thesis Committee"). An M.S. supervisory committee consists of three members, the majority of whom must be regular (tenured or tenure-track) faculty in the GG Department ("department representatives"). The supervisory committee chair must be a regular faculty member in the GG Department. Exceptions allowing a research or lecturer faculty member to serve as either department representative or committee chair require recommendation and justification by the Director of Graduate Studies or Department Chair and approval by the Dean of the Graduate School. An adjunct faculty member or other highly qualified individual may serve as a committee member if his/her expertise is especially pertinent to the student's thesis research topic. In no case can a supervisory committee include less than one regular faculty member primarily appointed in the GG Department.

The supervisory committee should be appointed no later than the end of the second semester of a student's graduate work. It is the student's responsibility to initiate a request for a committee and to nominate a committee chair. The GG Director of Graduate Studies or Department Chair must approve the membership of the committee, and the Dean of The Graduate School has final approval of the committee. The student should consult with the supervisory committee frequently, preferably at least once each semester, in planning and carrying out his/her degree program and thesis research. If a supervisory committee finds a graduate student's background to be deficient in critical areas, the student may be required to take supplementary undergraduate courses, for which graduate credit will not be allowed.

4.1.3 Required Course Work. Candidates for the M.S. degree must earn a minimum of 30 semester hours in graduate courses and thesis research. At least 24 semester hours must be in resident study at the University of Utah, and a minimum of 20 semester hours must be in formal course work with the balance in thesis research. A majority of the course credit hours must be earned in GEO courses taken in the GG Department. The candidate is required to maintain at least a 3.0 grade point average overall. A grade of B- or better is required for all courses that are counted for the degree. No courses to be counted towards graduation may be taken CR/NC.

All course work to be counted for the degree must be approved by the student's supervisory committee. All M.S. candidates in the GG Department are required to take GEO 6950 ("Reviews in Earth Science"), and all other courses to be counted for the M.S. degree are specified and approved by the student's own supervisory committee. Courses in which a letter grade is given solely on the basis of attendance without any requirement of student performance and without any assessment of student learning (e.g., the Distinguished Lecture Series) may not be used to count towards the required minimum of 20 semester hours in formal course work for the M.S. degree.

Graduate-level courses taken while an undergraduate that were counted towards the undergraduate degree (or a previous graduate degree) may not also be counted towards the graduate degree that is currently being pursued.

Credit earned by non-matriculated students (i.e., students who have not been formally admitted to a graduate program) may or may not apply to a graduate degree program. Non-matriculated credit that can be applied toward a graduate degree is limited to no more than eight semester hours. Applying more than eight hours of non-matriculated work to the degree requires a recommendation from the student's supervisory committee and the approval of the Dean of The Graduate School. Correspondence or home-study courses are not eligible for graduate credit.

4.1.4 Master's Qualifying Examination. All prospective Master's candidates must pass a written Master's Qualifying Examination, which is not to be confused with the thesis defense. The format of this exam in the GG Department consists of a compulsory seminar, called "Reviews in Earth Science (GEO 6950), which is offered in the fall semester and is followed immediately by the comprehensive M.S. Qualifying Exam. GEO 6950 addresses broad Earth science themes about which all graduate students are expected to be knowledgeable. Specific emphasis is placed on integrating knowledge from multiple subdisciplines in the geosciences. The qualifying exam consists of questions that are broad in nature, open-ended in style, and designed to reward students who are able to integrate material from multiple subdisciplines within geology and geophysics, and also to advance detailed arguments from a specific perspective. Administration and grading of the M.S. Qualifying Exam is done under the supervision of the Graduate Affairs Committee. The consequence of an unsatisfactory performance on the M.S. Qualifying Exam is at the discretion of the Graduate Affairs Committee; possible actions include an opportunity for the student to re-take the "Reviews" course and/or Qualifying Exam, or immediate dismissal from the graduate program.

Students who do not take the Qualifying Exam as normally scheduled will not be eligible to enroll in future graduate courses and will be dropped from the Graduate Program. Students with a bachelor's degree outside the Earth sciences may petition the Graduate Affairs Committee to take the "Reviews" course and M.S. Qualifying Exam in a later semester.

- **4.1.5 Application for Candidacy.** After successfully completing the "Reviews" course and the M.S. Qualifying Exam, and before completing the M.S. thesis, the student is required to submit an Application for Admission to the Candidacy for the Master's Degree. This form includes (among other things) a list of all graduate-level courses that will be counted towards the degree. Applications for candidacy must be signed by the supervisory committee members and approved by the GG Director of Graduate Studies or Department Chair before it is submitted to the Dean of The Graduate School for final approval. Normally this candidacy form is submitted by the end of the student's second semester in graduate school. In any case, a student may not schedule a thesis defense before the candidacy form is submitted and approved.
- **4.1.6 M.S. Thesis.** Every M.S. candidate must carry out an original research project in geology, geophysics or geological engineering under the guidance of his/her supervisory committee, and the results of this research must be presented to the University in the form of a formal thesis. The final product should be of a quality sufficient for publication in the professional literature in his/her field. Although acceptance of a manuscript for publication in a journal or book is not a requirement for the completion of the degree, students are very strongly encouraged to submit their work for publication before or after completing their degree. The M.S thesis must include a minimum of six semester credit hours of Thesis Research (in GEO 6790) that represent the research work presented for the M.S. degree.

Students who are near the writing stage should obtain a copy of "A Handbook for Theses and Dissertations" from the University's Thesis Office in the Graduate School. Specific instructions and regulations governing the form and distribution of the M.S. thesis may be obtained from the Graduate School web site: http://www.gradschool.utah.edu/catalog/thesis.php

Candidates for a master's degree should not delay beginning the necessary steps to clear their thesis through the University Thesis Editor's Office in The Graduate School. In order to graduate in a given semester, one copy of the thesis manuscript must be submitted electronically to the Thesis Editor's Office for format approval no less than six weeks prior to the closing date of the semester (i.e., the last day of final exams). Before submitting the thesis manuscript to the Thesis Editor, the student must make any mandatory changes to the manuscript required by the supervisory committee after the oral defense, and the student must have the signature forms signed in black ink by all members of the supervisory committee, who certify on the Supervisory Committee Approval form

that the thesis has been found to be satisfactory for the degree. Then the Department Chair should sign the Final Reading Approval form and certify that the final thesis has been read and approved, that all materials are in order, and that the manuscript is ready to submit to The Graduate School. After obtaining all the necessary signatures, the student should proceed to submit the manuscript electronically to the Thesis Editor. A thesis manuscript will not be accepted by the Thesis Editor for Format Approval until it has been successfully defended and the signatures of the supervisory committee and Department Chair have been obtained.

The complete M.S. thesis should be submitted electronically to the Thesis Editor for "Format Approval", and then after all the necessary corrections have been made the final version of the thesis should be submitted to the Thesis Editor electronically for "Thesis Release".

4.1.7 The Use of Restricted Data for M.S. Theses. According to the standard research agreement for sponsored contract work, the University of Utah, as a state institution of higher education, engages only in research that is compatible, consistent, and beneficial to its academic role and mission. Therefore, significant results of research activities must be reasonably available for publication. The University agrees, for a period not to exceed six months following completion of the project, that it will obtain sponsor approval prior to publication and this approval should not be unreasonably withheld by sponsor. The University agrees to keep confidential any sponsor proprietary information supplied to it by the sponsor during the course of research performed by the University student, and such information will not be included in any published material without prior approval by the sponsor.

With regard to the use of restricted data for M.S. theses, the following conditions apply: (1) Supervisory committees are responsible for approving topics for theses, and the approval must have the informed consent of the degree candidate to do the research. (2) Approval will not be given to a thesis subject that will prevent the completed thesis from being made available for public use by the time the University approves the degree. (3) The supervisory committee shall schedule a public oral examination at which time the candidate must defend his/her thesis satisfactorily. (4) The required number of copies of the completed thesis must be submitted for public use to the University of Utah Marriott Library by the time the degree is granted. Exceptions to items (2) and (4) above must be approved by the Graduate Council and can only be made by the Council in those cases where a delay is required (a) to protect the rights of patent applicants, (b) to prevent unjust economic exploitation, or (c) to protect the privacy of research subjects. (5) With regard to protecting the rights of patent applicants, (a) above, and in preventing unjust economic exploitation, (b) above, the Graduate Council may by formal action delay granting of the degree and/or publication of the thesis if the delay in either case is not longer than one year from the completion of the thesis.

4.1.8 M.S. Thesis Defense (**Final Oral Exam**). A public defense of the M.S. thesis is required of all M.S. candidates. It takes the form of an oral presentation of the significant scientific results of the candidate's thesis work, and attendance is open to all interested persons. As the defense represents the culmination of the candidate's major efforts in research, all GG faculty and graduate students are encouraged to attend thesis defenses in the Department. At the end of the candidate's presentation in his/her thesis defense, the candidate will be expected to respond effectively to questions about the thesis from the supervisory committee and other members of the audience.

The thesis defense ("Final Oral Exam") may be scheduled only after all members of the supervisory committee have read the thesis manuscript and decided that it is defendable in public. The student should allow committee members a minimum of two full weeks, and preferably longer, to read the thesis. The defense should be scheduled during the fall or spring semester, preferably in the first half of the semester. A defense during the last week of classes or final exam week of any semester is discouraged and may be scheduled then only with the unanimous consent of all

supervisory committee members. Likewise, a defense during the summer semester is discouraged and may be scheduled then only with the unanimous consent of all supervisory committee members.

A majority of the supervisory committee members must attend the thesis defense in person, and a majority vote of the committee members must decide that the candidate's performance in the defense was passing. In the case of a failure in the defense, a majority of the committee members then must decide whether or not the candidate is to be given a second chance to defend the thesis. If not, the student will be dropped from the graduate program. If so, the second defense must be scheduled in a subsequent semester. If the second defense is failed also, the candidate is dropped from the graduate program and not given an additional chance.

4.1.9 Thesis Collection Requirement. It is a departmental policy that each graduate student in the GG Department who has prepared a collection of rock, mineral and/or fossil specimens (or other prepared materials, such as thin sections) as a significant basis of his/her thesis work shall turn in that collection at the conclusion of his/her studies as a requirement for graduation. The thesis collection is to be accompanied by complete identification data, which will be turned over to the Chief Curator. As a general rule, the contents of the thesis collection should include only those specimens that are illustrated or described in the thesis, plus any other specimens deemed important by the student's supervisory committee. In the case of fossil type specimens (e.g., holotypes and paratypes), those specimens may, at the discretion of the supervisory committee chair, be deposited in a reputable research museum or other appropriate public repository.

All specimens in the student's thesis collection must be properly cleaned, organized, labeled and catalogued by the student before it is submitted to and accepted by the Chief Curator. A dirty, unorganized and/or unlabeled collection will not be acceptable, and the student's degree may be held up until this requirement is complied with.

4.1.10 Thesis Copies. The thesis is submitted electronically to the University. The successful M.S. candidate must provide the GG Department with one hardbound copy of the M.S. thesis. In addition, the candidate normally provides each of the supervisory committee members with a copy of the thesis as well.

4.2 Master of Engineering (M.E.) Degree

The GG Department offers M.E. degrees in Geological Engineering and Environmental Engineering. The M.E. degree is a non-thesis graduate program, which requires the student to accomplish a one-semester research project of more limited scope than a standard master's thesis. With the exception of the thesis requirement, candidates for the M.E. degree must complete the same general requirements as candidates for the M.S. degree (see Section 4.1), including the "Reviews in Earth Science" course and the Master's Qualifying Exam. A member of the Geological Engineering faculty in the GG Department will supervise the one-semester research project, and the Geological Engineering faculty as a whole will approve the graduate courses that will count towards the M.E. degree. A minimum of 30 semester credit hours of approved graduate-level courses, at least 24 hours of which must be taken in resident study at the University of Utah, are required for the degree. These course credits should be divided with at least 20 hours in a "major" area of concentration (e.g., hydrological engineering or geotechnical engineering) and least 10 hours in other ("minor") areas. Courses in which a letter grade is given solely on the basis of attendance without any requirement of student performance and without any assessment of student learning (e.g., the Distinguished Lecture Series) may not be used to count towards the required minimum of 30 semester hours in formal course work for the M.E. degree.

Graduate-level courses taken while an undergraduate that were counted towards the undergraduate degree (or a previous graduate degree) may not also be counted towards the graduate degree that is currently being pursued.

M.E. candidates are not eligible to register for Thesis Research (GEO 6970); instead, M.E. students should register for 3 or 4 semester hours of Special Topics (GEO 6920) for the required one-semester research project. All work for the M.E. degree must be completed within four consecutive calendar years (not including official leaves of absence).

4.3 Doctor of Philosophy (Ph.D.) Degree

The GG Department offers Ph.D. degrees in Geology, Geophysics and Geological Engineering, all of which require a Ph.D. dissertation that represents a major, original contribution to science or engineering, which is significantly broader in scope than what is normally expected of a master's thesis.

- **4.3.1 Time Limit for a Ph.D. Degree**. It is expected that all work for the Ph.D. degree will be completed in timely fashion. The Ph.D. degree requires a minimum of three years (six semesters) of continuous course work and research, but the University imposes no maximum time limit for completion of the doctoral degree requirements. In the GG Department, however, Ph.D. candidates normally are expected to complete all requirements for their degree within five years upon admission to the Ph.D. program. In each year that a Ph.D. candidate extends beyond the five years, the candidate should submit a written explanation of his/her progress to his/her supervisory committee with a copy to the Graduate Affairs Committee, which includes an outline of how and when the student intends to finish the degree in a timely manner.
- **4.3.2 Ph.D. Supervisory Committee ("Dissertation Committee").** A Ph.D. supervisory committee consists of five members, the majority of whom must be regular (tenured or tenure-track) faculty in the GG Department ("department representatives"). The supervisory committee chair must be a regular faculty member in the GG Department. Exceptions allowing a research or lecturer faculty member to serve as either department representative or committee chair require recommendation and justification by the Director of Graduate Studies or Department Chair and approval by the Dean of the Graduate School. An adjunct faculty member or other highly qualified individual may serve as a committee member if his/her expertise is especially pertinent to the student's thesis research topic. One member of the Ph.D. supervisory committee must be a qualified professional from outside the department; usually this is a faculty member from another science or engineering department in the University, but he or she may be someone from another university, government agency or other appropriate scientific or engineering organization. In no case can a supervisory committee include less than one regular faculty member primarily appointed in the GG Department.

The Ph.D supervisory committee should be formed as soon as practical, but must be formed before the Ph.D. qualifying examination (section 4.3.5). It is the student's responsibility to initiate a request for a committee and to nominate a committee chair. The GG Director of Graduate Studies or Department Chair must approve the membership of the committee, and the Dean of The Graduate School has final approval of the committee. The student should consult with the supervisory committee frequently, preferably at least once each semester, in planning and carrying out his/her degree program and thesis research.

4.3.3 Required Course Work. Candidates for the Ph.D. degree must complete three years (six semesters) or more of approved graduate-level course work and dissertation research. Ph.D. students entering the graduate program without having previously received a master's degree are required to complete all coursework requirements associated with the Department's M.S. degree program (sections 4.1.3 and 4.1.4). Beyond this requirement, no minimum number of credit hours in formal courses is specified for Ph.D. candidates. However, the program of study for a Ph.D. degree must be substantial and must be approved by the candidate's supervisory committee.

Doctoral students are expected to take courses in a broad spectrum of subject areas, which may (or may not) include some courses taken outside the GG Department, but a majority of the course credit hours must be earned in GEO courses taken in the GG Department. The candidate is required to maintain at least a 3.0 grade point average overall. A grade of B- or better is required for all courses that are counted for the degree. No courses to be counted towards graduation may be taken CR/NC. Courses in which a letter grade is given solely on the basis of attendance without any requirement of student performance and without any assessment of student learning (e.g., the Distinguished Lecture Series) may not be used to count towards the required formal course work for the Ph.D. degree.

Graduate-level courses that were counted towards a previous undergraduate or graduate degree may not also be counted towards the graduate degree that is currently being pursued.

A program of study approved by the student's supervisory committee must be submitted to the Graduate School on the "Program of Study for the Ph.D. Degree" form. This form must be signed by the supervisory committee members and approved by either the GG Director of Graduate Studies or Department Chair before being sent to the Graduate school for final approval by the Dean of the Graduate School. It should be submitted as soon as possible, but no later than one full semester before graduation.

4.3.4 Ph.D. Language Requirement. Because the geosciences are by nature global in scope, an ability to read literature in multiple languages and communicate with international scientists is a valuable professional asset. Whether or not foreign language proficiency is required of a Ph.D. candidate is determined by his/her supervisory committee. If foreign language proficiency is to be required of the candidate, the supervisory committee should decide if it will be "standard" or "advanced" proficiency, as well as which foreign language will be required. Options for fulfilling the language proficiency requirement are given on the Graduate School web site:

http://www.gradschool.utah.edu/catalog/language.php

4.3.5 Ph.D. Qualifying Examinations. A series of written and oral qualifying examinations (sometimes referred to as "Preliminary Examinations" or "Comprehensive Examinations") is required of each Ph.D. candidate. The Ph.D. Qualifying Exams are prepared and administered by the student's supervisory committee, and a majority (preferably all) of the committee members should participate by asking probing questions in the student's major field and allied fields. No one outside the supervisory committee is allowed to participate. The total length of the qualifying exams should not exceed 20 hours. The written exams should be at least 5 hours and should not exceed 15 hours, and the oral exam (which is not the dissertation defense) should not exceed 5 hours. The results of the Ph.D. Qualifying Exams will be transmitted to the Graduate Affairs Committee. The Ph.D. Qualifying Exams normally will be taken within two years after entering a Ph.D. program in the GG Department, but no later than three years after entering a Ph.D. program.

A majority of the supervisory committee (i.e., at least three members) must agree that the candidate has passed the Ph.D. Qualifying Exams. If the committee does not give the candidate an unqualified pass, the committee must decide on the consequences, which may be (a) immediate dismissal from the Ph.D. program, or (b) a recommendation that the student request reclassification into the Department's M.S. program (section 4.3.11), or (c) an opportunity to re-take the written and/or oral exams in the next semester, or (d) a follow-up assignment to address specific deficiencies in the student's performance on the exams, such as requiring the student to take additional courses or accomplish certain pertinent tasks. If the candidate is allowed to re-take any part of the Qualifying Exams, he/she may be given only that one more chance, and if the result is another failure, then the student is dismissed from the Ph.D. program. A student who is dismissed from the Ph.D. program for this reason may, with the support of their primary academic advisor,

petition the GG Graduate Affairs Committee for reclassification to the Department's M.S. program (section 4.3.11).

- **4.3.6 Application for Admission to Candidacy for a Ph.D. Degree.** After the candidate passes the Ph.D. Qualifying Exams, he/she should submit a "Report of the Qualifying Examination and Recommendation of Admission to Candidacy." The student should apply for candidacy no later than the semester preceding the semester in which he/she expects to complete the approved course work that is required for his/her degree.
- **4.3.7 Ph.D. Dissertation.** The Ph.D. candidate must carry out a major, original research project in geology, geophysics or geological engineering under the guidance of his/her supervisory committee, and the results of this research must be presented to the University in the form of a formal dissertation. The dissertation must embody the result of independent research and constitute a significant contribution to knowledge in the student's field. The final product should be of a quality sufficient for publication in the professional literature in his/her field. Although acceptance of a manuscript for publication in a journal or book is not a requirement for the completion of the degree, students are very strongly encouraged to submit their work for publication before or after completing their degree. The Ph.D. dissertation must include a minimum of six semester credit hours of Dissertation Research (in GEO 7790) that represent the research work presented for the Ph.D. degree.

Ph.D. candidates who are near the writing stage should obtain a copy of "A Handbook for Theses and Dissertations" from the University's Thesis Office in the Graduate School. Specific instructions and regulations governing the form and distribution of the Ph.D. dissertation may be obtained from the Graduate School web site: http://www.gradschool.utah.edu/catalog/thesis.php

Candidates for a Ph.D. degree should not delay beginning the necessary steps to clear their dissertation through the University Thesis Editor's Office in The Graduate School. In order to graduate in a given semester, one copy of the dissertation manuscript must be submitted electronically to the Thesis Editor's Office for format approval no less than six weeks prior to the closing date of the semester (i.e., the last day of final exams). Before submitting the dissertation manuscript to the Thesis Editor, the student must make any mandatory changes to the manuscript required by the supervisory committee after the oral defense, and the student must have the signature forms signed in black ink by all members of the supervisory committee, who certify on the Supervisory Committee Approval form that the dissertation has been found to be satisfactory for the degree. Then the Department Chair should sign the Final Reading Approval form and certify that the final dissertation has been read and approved, that all materials are in order, and that the manuscript is ready to submit to The Graduate School. After obtaining all the necessary signatures, the student should proceed to submit the manuscript electronically to the Thesis Editor. A dissertation manuscript will not be accepted by the Thesis Editor for Format Approval until it has been successfully defended and the signatures of the supervisory committee and Department Chair have been obtained.

4.3.8 The Use of Restricted Data for Ph.D. Dissertations. According to the standard research agreement for sponsored contract work, the University of Utah, as a state institution of higher education, engages only in research that is compatible, consistent, and beneficial to its academic role and mission. Therefore, significant results of research activities must be reasonably available for publication. The University agrees, for a period not to exceed six months following completion of the project, that it will obtain sponsor approval prior to publication, and this approval should not be unreasonably withheld by sponsor. The University agrees to keep confidential any sponsor proprietary information supplied to it by the sponsor during the course of research performed by the University student, and such information will not be included in any published material without prior approval by the sponsor.

With regard to the use of restricted data for Ph.D. dissertations, the following conditions apply: (1) Supervisory committees are responsible for approving topics for dissertations, and the approval must have the informed consent of the degree candidate to do the research. (2) Approval will not be given to a dissertation subject that will prevent the completed dissertation from being made available for public use by the time the University approves the degree. (3) The supervisory committee shall schedule a public oral examination at which time the candidate must defend his/her dissertation satisfactorily. (4) The required number of copies of the completed dissertation must be submitted for public use to the University of Utah Marriott Library by the time the degree is granted. Exceptions to items (2) and (4) above must be approved by the Graduate Council and can only be made by the Council in those cases where a delay is required (a) to protect the rights of patent applicants, (b) to prevent unjust economic exploitation, or (c) to protect the privacy of research subjects. (5) With regard to protecting the rights of patent applicants, (a) above, and in preventing unjust economic exploitation, (b) above, the Graduate Council may by formal action delay granting of the degree and/or publication of the dissertation if the delay in either case is not longer than one year from the completion of the dissertation.

4.3.9 Ph.D. Dissertation Defense (Final Oral Exam). A public defense of the Ph.D. dissertation is required of all Ph.D. candidates. It takes the form of an oral presentation of the significant scientific results of the candidate's dissertation work, and attendance is open to all interested persons. As the defense represents the culmination of the candidate's major efforts in research, all GG faculty and graduate students are encouraged to attend dissertation defenses in the Department. At the end of the candidate's presentation in his/her dissertation defense, the candidate will be expected to respond effectively to questions about the dissertation from the supervisory committee and other members of the audience.

The dissertation defense ("Final Oral Exam") may be scheduled only after all members of the supervisory committee have read the dissertation manuscript and decided that it is defendable in public. The student should allow committee members a minimum of four full weeks, and preferably longer, to read the thesis. The defense should be scheduled during the fall or spring semester, preferably in the first half of the semester. A defense during the last week of classes or final exam week of any semester is discouraged and may be scheduled then only with the unanimous consent of all supervisory committee members. Likewise, a defense during the summer semester is discouraged and may be scheduled then only with the unanimous consent of all supervisory committee members.

A majority of the supervisory committee members must attend the thesis defense in person, and a majority vote of the committee members must decide that the candidate's performance in the defense was passing. In the case of a failure in the defense, a majority of the committee members then must decide whether or not the candidate is to be given a second chance to defend the dissertation. If not, the student will be dropped from the graduate program. If so, the second defense must be scheduled in a subsequent semester. If the second defense is failed also, the candidate is dropped from the graduate program and not given an additional chance.

4.3.10 Policy Concerning Reclassification from the M.S. program to the Ph.D. program. A graduate student with a B.S. degree and unusual academic qualifications who is admitted into the M.S. program may submit a petition to the GG Graduate Affairs Committee to be allowed to bypass the M.S. degree and be advanced directly into the Ph.D. program. Performance on the departmental M.S. Qualifying Exam and in graduate-level courses in the GG Department will be used in evaluating the student's qualifications for direct progress to the Ph.D. degree. Application for direct progress to the Ph.D. degree should be made to the Graduate Affairs Committee, who will solicit written comments from the student's M.S. supervisory committee and possibly other GG faculty before making their recommendation to the GG Department Chair for approval.

- **4.3.11 Policy Concerning Reclassification from the Ph.D. program to the M.S. program.** A student who is not making satisfactory progress toward the Ph.D. degree, receives a negative evaluation from his or her qualifying exam committee, or for other reasons decides it is not in their best interest to continue in the Ph.D. program may wish to request reclassification into the Department's M.S. program. In order to be considered for reclassification the student must submit a written request to the GG Graduate Affairs Committee explaining why they are leaving the Ph.D. program and stating their commitment to completing the requirements of the M.S. degree. The student also must submit a letter of support from their primary faculty advisor. The request for reclassification as a M.S. student will be reviewed by the GG Graduate Affairs Committee, which will decide whether or not to approve the request. If approved, the student will be required to successfully complete all of the requirements of the M.S. program (section 4.1) in order to receive the master's degree. In this case, coursework and/or research conducted during the student's time in the Department's PhD program can be counted toward the Master's degree requirements.
- **4.3.12 Dissertation Collection Requirement.** It is a departmental policy that each graduate student in the GG Department who has prepared a collection of rock, mineral and/or fossil specimens (or other prepared materials, such as thin sections) as a significant basis of his/her dissertation work shall turn in that collection at the conclusion of his/her studies as a requirement for graduation. The dissertation collection is to be accompanied by complete identification data, which will be turned over to the Chief Curator. As a general rule, the contents of the dissertation collection should include only those specimens that are illustrated or described in the dissertation, plus any other specimens deemed important by the student's supervisory committee. In the case of fossil type specimens (e.g., holotypes and paratypes), those specimens may, at the discretion of the supervisory committee chair, be deposited in a reputable research museum or other appropriate public repository.

All specimens in the student's dissertation collection must be properly cleaned, organized, labeled and catalogued by the student before it is submitted to and accepted by the Chief Curator. A dirty, unorganized and/or unlabeled collection will not be acceptable, and the student's degree may be held up until this requirement is complied with.

4.3.13 Dissertation Copies. The dissertation is submitted electronically to the University. The successful Ph.D. candidate must provide the GG Department with one hardbound copy of the Ph.D. dissertation. In addition, the candidate normally provides each of the supervisory committee members with a copy of the dissertation as well.

5.0 GENERAL POLICIES & EXPECTATIONS

5.1 Graduate Student Office Policy

Office space for GG graduate students will be assigned by the Chair of the GG Graduate Affairs Committee. Faculty members who control individual research labs may decide which students will occupy space in their lab. Full-time students have priority for office space over part-time students. Students who fail to make satisfactory degree progress and/or students who are found to be using their offices improperly (i.e., for non-university activities) will not be assigned departmental office space.

5.2 Grading Policy for Research Credits

In order for the Department to effectively track the progress of a graduate student toward his/her degree, the courses GEO 6970 (M.S. Thesis Research) and GEO 7970 (Ph.D. Dissertation Research) should be graded at the end of each semester. Incomplete grades (I) in GEO 6970 or 7970 should be awarded only under special circumstances and must be justified in writing by the supervisory committee chair. Incomplete grades (I) in Special Topics or Thesis/Dissertation

Research courses must be removed within 2 semesters of receipt of the Incomplete. After this time, grades of I will revert to E grades. Any grade lower than B- in any course will not be admissible as course work counted toward the completion of an M.S., M.E. or Ph.D. degree.

5.3 Satisfactory Progress and Policies for Dismissal from the Graduate Program

In order to demonstrate satisfactory progress and remain in good standing within the program, all graduate students must:

- I. Maintain an overall GPA of greater than 3.0 in all coursework,
- II. Comply with departmental deadlines for the formation of committees (sections 4.1.2 and 4.3.2) required coursework (sections 4.1.3 and 4.3.3), and M.S. and Ph.D. qualifying examination (sections 4.1.4 and 4.3.5),
- III. Earn a passing evaluation on the M.S. and/or Ph.D. qualifying examination, as applicable to their program,
- IV. Maintain high standards of academic integrity (including honesty in research and appropriate documentation and attribution of work) throughout their time in the program,
- V. Demonstrate continued, satisfactory progress in research, as judged by the primary research advisor, and
- VI. Comply with deadlines and policies for completion of degrees (sections 4.1.1 and 4.3.1).

In the event that a student is judged to be out of compliance with the above-described standards he/she will be provided written notification and be invited to respond with a plan to address or resolve the infraction. This correspondence will be initiated by the Director of Graduate Studies for infractions relating to items I, II, and VI above, and from the student's supervisory committee chair for infractions relating to III – V. Except in the instance of a serious ethics violation (item IV above), the student will be granted reasonable time (from 30 days to 1 semester) to resolve any infraction. If the infraction is resolved within this probationary period, the student will be returned to good standing in the graduate program.

If, in the judgement of the Graduate Affairs Committee or a majority of the student's supervisory committee members, as appropriate, the infraction remains unresolved at the end of the probationary period it is the prerogative of this party to initiate dematriculation of the student from the graduate program. In this case, the student will be granted a grace period of at least 15 days before their matriculated status and departmental employment, if any, is terminated. If the student disagrees with the judgement of continued non-compliance, they may appeal the decision during the grace period. Initial requests for appeal should be made to the department chair, in accordance with section 5.6. It is the responsibility and obligation of a student who is dematriculated under the provisions of this section to turn over any data, laboratory notebooks, or other materials related to research work conducted during their time in the program to their primary advisor prior to the end of this grace period. The student's full rights and responsibilities in the case of dismissal are set forth in University Policy 6-400, Sections IV and V, of the Regulations Library.

In any case described in this section all correspondence, starting with the initial notification of an infraction, shall be documented in writing and a copy provided to the Director of Graduate Studies.

5.4 Changing Advisor, Committee and/or Thesis/Dissertation Topic

In the majority of cases, graduate students select a major advisor, supervisory committee and thesis/dissertation topic, and then they continue along the path to completing their degree without any changes. Sometimes, however, a change in major advisor, supervisory committee and/or thesis/dissertation topic may be desirable, whether due to a change in the student's research interests, difficulties arising from the student/advisor relationship, or in response to a negative evaluation of research progress (section 5.3, item V).

The Director of Graduate Studies, along with the former and new faculty advisors, should be involved in helping to facilitate such a change, and in no case will a change of advisor be approved without the express support of the new faculty advisor. A student who initiates a change of advisor should provide their current advisor and the Director of Graduate Studies with written notice of their intent and the reasons for their change. At least 30 days advance notice should be granted, during which time any ongoing research work should be brought to a point that it could be passed on to another researcher. It is the responsibility and obligation of the student to turn over any data, laboratory notebooks, or other materials related to research work conducted during their time in the current advisor's group prior to the termination of this advising relationship.

In general, the student will be allowed to apply research work conducted with their former advisor toward meeting the research requirements of the degree program, provided that: 1) the student was primarily responsible for the work (i.e. played a role that would normally be acknowledged with lead authorship); 2) the work is materially completed (i.e. published or publishable as a manuscript or journal article) at the time of the transition or by a later date mutually agreed upon by the student and the former and new advisors; and 3) the completed work is included in the student's thesis and approved by the supervisory committee at the time of the defense. Any such arrangement shall be agreed upon by the former and new faculty advisors and the Director of Graduate Studies and documented in writing at the time of the transition.

If the supervisory committee request form and the application to candidacy form already have been filed, new forms will have to be submitted and approved. For obvious reasons, such a change will cause a delay in the progress towards completion of the degree, so it is important for a student to initiate such a change sooner rather than later in order to minimize the amount of the delay in their progress. The student must realize that the time clock for completion of all degree requirements (four years in the case of a master's degree) and the number of semesters of eligibility for the Tuition Benefit Program are not altered by the change.

5.5 Special Awards

The GG Department annually honors some exceptional graduate students with special awards, including (but not limited to) the Outstanding M.S Student Award and Outstanding Ph.D. Student Award. Recipients of these awards are selected by the Graduate Affairs Committee and they normally are announced at the department's annual spring awards event. Nominations for the Outstanding M.S Student and Outstanding Ph.D. Student Awards are made by GG faculty, and they should include the name and pertinent information about the student (an abbreviated c.v. is helpful), and the nominator also should write a brief letter explaining in clear detail why the nominee deserves to honored with the award. Criteria that will be considered by the committee in making the selection will include such things as excellence of academic performance, quality of scientific contributions, participation in departmental activities, and timeliness of completion of the degree requirements. Current graduate students and those who have completed their graduate degrees in the department during the current academic year are eligible.

5.6 Grievances

In general, faculty and staff in the GG Department maintain an open door policy for students to ask questions and voice concerns. Graduate students may formally appeal any decision relevant to their status or progress in the graduate program by petitioning the chair of their supervisory committee. If satisfaction is not obtained at this level, the student may petition (in turn) the Chair of the GG Graduate Affairs Committee, the Chair of the GG Department, the Dean of the College, and at any time the University's Student-Faculty Relations Committee.

5.7 Expectations

It is hoped that graduate students will take advantage of the myriad educational opportunities at the University – both inside and outside the classroom and research lab – to have an optimal

graduate experience at the University of Utah. In order for students to finish their degree in a timely manner and be competitive in today's professional market place, it is important that all graduate students adopt a strong work ethic. Getting a graduate degree is a lot more than just a "40-hour per week job." Effective communication and fruitful interaction with faculty advisors and graduate student peers are crucial.

The GG Department sponsors a weekly Distinguished Lecture Series and many other special lectures to bring in a variety of geoscientists who add new insights and breadth to our curriculum in the Earth sciences. It is expected that all graduate students will attend these lectures regularly as a part of their graduate education. Students may opt to register for one credit hour in the course GEO 6920 (Distinguished Lecture Series) on a CR/NC basis. Sign-in attendance of 80% or more is expected in order to gain a CR. Registration for the Distinguished Lecture Series course number counts in determining full-time student status, but it does not count as a course requirement for a graduate degree, since it is a CR/NC course. Informal brown-bag seminars are offered frequently to promote communication and exchange between faculty and graduate students in different subdisciplines. Student participation in all other Departmental activities is strongly encouraged.

5.8 Normal Progress Towards a Graduate Degree

5.8.1 First Year:

Fall Semester – Take "Reviews in Earth Science" course (required of master's students and doctoral students without a master's degree); select and consult with a major advisor concerning approved course work and possible thesis/dissertation topics; take pertinent courses.

Spring Semester – Pass the Master's Qualifying Exam (not applicable to Ph.D. students); submit the "Request for Thesis/Dissertation Supervisory Committee" form; meet with the thesis/dissertation committee to decide the specific curriculum that will be counted towards the degree; submit the "Application for Candidacy" form; continue taking pertinent courses; begin thesis/dissertation research.

5.8.2 Second Year:

Fall & Spring Semesters – Finish taking the approved courses for the degree; continue doing thesis/dissertation research; meet with the thesis/dissertation committee at least once per semester to discuss timely progress; ideally, M.S. students should complete and defend the M.S. thesis by the end of the second year, but absolutely by the end of the fourth year; ideally, Ph.D. students should take and pass the Ph.D. Qualifying Exams by the end of the second year, but absolutely by the end of the third year.

5.8.3 Subsequent Years:

All graduate students are expected to meet with their thesis/dissertation committee at least once each semester until the degree is completed. Candidates for the master's and doctoral degrees are responsible for communicating with the GG Graduate Affairs Committee in the semester preceding the semester in which graduation is expected, in order to ensure that all necessary forms are on file and all academic records are in order for clearance for graduation in a timely fashion. Candidates for degrees that require a thesis or dissertation must submit the final copy of the thesis/dissertation manuscript, along with all necessary departmental signatures, to the Thesis Editor in The Graduate School for format approval no less than six weeks prior to the end of the semester in which they plan to graduate.

Department Contact Information:

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