

**University of Manitoba  
Department of Geological Sciences**

**Graduate Program Procedures  
for  
Faculty, Staff, and Students**

Updated and Revised: 22<sup>nd</sup> January 2015

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# **Department of Geological Sciences – Graduate Program Procedures**

**Updated and Revised: 22<sup>nd</sup> January 2015**

## **1. General Aspects**

### **1.1 Purpose of this Document**

This document outlines the operating procedures followed in the Department of Geological Sciences for the administration of the graduate programs. It is intended to complement the formal regulations including those of the Faculty of Graduate Studies (FGS) and those in the Department of Geological Sciences Supplemental Regulations. The list of FGS and Supplemental Regulations is maintained at: [http://umanitoba.ca/faculties/graduate\\_studies/admin/supplemental\\_regulations.html](http://umanitoba.ca/faculties/graduate_studies/admin/supplemental_regulations.html). In the event of a conflict between the regulations, the on-line Supplemental Regulations take precedence.

### **1.2 Degree Programs**

The degrees offered by the Department of Geological Sciences are:

- M.Sc. in Geological Sciences;
- Ph.D. in Geological Sciences.

The Department supports students in the Ph.D. Individual Interdisciplinary Program (IIP). The regulations for this program are at:

<http://crscalprod1.cc.umanitoba.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=240&chapterid=2264&loadusercredits=False>.

The degree parchments for the M.Sc. and Ph.D. degrees list the degrees received as:

- M.Sc. in Geological Sciences;
- Ph.D. in Geological Sciences.

There is ongoing discussion regarding including the unit name.

### **1.3 Expected Program Duration**

Students are expected to complete their graduate program in two years (full time) for an M.Sc. degree and four years (full time) for a Ph.D. degree (beyond the B.Sc. Honours degree). Under FGS regulations, the maximum time allowed for the completion of the Master's degree is four years (five years for those who started before 1 September 2013) and the maximum time allowed for completion of the Ph.D. degree is six years following initial registration in the Ph.D. program (seven years for those who initially registered before 1 September 2013). For those students who transfer from the Master's to the Ph.D., years spent in the Master's program are counted as years in the Ph.D. program. Recommendations for extensions of time to complete the degree will be considered on an individual basis and must be submitted to the Faculty of Graduate Studies at least three months (but not more than four months) prior to expiration of the respective maximum time limit.

Students not working on their studies on a full-time basis should consider transfer to a part time status (see Section 1.4.1 of the University of Manitoba Graduate Academic Calendar). Student status should be determined by the student and advisor/co-advisor, and changes must be requested on the "Part-Time Status Form" ([http://umanitoba.ca/faculties/graduate\\_studies/forms/index.html](http://umanitoba.ca/faculties/graduate_studies/forms/index.html)). The form must be approved by the unit Head and submitted to the Faculty of Graduate Studies. Time spent in

part time status will extend the deadlines for program completion. Retroactive changes in status are not permitted.

## 2. Individual Responsibilities and Committees

### 2.1 Graduate Chair

The administration of the graduate programs in the Department of Geological Sciences is done in significant part by a Graduate Chair. The Graduate Chair is appointed by the Head and generally serves for a term of three to five years. If the Graduate Chair is on research leave, the Head may appoint an Acting Graduate Chair for a six-month or one-year period. The duties of the Graduate Chair are defined in the FGS regulations, the Department's Supplemental Regulations and in this document.

### 2.2 Responsibilities

The basic responsibilities of the Head, Graduate Chair, Advisor, Advisory Committee, and Graduate Student are defined in Appendix 1. Responsibilities of advisors and students are also covered in part in the FGS Advisor-Student Guidelines. The Department's Administrative Assistant and Office Assistant provide assistance to the Head, Graduate Chair, and Advisors in administering the graduate program.

### 2.3 Graduate Committees

The structure of several of the main graduate committees is defined in the Department's Supplemental Regulations. Additional committees are defined in this document.

1. The Department of Geological Sciences **Graduate Studies Committee (GSC)** comprises three faculty members (appointed by the Head) and is chaired by the Graduate Chair.
2. The **Graduate Admissions Committee** consists of two members from the GSC (appointed by the Head) plus the Graduate Chair and is responsible for graduate student admissions.
3. The **Graduate Affairs Committee** consists of the members of the GSC and appointed graduate student representatives and is responsible for considering other aspects related to graduate students.
4. The **Graduate Curriculum Committee** is formed as needed with members appointed by the Head or elected by either Departmental Council in the case of faculty members or the graduate student body in the case of the graduate student representatives.
5. Appeals of decisions by the Department of Geological Sciences concerning graduate students in academic matters are heard by the Department of Geological Sciences **Graduate Appeals Committee**. This panel consists of the Department Head as Chair, the Graduate Chair, one other member designated by the Head, and one alternate should one of the above be responsible for the original decision/recommendation.
6. Each student in the M.Sc. and Ph.D. program will have an individual **Advisory Committee** chaired by the advisor. In the case of an M.Sc. student with co-advisors who are both members of the Faculty of Graduate Studies, the co-advisors will be considered by the Department to constitute the advisory committee.

### 3. Admission

#### 3.1 General Admission Requirements

Admission requirements are fully specified in the FGS regulations and in the Department of Geological Sciences Supplemental Regulations. Some of the pertinent information and regulations are as follows:

- a) Applicants must select a department when applying to the Faculty of Graduate Studies. Therefore, it is important to clarify the criteria for selecting Geological Sciences. The primary reason for selecting this Department is that it will lead to a degree under the Geological Sciences program. The choice of this program implies that the research will be in the geological sciences, the majority of the required courses taken by the student should normally be from the Department of Geological Sciences (see Sections 3.1c and 3.1d), and the program will be administered under the Supplemental Regulations of the Department of Geological Sciences. In this context “*geological sciences*” encompasses the broad range of research areas and courses offered by the faculty members in the Department of Geological Sciences.

Except for the program-related reasons noted above, a student would choose the Department of Geological Sciences if their preferred advisor has their primary affiliation with this Department, even if the faculty member has a secondary affiliation with another unit. If an applicant will have co-advisors from the Department of Geological Sciences and another unit, the student would generally specify the unit of their primary advisor if that person is defined (e.g., the advisor most closely directing the project or the principal investigator of the research grant from which the main research and stipend funding will come).
- b) **Pre-Masters.** Applicants to the M.Sc. program whose academic standing qualifies them for graduate work, but whose previous education did not include topics essential to the area of research they wish to pursue, may be offered the opportunity to remedy these deficiencies during a 1-year Pre-Master’s program of study. For students admitted to the Pre-Master’s program, the course program is set by the Graduate Chair, in consultation with the student’s likely adviser. The Pre-Master’s program will normally include a minimum of 18 credit hours. Applications for admission are reviewed and approved by the Department of Geological Sciences Graduate Admissions Committee.
- c) **M.Sc.** The normal entry requirement is the equivalent of an Honours B.Sc. degree in Geological Sciences from the University of Manitoba. Students with honours degrees in related disciplines (such as Geography, Soil Science, Biology, Chemistry, Environmental Science, Physics, Mathematics, Engineering Physics, and Geological, Civil and Electrical Engineering) may be accepted by the Graduate Admissions Committee providing their planned degree program involves studies in the geological sciences. The majority of the required courses taken by the student should normally be from the Department of Geological Sciences. The research should also be in the geological sciences.
- d) **Ph.D.** The normal entry requirement is the equivalent of a M.Sc. in Geological Sciences. Students with M.Sc. degrees in related fields may be accepted by the Graduate Admissions Committee providing their planned degree program involves studies in the Geological Sciences. The majority of the required courses taken by the student should normally be from the Department of Geological Sciences. The research should also be in the geological sciences. Direct entry into the Ph.D. program from an honours Bachelor’s degree is permitted only for outstanding students (GPA well above 3.0 in the last two full years of undergraduate study). This route is at the discretion of the Graduate Admissions Committee and is intended only for

those students that the committee considers adequately prepared for immediate Ph.D.-level studies.

- e) **Transfer to Ph.D.** Where a student **with a Bachelor's degree or equivalent** is initially admitted and registered in a Master's program, that student may be transferred to the Ph.D. program within the same department on recommendation from the student's advisor and Department Head, provided the recommendation is made at the time of admission to the Master's Program (i.e., "Possible transfer to Ph.D. Program within 12 months") and the follow-up transfer recommendation occurs within 12 months of the initial registration in the Master's program.

### **3.2 English Language and GRE Requirements**

Admission to a program in the Department requires a Graduate Record Examination (GRE) score for all international applicants. The Graduate Admissions Committee may approve a conditional entry subject to the completion of this requirement. Under exceptional circumstances, the Graduate Admissions Committee, in consultation with the potential advisor, may waive the GRE requirement.

Admission requires an English Language Proficiency Test score for all applicants who have not received a high school or university degree from Canada, United States or certain other countries (see the Graduate Studies documentation for the list of countries exempted from submitting an English language score).

### **3.3 Application Deadlines**

The Department of Geological Sciences allows students to begin the program on September 1, January 1, or May 1. Canadian/U.S. students should submit their applications with complete supporting documentation no less than three (3) months before the intended start date. International students should submit their applications with complete supporting documentation no less than seven (7) months before the intended start date.

### **3.4 Application Procedure**

Applications are currently submitted electronically through the FGS ApplyYourself (AY) system. Within the Department, the processing of the applications is coordinated by the Graduate Chair and Administrative Assistant with the assistance of the Department Office Assistant. The **Graduate Admissions Committee** is responsible for the assessment of the graduate student admissions.

After an application is received by the Department and has undergone initial processing by the Administrative Assistant and/or Graduate Chair, it is circulated through the members of the Graduate Admissions Committee and proposed or possible supervisors for input. The committee makes a final decision regarding admission based on this input. The Head's signature on the final committee recommendation denotes his/her confirmation of due process in this evaluation.

## **4. Financial Support**

### **4.1 General Requirements and Minimum Levels**

The Department of Geological Sciences attempts to maintain minimum levels of support (determined approximately annually) for all its graduate students from sources including fellowships, research grants, and student teaching assistantships. Financial support cannot, however, be guaranteed and support levels may differ from student to student. Each student accepted into the graduate program is informed of the expected level of support and duration at the time the offer is made.

The following are normal sources of funding available to a graduate student: a research grant of the supervisor, scholarships or bursaries awarded to the student, Teaching Assistantships (on application for available positions), other sources such as contracts or job arrangements with either the supervisor or external organizations. **The Department of Geological Sciences is unable to provide funding for research costs or student stipends. This limitation applies even in emergency situations when a supervisor's funding unexpectedly declines or terminates.** However, the Department will assist a supervisor in seeking emergency funds from other sources (e.g., with the Graduate Chair and/or Head writing letters of support in appropriate situations).

#### **4.2 Graduate Stipends**

Graduate stipends are intended to support the student during their graduate research. They are not to be used as payment for work done for a supervisor outside the context of the student's research project. They are not intended to pay research costs.

The present expected minimum annual stipend in the Department for the first two years of a M.Sc. program is \$12,000 and for the first three years of a Ph.D. program is \$15,000, although the Department does not have regulations enforcing this minimum. There is no maximum defined for the stipend. A supervisor may choose to extend the stipend beyond the normal two-year time-frame of a M.Sc. degree or three-year time-frame of a Ph.D. degree but has no obligation to do so.

The stipend is usually defined at a level that is mutually agreeable to both the student and supervisor. The stipend for the student's first year is included in the letter of offer to the student. The minimum stipend for subsequent years may be listed in this letter and should be known to the student before they accept the offer of entry into the program. The level of a stipend for the second and later years of a program is subject to satisfactory performance by the student and to the continued availability of research funding to the supervisor. Unless otherwise arranged, it is also subject to the student working full-time on their research project: the stipend may be suspended if, for example, a student departs to take up a summer job. Payment of the stipend is contingent on the student's full-time attendance and residence in the Department and it may be suspended if the student does not fulfill this requirement.

At the University of Manitoba, the level of the graduate stipend is defined independently from income received by the student from Teaching Assistantships. The stipend is meant to be a minimum level of support.

See Section 4.6 Communication of Funding Arrangements and Expectations. It is important for the supervisor and student to have a clear understanding of the stipend and what it is meant to cover.

#### **4.3 Scholarships and Bursaries**

A graduate student may apply for, and be awarded, major scholarships such as an NSERC Postgraduate Scholarship, a University of Manitoba Graduate Fellowship, or a Province of Manitoba Graduate Fellowship. In general, a student's stipend will be adjusted if they receive such a scholarship. Depending on the scholarship, the level of their previous stipend, and the supervisor's research budget, the student may receive just the scholarship, or they may receive the scholarship plus a top-up stipend. Some scholarships, such as from NSERC, limit the amount of additional funding that can be received. The combined funding received from scholarships and stipends should not be less than the recommended departmental minimum and should not decrease as a result of a student receiving a scholarship. Bursaries are awarded to students who are in a position of financial difficulty so there should usually be no adjustment of a stipend to a student awarded a bursary. Stipends are usually not adjusted when students receive awards (cf. scholarships) based on their academic performance.

#### **4.4 Teaching Assistantships**

Teaching assistantships are regarded by the University of Manitoba and the Department of Geological Sciences as an integral part of the academic experience of students and form a contribution to student's graduate education.

New and continuing students may apply for CUPE 3909 Teaching Assistant or Grader/Marker positions as they become available. The process is competitive and there is no guarantee that positions will be available, or if available, that any particular student will receive a specific position.

Under the terms of the collective agreement, the Department can neither prevent a student from applying for a position nor can the Department withhold an offer of employment if the student is the best qualified for the position. If the conditions of a student's research project or research funding preclude a student holding a Teaching Assistant position, then the supervisor should communicate directly with the student regarding the situation (e.g., if a research project involves field work that will preclude a student taking up a Teaching Assistantship for a particular term). In some cases it may be appropriate for these limitations to be included in the letter of offer. Students must conform to other pertinent university regulations while working as Teaching Assistants (e.g., meeting requirements of adequate progress as defined by the Faculty of Graduate Studies procedures).

#### **4.5 Other Forms of Funding**

Some students receive funding from other sources of employment including contracts, research assistant appointments with their supervisor, and summer or part-time jobs with external organizations. Any work that precludes full-time progress on the student's graduate studies should be identified to their supervisor and the Department. The student's stipend may be adjusted accordingly.

#### **4.6 Communication of Funding Arrangements and Expectations**

It is critical for the supervisor and student to be clear on financial arrangements for the student support prior to the student accepting entry into the program. The following points should be discussed and/or documented:

1. Level of stipend in the first year.
2. Minimum level of stipend in subsequent years, and the minimum number of years of stipend support subject to adequate progress.
3. An indication of any possibility that the supervisor may not hold research funding for the duration of the student's degree.
4. Tuition Fees. Students are responsible for paying their own tuition fees. However, the supervisor may decide to provide an additional amount of stipend support in consideration of this expense for the student. This should be discussed between supervisor and student.
5. Whether the student is expected to pay for tuition from their stipend.
6. Whether the student will be expected to pay for research-related costs such as laptop computer or conference attendance from their own funds.
7. How the stipend will be adjusted if the student receives a major scholarship.
8. Whether the research project or funding will restrict the student's ability to accept Teaching Assistantships.

### **5. Advisory Committees**

The structure and duties of M.Sc. and Ph.D. Advisory Committees are defined in the FGS and Supplemental Regulations.

## **5.1 M.Sc. Advisory Committees**

The Department of Geological Sciences requires an M.Sc. Advisory Committee, except in the case of a student with co-advisors who are both members of the Faculty of Graduate Studies. FGS regulations require that the committee must include at least one person who holds a primary appointment from within the major department. The Department's Supplemental Regulations require that the minimum membership of the M.Sc. Advisory Committee will be the advisor and an additional member of the Faculty of Graduate Studies.

As specified in the Faculty of Graduate Studies regulations for Master's degrees, the advisor (or co-advisors) will advise the student on a program of study, direct research, and supervise the thesis. The function of the M.Sc. Advisory Committee is to provide guidance on (not to direct) the research. The minimum duty of the committee is to meet with the student formally once per year, ahead of the submission of the Progress Report to the Faculty of Graduate Studies.

## **5.2 Ph.D. Advisory Committees**

FGS regulations indicate that the Head of the major department is responsible for the establishment of an advisory committee for each Ph.D. student. The advisory committee must consist of a minimum of three members of the Faculty of Graduate Studies, one of whom must hold a primary appointment from within the major department and one of whom must hold a primary appointment outside the major department. Committees may include one guest member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies. The membership of the committee, including the advisor, as well as any changes to it, must be approved by the Dean of Graduate Studies. The advisor is the Chair of the advisory committee.

Responsibilities of the committee are to approve the program of study and thesis proposal and to exercise general supervision over the student's work throughout the Ph.D. program. The committee should meet with the student periodically (and must meet with the student at least once a year) to review the student's progress and to report this progress to the Faculty of Graduate Studies (through the Head of the major department). If there is evidence of unsatisfactory performance, the student may be required to withdraw.

Department Supplemental Regulations indicate that the Advisory Committee must be appointed prior to the student's arrival. Normally, within the first two weeks of the student's commencement of the program, and prior to the course change deadline, if the student arrives at the start of a term, the Advisory Committee will meet with the student and discuss the student's background and proposed research area, in order to formulate appropriate course work for the student's program. A student's program will normally be developed in conjunction with their Advisor and advisory committee, with review by the Graduate Chair.

## **6. Program Requirements**

### **6.1 General Requirements**

The general program requirements for the different degree programs are defined in the FGS regulations and Supplemental Regulations.

### **6.2 M.Sc. Course Requirements**

The formal requirements for the M.Sc. degree are a minimum of 12 credit hours of approved courses, plus GEOL 7760, plus a thesis.

- The course-work must include at least 6 credit hours at the 7000 level with the balance of the coursework at the 3000 level or above.

- Students who have completed GEOL 7760 Graduate Seminar must give a departmental seminar annually and attend the majority of departmental seminars during the sessions in which they are either full- or part-time resident students. The instructor for GEOL 7760 is responsible for ensuring students meet these requirements and for reporting any failure of students to do so.

### **6.3 Ph.D. Course Requirements**

The formal requirements for the Ph.D. degree, where admission to the Ph.D. is directly from a Master's Degree, are a minimum of 12 credit hours, plus GEOL 7760, plus a thesis. FGS regulations indicate that 12 credit hours must be at the 7000 level. Because GEOL 7760 counts in this category, a Ph.D. student completing the minimum number of courses may take a maximum of 3 credit hours at the 3000 or 4000 level. Where admission to the Ph.D. is directly from an Honours Bachelor Degree or equivalent, a minimum of 24 credit hours (minimum 21 at the 7000 level, maximum 3 at the 3000 or 4000 level), plus GEOL 7760, plus a thesis are required.

Students who have completed GEOL 7760 Graduate Seminar must give a departmental seminar annually and attend the majority of departmental seminars during the sessions in which they are either full- or part-time resident students. The instructor for GEOL 7760 is responsible for ensuring students meet these requirements and for reporting any failure of students to do so.

### **6.4 GEOL 7760 Seminar in Geological Sciences**

The objectives of the Geological Sciences Seminar are:

1. Providing an opportunity for graduate students to present their scientific research to their fellow students, Department members, and the broader community and to receive feedback on their work;
2. Providing graduate students with experience in the presentation of their scientific research, including preparing for specialist conferences and for presentations to broader audiences;
3. Ensuring graduate students broaden their geoscientific knowledge beyond their own study area through attending presentations on a broad range of geoscience topics; and
4. Fostering academic and scientific community within the Department of Geological Sciences.

For the year in which students are enrolled in GEOL 7760 they must give a Geological Sciences Seminar and attend and participate in all, or almost all, of the other Geological Sciences Seminars. The requirements are defined for students enrolled in the course by the corresponding course outline.

Under the Department of Geological Sciences Supplemental Regulations all resident graduate students must continue to participate in the Geological Sciences Seminars. The requirements for all resident graduate students are straightforward:

1. Present one seminar in each academic year of your program;
2. Attend and participate in seminars by other speakers.

Procedurally, failure of students to fulfill these requirements can be addressed through communication between the GEOL 7760 instructor and the Advisor, with the deficiencies noted on the Progress Report. If this arrangement fails to resolve the problem, the GEOL 7760 instructor should inform the Graduate Chair and/or Head. Note that a resident graduate student is defined as a student with an office space or alternate research space assigned on the University of Manitoba campus. Non-resident students are encouraged, but not required by the Department, to also participate in the Geological Sciences Seminar series when it is practical for them to do so.

### **6.5 External Courses**

Students may include courses from outside the University of Manitoba for credit in their programs with appropriate approval. This approval should be sought before the course is taken. The

process includes arranging a letter of permission through the U. of Manitoba Registrar's Office. In certain cases, such as under the Western Dean's Agreement ([http://umanitoba.ca/student/records/leave\\_return/western\\_deans\\_agreement.html](http://umanitoba.ca/student/records/leave_return/western_deans_agreement.html)),

the student may be able to take courses at other institutions without additional fee payments. Both student and supervisor should be aware that if there is no agreement in place to cover tuition at another university, the student will be responsible for tuition fees in excess of what he/she would normally pay at the U. of Manitoba where tuition is assessed at a flat rate (cf. on a per course basis).

At times, it may be desirable to have a graduate student take a specialized course that involves both an external component and an internal component (e.g., if the student takes a short-course at a conference in association with a reading course at University of Manitoba). Such situations should be discussed with the Graduate Chair and/or Head. It is essential for the University of Manitoba instructor involved to be able to take full responsibility for the overall content of the course and for evaluation of the student in the course. This is critical for handling issues such as student appeals of final grades and term work grades.

### **6.6 Incomplete and Continuing Courses**

It is desirable for a graduate course to finish in the term in which it is offered, and this situation should always be the target result at the start of the course. However, it is acknowledged that in a number of situations the course must continue beyond the deadline for submission of grades. The following approaches should be followed:

- a) If the course is incomplete because a student missed a final examination, the instructor will submit a grade based on the cumulative work (i.e., including a mark of zero for the final exam in the normal grading assessment scheme) with an NP comment. Should there be extenuating circumstances (medical or compassionate), the student may request a deferred exam through the FGS.
- b) If the course is incomplete because a student has failed to complete term work in an appropriate timely manner (e.g., relative to other students) and has appropriate justification (e.g., medical circumstances) the instructor will submit the appropriate paperwork for an Incomplete grade, and submit a grade based on the cumulative work (i.e., including a mark of zero for the incomplete term-work in the normal grading assessment scheme) with an Incomplete comment. The instructor should not enter an Incomplete grade if the course is formally continuing to the next term.
- c) If the course is continuing for a short time (a maximum of a few weeks) after the mark submission deadline, a grade of IP (in progress) will be automatically entered if no grades are filed. Final grades can then be submitted using a spreadsheet submission to the Registrar's office. The instructor should not use an Incomplete grade if the course is formally continuing to the next term.
- d) If the course is continuing on into the subsequent term because of circumstances that can be attributed mainly to the course itself (e.g., need for additional work, field work, etc.) a grade of CO can be used. When a student has been assigned a grade of CO, the student must re-register for that course in the subsequent term. The final grade will be assigned in the term in which the student completes work in the course.

In all cases the grade submission process includes approval by the Head.

### **6.7 Course Load**

Graduate courses typically involve a greater time-commitment than undergraduate courses (e.g., associated with a larger volume of reading and/or a more detailed research project). In general, students will therefore take a maximum of two graduate courses per term. In exceptional circumstances they

may take three courses, but this situation should follow a discussion with the Graduate Chair to establish that the student's course results and research progress will not be adversely affected. FGS and the Department will not generally approve a load of more than three graduate courses in a term.

### **6.8 Selection of Courses and Course Changes**

Graduate courses are intended to provide a graduate student with both breadth and depth in their program. While courses may form a complement to the thesis research (e.g., a reading course in an area related to the research, or a course in which one component is an analysis that can be used in the thesis), they should not focus only on thesis research.

For M.Sc. students, the advisor advises the student on a program of study, directs research, and supervises the thesis or practicum work. In general, the courses to be included in the program are selected based on input from both the student and advisor. For Ph.D. students the definition of the courses to be taken is included as part of the **Program of Study**. The program of study and any changes thereto must be approved by the student's advisor, the advisory committee, and the Head of the major department. In general, the student is provided the opportunity for some input into the selection of courses. Under the Department's Supplemental Regulations, the proposed programs are normally reviewed by the Graduate Chair.

Under FGS regulations students are not permitted to change their program of study, including withdrawal from individual courses, without the approval of their advisor and/or advisory committee and Department Head. Withdrawal from courses or changes of course category without such approval will result in the student being required to withdraw from the Faculty of Graduate Studies.

### **6.9 Advisor-Student Guidelines**

The "Advisor-Student Guidelines" form must be completed prior to the commencement of any research and no later than the submission of the first Progress Report. The process should be initiated by the advisor. Until online submission is available, the original paper copy of the signed Guidelines is to be submitted to the Graduate Chair, who will provide a duplicate to the advisor, the student, and the unit (in the student's personal file), and send the original to FGS. When submission is online, the advisor must provide the Graduate Chair with a paper copy, which will be placed in the student's personal file. The Guidelines may be revisited at any stage of the student's graduate program to accommodate for changes in the advisor-student relationship.

### **6.10 Meetings and Progress Reports**

It is the responsibility of the advisor to initiate a minimum of one annual progress report to the Faculty of Graduate Studies on the "Progress Report Form". Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation by the Department Head to the Dean of Graduate Studies. Two consecutive "in need of improvements" normally requires the student to withdraw.

Under the Department of Geological Sciences Supplemental Regulations, the minimum duty of the committee is to meet with the student formally once per year, ahead of the submission of the Progress Report to the Faculty of Graduate Studies. Under FGS regulations, the Ph.D. Advisory Committee should meet with the student periodically and must meet with the student at least once a year to review the student's progress and to report this progress to the Faculty of Graduate Studies (through the Head of the major department).

As noted above in Section 5.2 for Ph.D. students, normally, within the first two weeks of the student's commencement of the program, and prior to the course change deadline, if the student arrives at the start of a term, the Advisory Committee will meet with the student and discuss the student's

background and proposed research area, in order to formulate appropriate course work for the student's program. **The meeting must be conducted in a timely manner.**

Under the Department of Geological Sciences Supplemental Regulations, each student, including those registered as part-time students, must provide an **annual progress report** containing a summary of progress (e.g., proposal, new results, timetable updates, etc.) to the Head on or before February 1. These progress reports are normally about 1-2 pages long and are in addition to any progress reports or presentations required by the student's advisor or Advisory Committee.

## **7. Thesis Proposals**

The thesis proposal requirements for the different degree programs are defined in the FGS regulations and Supplemental Regulations. It is essential that the evaluation of the thesis proposal is a careful, fair and defensible process. One of the Graduate Chair's most important roles in chairing the evaluation of the proposal is to ensure that this is the case. For example, the Graduate Chair ensures that there is equity in the evaluation of proposals across the Department. It is recognized that the consequences of a student failing the proposal are very significant to both the student and advisor.

### **7.1 M.Sc. Thesis Proposals**

Under the Department of Geological Sciences Supplemental Regulations the M.Sc. thesis proposal must normally be submitted within **8 months** of the student's commencement date in the program. It must demonstrate the student's understanding of the research area and define the research objective including demonstrating that it is a distinct contribution to the field of study. The proposal must include an introduction with citation of relevant literature, the thesis research objectives, the proposed methodology including a timetable, the anticipated significance of the research, and references. The length of the proposal is to be between 5 and 10 pages including figures and references (12 point, single spaced, 2 cm margins).

The evaluation of the proposal is conducted by the Advisory Committee chaired by the Graduate Chair. All decisions of the committee must be unanimous. The committee will define the proposal as being:

- (i) Approved.
- (ii) Not approved. In this case the proposal must be revised to meet the requirements of the committee and resubmitted within a 3 month period. If the proposal is still regarded as unacceptable, the student will be required to withdraw from the program.

A recommended procedure for the evaluation of the proposal is as follows:

1. Introduction.
2. Short presentation by student on his/her proposal. This item is not essential but will help focus the discussion, may allow the student to show additional figures not in the proposal, and will allow the student to provide any updates of work since submission of the proposal. However, the evaluation is of the written proposal.
3. Questions on the proposal.
4. Evaluation of the proposal with student absent.
5. Discussion of the outcome and proposal with student.
6. Completion of FGS form if proposal is approved.

### **7.2 Ph.D. Thesis Proposal**

The Supplemental Regulations define the following procedures for the Ph.D. Thesis proposal:

- The purpose of the Thesis Proposal is to demonstrate the student's understanding of the research area and to define the research objective including demonstrating that it is a distinct contribution to the field of study.
- Timing: The thesis proposal must normally be completed within **12 months** of the student's commencement date.
- Examining Committee: The evaluation of the thesis proposal will be conducted by the Advisory Committee chaired by the Graduate Chair. All decisions of the committee must be unanimous.
- Format of the Proposal: The proposal must include an introduction with citation of relevant literature, the thesis research objectives, the proposed methodology including a timetable, the anticipated significance of the research, and references. The length of the proposal must be between 10 and 20 pages including figures and references (12 point, single spaced, 2 cm margins).
- Examination of the Proposal: Normally, within two weeks of submission of the proposal, the committee and Graduate Chair will meet with the student present. The student will give a 20 minute oral presentation of the proposal to the committee and then answer questions from the committee required to clarify points related to the proposal. Following these questions and withdrawal of the student from the meeting, the committee will evaluate the proposal.
- Outcome: The committee will define the proposal as being:
  - i. Approved. In this case the FGS form will be completed.
  - ii. Conditionally approved. In this case the proposal must be revised to meet the requirements of the committee and resubmitted within a 3 month period. The committee may appoint the Advisor and/or Graduate Chair as being responsible for ensuring the revisions are made adequately. If the committee considers that the revised proposal is unacceptable, it will be treated as a failed proposal in accord with point iii.
  - iii. Not approved. The proposal must be reformulated and rewritten and the evaluation process repeated within a 3 month period. If the proposal is still regarded as unacceptable, the student will be required to withdraw from the program.

### **7.3 Additional Procedures for Submitting and Evaluating M.Sc. and Ph.D. Thesis Proposals**

- It is essential that there is full documentation in place to support the decisions that are made in the evaluation of thesis proposals. Such documentation must be available should the student appeal a negative decision. The Graduate Chair and Advisor must ensure that all documentation related to the thesis proposal is retained until the evaluation is completely finalized and the appeal period has passed.
- The written proposal is prepared under the general guidance of the Advisor with possible additional guidance from members of the Advisory Committee.
- When complete and ready for submission, the thesis proposal should be submitted by the student to the Graduate Chair for a brief overview. It is then distributed by the student to the committee members. The Graduate Chair in association with the Advisor convenes a general meeting of the Advisory Committee to conduct the evaluation of the proposal. This meeting should normally take place within three weeks of submission of the proposal.
- The written proposal is prepared under the general guidance of the Advisor and is to be reviewed by *each member of the Advisory Committee*.
- The criteria for evaluation are that the proposal must demonstrate the student's understanding of the research area, and define the research objective including demonstrating that it is a distinct contribution to the field of study. In addition, the proposal must contain the information

specified in the Supplemental Regulations and conform reasonably to the formatting specified in these regulations (see Sections 7.1 and 7.2).

- Following the approval of the proposal, the appropriate FGS form should be prepared, signed by the Head, and submitted to FGS.
- In the event of a conditional approval or non-approval of a proposal it is essential that the committee provide the student with a written explanation of the general reasons for the failure in light of the examination criteria. This explanation should provide appropriately explicit rationale (e.g., explaining why the research objective was inadequately defined, why the proposal failed to demonstrate the student's understanding of the research area, how the proposal failed to include an adequate literature review, etc.).
- For cases in which the regulations permit a re-submission, the student should also be provided with a written description of the type and magnitude of changes required to bring the proposal up to an appropriate standard.
- The preparation of a thesis proposal, or a component of a proposal such as the literature review, may form part of a graduate course. However, in this case the evaluation of the proposal must still adhere to the regulations and procedures described above. The evaluation of the proposal must be independent of the evaluation of the piece of work as a component of the graduate course.
- The Graduate Chair must be provided a copy of the final, revised and accepted thesis proposal.

## **8. Ph.D. Candidacy Examination**

### **8.1 General Regulations**

As noted above for the thesis proposal, it is essential that the evaluation of the Candidacy Examination is a fair and defensible process. One of the Graduate Chair's most important roles in chairing the Candidacy Examination is to ensure that this is the case. For example, the Grad Chair ensures that there is equity in the definition of the subject areas and in the level of questions asked across the Department. It is recognized that the consequences of a student failing the candidacy exam are very significant to both the student and advisor.

The requirements for the Ph.D. Candidacy Examination are defined in the FGS regulations and Supplemental Regulations and include:

- Purpose: The purpose of the Candidacy Examination is as specified in the Faculty of Graduate Studies regulations and is to ensure the student has both the depth and breadth of knowledge required for the completion of the Ph.D. program.
- Timing: The candidacy examination will normally be completed within 24 months of the student's commencement of the program. The student will be advised on the topics to be included in the examination immediately following the completion of the thesis proposal.
- Candidacy Examining Committee: The examination will be evaluated by a Committee chaired by the Graduate Chair (or designate), and consisting of the Ph.D. Advisory Committee and the Graduate Chair (or designate). The Graduate Chair (or designate) must not be a member of the Advisory Committee.
- Format of the Examination: The examination will be a written examination conducted over the course of one day. It will consist of an examination of three hours duration in the morning on topics in the area of the research program, a break of two hours, and an examination of three hours duration in the afternoon on topics defining the breadth of the student's knowledge in the geological sciences.

- The examination on the area of the research program will consist of questions in two discipline areas of the student's research and be at the level of Ph.D. research. The examination of the student's breadth of knowledge will consist of questions in three subject areas peripheral to, but relevant to, the research area and be at the senior undergraduate level. The questions for both examinations are set by the Advisory Committee and reviewed by the Graduate Chair. The subject areas for the examinations will be defined by the Advisory Committee immediately following the thesis proposal and reviewed by the Graduate Chair.
- Outcome: A pass in the Candidacy examination is defined as a pass of both the examination in the area of the research program and of the examination on the student's breadth of knowledge. A pass decision of the examiners must be unanimous.
- A failure of either the research program or breadth-of-knowledge component of the examination will require the full examination process to be re-started, with the repeated examination to be completed within a six month deadline of the date of the initial examination. If a student fails this second attempt, a recommendation will be made to the Dean of Graduate Studies that the student be asked to withdraw from the Ph.D. program.

## **8.2 Additional Procedures for the Ph.D. Candidacy Examination**

- It is essential that there is full documentation in place to support the decisions that are made. Such documentation must be available if required should the student appeal a negative decision. All original examination material, questions, booklets, and responses should be returned to the Graduate Chair and retained by the Department for the normal length of time required by the University for examination materials.
- The subject areas for the examinations will be defined by the Advisory Committee immediately following the acceptance of the thesis proposal. Discussion of the subject areas may take place following the acceptance of the thesis proposal at the thesis proposal meeting or the discussion may be conducted by email. It is the duty of the advisor to lead this process. The process should be completed within two weeks of the acceptance of the proposal. The Graduate Chair will maintain a list of subject areas used in previous candidacy examinations to help guide the selection.
- The subject areas are reviewed by the Graduate Chair.
- The Graduate Chair will advise the student in writing of the subject areas. If necessary the Advisor and Graduate Chair should provide general guidance to the student on the scope of the subject areas.
- The Graduate Chair, in consultation with the candidate's Advisory Committee and the candidate, decides on an appropriate date for the examination and arranges appropriate space.
- It is the responsibility of the candidate's Advisor, in consultation with the Advisory Committee, to collect examination questions from the Advisory Committee and forward these to the Graduate Chair at least several days in advance of the examination. The Graduate Chair will maintain a list of questions used in previous Candidacy Examinations to help guide the selection of questions.
- The Graduate Chair conducts the examination of the student.
- Following the examination, the Graduate Chair passes the papers to the Advisor who will ensure that the examiners are aware of marking methods and criteria, that the papers are marked and then circulated as a group, first to all members of the Advisory Committee and then to the Graduate Chair.
- The encompassing criteria for marking are that the student has both the depth and breadth of knowledge required for the completion of the Ph.D. program. The questions in the two

discipline areas of the student's research (Part I) must be answered at a satisfactory level for a Ph.D. research candidate, and the questions in the three subject areas peripheral to, but relevant to, the research area (Part II) must be answered at a satisfactory level for a senior undergraduate student. In grading questions, it is important to always keep in mind the length of time that the student had available to answer the questions, and the necessity for the student to use some of the available time to "switch gears" from question to question.

- The grading should be completed within **one week** of the writing of the examination. The following guidelines should be followed:
  1. Assign a **separate grade** to each question and to each separate part of a question.
  2. Use **letter grades** (A+, A, B+, B, C+, C, D, F) rather than numerical marks, and include comments about the student's performance **relative to** the knowledge that would be expected at the typical Ph.D. (Part I) or B.Sc. Honours (Part II) level of expertise. It is recommended that each question be graded by the person who set the question. The Advisor will act as the coordinator of this task.
  3. When grading is completed, the Advisor should collate all of the graded papers and circulate these, as a group, to all members of the Advisory Committee. **All** members of the committee should see and read **all** of the responses and, if appropriate, add comments. Electronic circulation may be required.
  4. When all members of the Advisory Committee have seen the complete responses to all questions, the Advisor must schedule a **closed meeting** of the Committee to consider the results. It is not required that the Graduate Chair be present at this meeting.
  5. The final result of the examination must be defined as a **Pass** or **Fail**. A pass in the Candidacy Examination is defined as a pass of both the examination in the area of the research program (Part I) and of the examination on the student's breadth of knowledge (Part II). The Advisory Committee must formulate a written justification for the outcome, based on the results of individual parts of Part I and Part II of the examination, and provide this to the Graduate Chair.
  6. In the event of a failure of the candidacy examination, the Graduate Chair in association with the Advisory Committee must prepare a written explanation to the student explaining how they have failed to pass Part I and/or Part II of the examination. This explanation should not include the grades assigned by the committee members in the evaluation process but should provide an appropriately detailed explanation for the reason for failure (e.g., "*The examination committee considered the answers of the questions in subject area 1 of the research program to not reach the level appropriate for a Ph.D. candidate. The student was unaware of, or had an incorrect interpretation of the following basic concepts ... The answers for subject area 2 were also incomplete ...*" or "*The examination committee considered the answers of the questions in two of the three subject areas peripheral to, but relevant to, the research area to not reach the required standard of the senior undergraduate level. The student answered the question on ... incorrectly and failed to address the key concept ... taught as standard concept in senior undergraduate courses on this topic.*").
- The Graduate Chair informs the student of the result of the candidacy examination and in the event of failure provides the student with the written justification.

## **9. M.Sc. Thesis Examination**

### **9.1 M.Sc. Thesis Requirements**

The required format for the M.Sc. thesis is defined in the FGS regulations and in the FGS Thesis Guidebook. Particular attention must be paid to copyright issues.

Both “regular” and “manuscript/grouped manuscript” styles are acceptable. As stated in the Supplemental Regulations, the Department of Geological Sciences permits published papers or about-to-be-published papers to be included in a Master’s thesis, under the following conditions:

- The candidate’s specific contribution to each paper (in case of multiple-authored papers) must be clearly indicated.
- The candidate must be the first author on multiple-authored papers or manuscripts.
- The thesis must include an abstract, full introduction, and conclusions.
- Where more than one manuscript is included, connecting text and common abstract, introduction, and conclusions must be included.
- There must be adherence to all other requirements as outlined in Thesis Guidelines.

### **9.2 Formation of M.Sc. Thesis Examination Committee**

Under FGS regulations, the student’s advisor will recommend a suggested thesis/practicum examining committee to the Department Head for approval, which shall then be reported to the FGS Office on the “Master’s Thesis/ practicum Title and Appointment of Examiners” form. This form must be approved by the Dean of the FGS prior to distribution of the thesis.

The committee must consist of a minimum of three examiners. At least two examiners must be members of the Faculty of Graduate Studies. One examiner must hold a primary appointment from within the major department and one examiner must be external to the department. In the situation of co-advisers, under FGS regulations, the co-advisers together will fulfill the role of a single member of the examination committee. All examiners must be deemed qualified by the Department Head and be willing to serve. The Department’s Supplemental Regulations indicate that members of the M.Sc. Advisory Committee would normally, but not necessarily, be included in the Examining Committee.

In the situation of the advisor recommending an examiner who is not a member of the FGS, the Department requires the submission of the curriculum vitae of the potential examiner to provide for the evaluation and documentation of their appointment. The Head provides a memo to FGS indicating approval of the examiner based on inspection of the curriculum vitae.

### **9.3 Distribution and Evaluation of the M.Sc. Thesis**

Under FGS regulations, it is the responsibility of the Head of the major department to arrange for the distribution of the M.Sc. thesis to the examiners and to notify the Faculty of Graduate Studies Office at the time that the thesis/practicum has been distributed for examination.

In the Department of Geological Sciences, the duty of distribution of the thesis is delegated to the Graduate Chair. The M.Sc. student should submit a pdf file of the thesis to the Graduate Chair. The Graduate Chair, in consultation with the Advisor, will define the time-scale on which the thesis should be examined and will define a tentative time for the M.Sc. oral defense to follow the examination of the written copy. In most circumstances the time-scale for evaluation of the written thesis will be three weeks or one month.

The Graduate Chair will arrange for the distribution of the thesis along with a memorandum outlining the required evaluation procedure and the required time-scale for the examination. Following FGS regulations: It is the duty of all examiners to read the thesis/practicum and report on its merits according to the following categories:

- Acceptable without modification or with minor revision(s);
- Acceptable subject to modification and/or revision(s);
- Not acceptable.

Note that it is normal for the student to seek their Advisor's approval to submit the thesis for examination and for the Advisor to have reviewed the thesis by this time. However, under FGS regulations a student has the right to an examination of the thesis/practicum if he/she believes it is ready for examination. It is the unit's responsibility to warn the student of any risk involved should he/she decide to proceed against the unit's recommendation.

#### **9.4 M.Sc. Thesis Oral Defense**

The Department of Geological Sciences requires that an oral examination take place as part of the M.Sc. thesis examination.

The oral examination will be chaired by the Graduate Chair or designate, who should not be a member of the examination committee. The Graduate Chair or designate must be informed of the examination date at least two weeks in advance, in order to ensure the event is adequately publicized to the University community. The full examining committee should normally attend the defense, if necessary via teleconferencing. When the absence of an external examination committee member is unavoidable, they will provide questions to the Chair who will ask these questions in the examination.

The oral examination will begin with a 20-30 minute oral presentation by the student summarizing the results of the thesis research. The oral examination is open to all members of the University community. Following the presentation and a 15 minute open question session from the audience, everyone but the student, chair, and examining committee will be asked to leave. This will be followed by two rounds of questions put to the student by each member of the examining committee. Each examiner will be allocated a maximum of 20 minutes for questions. Questioning may be extended if necessary, but only under exceptional circumstances should it be allowed to exceed 60 minutes.

#### **9.5 Final Approval/Rejection of the M.Sc. Thesis**

Under FGS regulations, following completion of the examination of the thesis/practicum, examiners will consider the oral examination and the written thesis/practicum to determine the nature of, and procedures for, approval of any revisions that will be required prior to submission to the Faculty of Graduate Studies.

The judgment of the examiners shall be reported to the Faculty of Graduate Studies in the qualitative terms "approved" or "not approved" on the thesis/practicum final report form. Each examiner must indicate his/her opinion by his/her signature. If two or more examiners do not approve the thesis, then the student is deemed to have failed the defence. In the case of a failure for the thesis/practicum at the Master's level, a detailed written report will be prepared by the Graduate Chair or designate and submitted to the Faculty of Graduate Studies, who will make the report available to the candidate and advisor.

A student whose Master's thesis has been rejected twice will be required to withdraw.

The advisor is normally responsible for ensuring that revisions are completed according to the instructions from the examining committee. The Faculty of Graduate Studies will accept the thesis/practicum only when it is submitted with a signed statement from the advisor that the required revision has been completed.

## 9.6 Final Submission of the M.Sc. Thesis

The requirements for the final corrected thesis and paperwork submitted to FGS are specified in FGS documentation. In addition to the electronic copy for the Faculty of Graduate Studies, a pdf file of the final version of the M.Sc. thesis must be submitted to the Departmental Office. It will be printed and bound, at the department's expense, for the departmental thesis collection.

## 10. Ph.D. Thesis Examination

### 10.1 Ph.D. Thesis Requirements

An essential feature of Ph.D. study is the candidate's demonstration of competence to complete a research project and present the findings. The thesis must constitute a distinct contribution to knowledge in the major field of study and the material must be of sufficient merit to be, in the judgment of the examiners, acceptable for publication.

The required format for the Ph.D. thesis is defined in the FGS regulations and in the FGS Thesis Guidebook. Particular attention must be paid to copyright issues.

### 10.2 Formation of Ph.D. Thesis Examination Committee

Under FGS regulations the advisor/co-advisor, in consultation with the Head of the unit, will recommend at least three internal thesis examiners, to be forwarded to the Dean of Graduate Studies for approval. One must hold a primary appointment within the major department and one must hold a primary appointment outside the major department. All internal examiners must be members of the Faculty of Graduate Studies. In normal circumstances these internal examiners will be members of the student's advisory committee.

The advisor/co-advisor, in consultation with the advisory committee, will recommend three distinguished scholars from outside the University of Manitoba with particular experience in the field of the thesis research to serve as the external examiner. **These scholars are not to be contacted by anyone other than FGS.** To the extent possible (keeping the previous sentence in mind), the recommendation for each prospective external examiner should include a brief CV and a short statement detailing the rationale behind the recommendation, the person's qualifications, including a current list of scholarly publications and research activities and, importantly, their experience with graduate student education. If any of the recommended examiners does not meet the criteria specified below, a detailed explanation should be included with the rationale for the recommendation.

The external examiner should:

- hold a Ph.D. or equivalent;
- hold the rank of Associate Professor, Full Professor, Senior Scholar or Emeritus Professor (or the equivalent if outside North America) at a university, or have comparable expertise and standing if not a faculty member at a university;
- have an established reputation in the area of the thesis research and be able to judge whether the thesis would be acceptable at an institution comparable to the University of Manitoba;
- have significant recent experience with the supervision and/or examination of Ph.D. students.

The external examiner should not:

- have acted as an external examiner for the same Ph.D. supervisor within the previous two years;
- have been associated with the candidate at any time or in any significant way in the past five years, present or reasonably foreseeable future (advisor/co-advisor, colleague, teacher, co-author of published material, family member *etc.*);

- be associated with the advisor/co-advisor in any of the following ways: former student; research advisor/co-advisor; research collaborator within the last five years; co-author of published material within the last five years;
- have had a significant academic disagreement with the candidate, the advisor/co-advisor or any member of the advisory committee.

The Dean of Graduate Studies will choose the external examiner from the list provided by the advisor/co-advisor and will make the formal invitation to the external examiner. The Dean shall ensure the anonymity of the external examiner until it has been determined that the student can proceed to oral defence.

### 10.3 Examination Procedure

The candidate will upload the thesis to the thesis distribution portal (located on the 'Graduate Studies' JUMP tab). The Faculty of Graduate Studies distributes the electronic version of the thesis to the examiners. Once the thesis has been submitted to FGS, neither the candidate nor the advisor/co-advisor shall have any communication with the examining committee regarding the thesis. The examination is conducted by FGS and proceeds in three stages:

1. *Examination of the candidate's thesis by the internal examining committee.* If none or one (the dissenting voice) of the internal examiners fails the thesis, the thesis receives an internal pass and shall proceed to external distribution. Prior to external distribution, the candidate shall have the opportunity to incorporate changes suggested by the examining committee but not necessarily those of the dissenting voice. If two or more of the internal examining committee fail the thesis, then the thesis fails. If the thesis fails, the unit Head shall convene a meeting of the internal examining committee and the candidate's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard for a second submission to the internal examining committee. In normal circumstances, this will involve additional scholarly work which the unit Head will describe, in writing, to the advisor/co-advisor, the candidate and the Dean of the FGS. If more than one of the internal examining committee members fail the resubmitted thesis, this constitutes a second failure. In this case, the candidate cannot proceed to external distribution and is required to withdraw from the FGS.
2. *Examination of the candidate's thesis by the external examiner.* If the external examiner passes the thesis, the student can proceed to oral defence. If the external examiner fails the thesis, the unit Head shall convene a meeting of the internal examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard. In normal circumstances, this will involve additional scholarly work which the unit Head will describe, in writing, to the advisor/co-advisor, the candidate and the Dean of the FGS. If the external examiner fails a resubmitted thesis, this constitutes a second failure. In this case, the candidate cannot proceed to oral defence and is required to withdraw from the FGS.
3. *Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.* Units cannot proceed with scheduling the oral defence prior to receiving the approved examiners report from the FGS. The examination must be held at the University of Manitoba. The Dean of the FGS or designate shall act as Chair of the examination committee. Attendance of the external examiner at the oral examination is encouraged; if the external examiner will not be present, his/her participation via voice or video conferencing is expected. All internal members of the examining committee must be present at the defence, unless exceptional circumstances prevent this and with prior approval of the Dean of the FGS. Regardless, no more than two examiners can use voice or video conferencing. Under no circumstances can the candidate participate by voice or video conferencing.

The first part of the oral examination shall consist of an oral presentation by the candidate. This is followed by examination of the candidate by the examination committee. If time permits the Chair, at their discretion, may allow questions from members of the audience. Following completion of the formal examination, the candidate and audience must leave the examination room. The decision of the examining committee will be based both on the content of the thesis and on the candidate's ability to defend it. The judgement of the examiners shall be reported to the FGS in the qualitative terms "pass" or "fail" and each examiner must indicate his/her opinion by his/her signature. If the external examiner *or* two or more internal examiners indicate a fail, the candidate fails the examination.

The student will be required to withdraw when the Ph.D. thesis has been rejected twice at the stage where: a) the internal examining committee reports on the merits of the written thesis; b) the external examiner reports on the merits of the written thesis; c) the oral examination; or d) a combination of any of these stages.

#### **10.4 Final Submission of the Ph.D. Thesis**

The requirements for the final corrected thesis and paperwork submitted to FGS are specified in FGS documentation. In addition to the electronic copy for the Faculty of Graduate Studies, a pdf file of the final version of the Ph.D. thesis must be submitted to the Departmental Office. It will be printed and bound, at the department's expense, for the departmental thesis collection.

### **11. Departmental Appeal Procedures**

Appeals of term work or final grades in courses are administered by the Registrar's Office. Refer to [http://umanitoba.ca/student/records/exams\\_grades\\_hub.html](http://umanitoba.ca/student/records/exams_grades_hub.html) or visit the Registrar's Office, 400 University Centre.

FGS regulations define that in terms of qualifying examinations, candidacy examinations, thesis examinations, and any other academic matters, departments make recommendations for action to the FGS. In the first instance, any appeal of a department's recommended action should be handled through the departmental appeal process, which is outlined in the department's Supplementary Regulations. Appeals stemming from departmental actions on academic matters (e.g., failure in a course) will be heard by the Faculty of Graduate Studies Appeal Panel only after they have been dealt with by the appropriate departmental-level appeal process.

When a Departmental decision is made with regard to a student's status and/or progress in the graduate program, the student will be informed by the Graduate Chair of the nature of the decision and of the possible consequences. Following the Department's Supplemental Regulations, within one week of receiving the decision/recommendation, the student may appeal of the decision to the Department of Geological Sciences Appeal Committee. The appeal must be made in writing and must specify whether the appeal is of the decision or of the disposition and the basis for the appeal.

The appeal will be considered using the principles applied in other appeal processes at the University of Manitoba.

1. The Department of Geological Sciences Appeal Committee is to include the Department Head as Chair, the Graduate Chair, one other member designated by the Head, and one alternate should one of the above be responsible for the original decision/recommendation.
2. Hearings shall be held in closed session.
3. Appeal hearings shall be arranged as expeditiously as possible and all parties involved shall be given notice of the appeal hearing within a reasonable timeframe.
4. As a first item of business the Appeal Committee shall consider in closed session whether there are sufficient grounds to proceed with the appeal hearing.

5. If there are sufficient grounds to proceed, the Chair will schedule the hearing of the Appeal Committee and provide notice in writing to the student (known as the Appellant).
6. The Appellant has the right to appear in person or to be represented by a Student Advocate. One member of the Appellant's immediate family and his/her lawyer may be present but only as observers who do not participate in the hearing. The Appellant must advise the Chair of the Appeal Committee with at least two days of notice of the attendance of a student advocate and/or observers.
7. The Appellant shall have the right to suggest witnesses that he/she wishes to appear before the panel. It will be at the discretion of the Chair to determine whether any witnesses are called. It is the responsibility of the Appellant to ensure that the witnesses are informed of the date and time of the hearing.
8. The general progression of the appeals meeting is:
  - Introduction and statement of the basis of the proceedings;
  - Appellant is given the opportunity to state their case and to call witnesses;
  - Panel members are given the opportunity to ask questions of the Appellant and/or their witnesses;
  - Appellant is given the opportunity to ask questions of the Appeal Committee members;
  - Appellant is provided the opportunity to make a closing statement.
9. The Appeal Panel will make a decision on the request in closed session.
10. As soon as possible after the decision is made the Department Head will notify the student of the committee's decision and will forward the departmental recommendation to uphold the original recommendation or to make a new recommendation to the Dean of the Faculty of Graduate Studies.

## **12. Graduate Course Offerings and Arrangements**

### **12.1 Course Planning and Coordination**

One of the duties of the Graduate Chair is to work with Advisors and the Department on soliciting an appropriate list of graduate courses to be offered in the following year. This work should involve consideration of the students' need for particular courses in the following year, consideration of planned offerings by instructors, and if necessary some liaison to optimize the offerings. There is an expectation that faculty members in the Department offer a minimum of one graduate course per year.

It is recognized that this course planning is made somewhat difficult by the relatively small number of faculty members and graduate students in the Department, but it is important to be coordinated as much as possible. It is important for the list of courses to be formulated as early as possible to allow time-tabling and room booking to take place.

### **12.2 Course Delivery and Course Outlines**

The offering of graduate courses should adhere to the regulations outlined in the University policy on Responsibilities Of Academic Staff with regard to Students (ROASS) and normally applied in undergraduate teaching (e.g., all courses must have a course outline defining the course content and grading scheme). Refer to [http://umanitoba.ca/admin/governance/governing\\_documents/students/278.html](http://umanitoba.ca/admin/governance/governing_documents/students/278.html).

The Department requires the submission of the course outlines at the time of the start of each course for its records.

## **13. Awards and Scholarships**

### **13.1 Awards**

Recommendation on the selection of Department graduate awards and bursaries is generally done by the Department's Awards Committee. The Graduate Chair and Head assist in the submission of applications for some external awards such as the University Distinguished Dissertation award.

### **13.2 Scholarships**

The Department at times prepares nominations and rankings of students for external scholarships such as the University of Manitoba Graduate Fellowships and the Clayton H. Riddell Graduate Entrance Scholarships. These selections are coordinated by the Head and/or Graduate Chair and as needed the Graduate Admissions Committee. The Department Head and Graduate Chair are also available to help in the preparation of NSERC PGS applications.

## **14. Other**

### **14.1 Receptions**

It is normal in the Department of Geological Sciences, but not required, for a small reception to be held for the student and attendees after a successful oral defence. The organization of the reception is the responsibility of the Adviser but the Department can help in logistical arrangements if requested. In recognition of the student's achievements, the Department will provide funding for a basic reception but the advisor is welcome to provide additional funds if a more elaborate reception is desired.

### **14.2 Outreach**

The Department Head, Graduate Chair, and Administrative Assistant are responsible for most of the advertising and outreach associated with the graduate program. This work involves maintaining brochures and web page materials and participation in occasional outreach events.

## **Appendix 1. Responsibilities and Duties**

The rules and responsibilities listed in this section are based on the Faculty of Graduate Studies document on Roles and Responsibilities: A Guide for Faculty and Students. Some of this information is defined in the Advisor-Student Guidelines.

### **Appendix 1.1 Responsibilities and Duties of the Department Head**

The Department/Unit Head is ultimately responsible for ensuring that the graduate program of the unit is operating according to the guidelines of FGS and their supplementary regulations. The specific responsibilities include the following:

- Develop a committee structure to administer the graduate program. Identify and define the role of a Graduate Chair and provide the name of the advisor, and advisory committee and his or her own role and responsibilities.
- Ensure that the department/unit has a set of guidelines and criteria for admission of students and completion of their programs.
- Formulate specific guidelines if work experience is to be included as one of the admission criteria.

- Ensure that the supplementary regulations for administering the graduate program(s) are well defined and outlined in an official document (this document needs FGS approval).
- Provide mentorship to new faculty members as graduate advisors.
- Ensure that each student receives a letter of offer indicating the area of study, the name of the advisor, and financial support (availability, amount, source and duration).
- Define the applicable terms and conditions for each student (including those students who hold a fellowship or scholarship) receiving financial support from a unit or departmental fund or from an individual operating grant. The terms and conditions must address the issue of top-up or supplemental financial support.

### **Appendix 1.2 Responsibilities and Duties of the Graduate Chair**

The general duties of the Graduate Chair as defined in the FGS document are:

- Serve as a liaison person between the unit and FGS. Ensure a committee is in place to administer graduate programs including admission, assigning an advisor and advisory committee and reporting on student progress.
- Ensure that students' files are current with respect to the address of the student, name of the advisor and the advisory committee members and to inform FGS of any changes.
- Inform all members of the department/unit engaged in graduate education about the Academic Guide, FGS regulations, requirements and any supplementary regulations as well as important deadlines.
- Ensure that the students are made aware of workshops offered by UTS (University Teaching Services; e.g., CHET – Certification in Higher Education Teaching Program), and FGS specifically for graduate students.
- Organize students' orientation to the department/unit and the resources available to them.
- Provide the student with information about the role and responsibilities of the advisor, and advisory committee and his or her own role and responsibilities (i.e., Advisor-Student Guidelines).
- Monitor implementation of the Department/Unit Head's decision regarding the student's access to an assigned advisor and to a designated acting advisor in the case of the advisor's absence (research/study leave or leave of absence).
- Ensure that the student has formally submitted a thesis proposal to the advisory committee, including well-stated objectives and a path for achieving them.
- Ensure the student meets the advisor or advisory committee to discuss coursework, research program, progress and future plans.
- Ensure that collaborative research (inter-unit/departmental, inter-university or with an outside research institute) is identified and that the specific role of each unit is clearly defined.

Specific duties include:

- Chair the Graduate Admissions Committee. The chair may make rejection decisions without consulting the committee but will report all decisions to the committee.
- Make periodic consultations with the administrative assistant about correspondence from potential applicants and funding levels, and with potential advisors about applicants.
- Supervise, coordinate, and maintain standards for the following examinations, and chair examination committees and oral presentations when required: M.Sc. thesis proposal; M.Sc. thesis oral defense; Ph.D. thesis proposal; and Ph.D. candidacy examination.
- Review the progress of all students in the pre-Masters, M.Sc. and Ph.D. programs on a yearly basis and verify that the annual Faculty of Graduate Studies reports are submitted each year.
- Chair the Graduate Affairs Committee, which meets on an irregular basis.

- Act as student advocate for graduate students who have problems with advisors, committees, department, or faculty. In the process of this capacity as advocate, consultations will normally involve just the Chair, although the full GSC may be consulted.
- Make recommendations to, and have periodic discussions with the Department Head and with the Dean or Associate Dean of Graduate Studies.
- Chair (or share chairing with the Head) of the Graduate Curriculum Committee.
- In consultation with the administrative assistant, consider the scheduling of graduate courses.
- Have periodic consultations with advisors about various graduate studies matters.
- Have periodic consultations with the Head about various graduate studies matters including student problems, advisor problems, appointment of faculty members to the Faculty of Graduate Studies, appointment of adjunct professors.
- Undertake other duties dealing with graduate students within the department.
- Periodically review current graduate course offerings and recommend on those courses to be dropped or revised. This process is to be scheduled in relation to retirements and the hiring of new faculty.
- Periodically review the format and educational quality of workshop courses offered by faculty members. The objective of the workshop course is to provide the opportunity for a student to receive more specific knowledge or training than that offered by other graduate courses; knowledge gained from the workshop can be unrelated to, peripheral to, or directly related to thesis research, but the workshop is not to be part of thesis research.
- Produce a handbook for incoming graduate students listing all supplementary regulations for graduate studies, brief descriptions of facilities in the department, information about obtaining access to such facilities, and some course information.
- See that the department receives credit for interdisciplinary graduate students whose main supervisor and office are within the Department.
- In consultation with the Head, examine and modify as necessary supplementary regulations concerning graduate studies in the Department.
- Preview proposed new courses before they are presented to Department Council for approval.
- Examine and periodically recommend funding levels for graduate students.

### **Appendix 1.3 Responsibilities and Duties of the Advisor**

The advisor is not only a mentor to the student, but also provides leadership in forming the partnership with his/her students, the department/unit, and the advisory committee. The following responsibilities are for the advisor to ensure equitable and high quality academic training to the student:

- Inform and update the student of his/her academic and holiday schedule on a regular basis so that the student is aware of how much time and when access can be reasonably expected from the advisor.
- Seek and provide the student with adequate financial support, where possible.
- Ensure completion of the “Advisor-Student Guidelines” form prior to the commencement of any research and no later than the submission of the first Progress Report.
- Work with the student to develop a research topic(s) ensuring that the research plan is well defined, realistic and manageable within the allocated time frame for successful completion of the program.
- Ensure that within the first six months to a year, the student has an advisory committee, the program of study approved by the advisory committee with respect to FGS requirements (the number and type of courses), and a research plan.

- If there are major modifications to the research plan after one year, a revised research plan must be approved by the advisory committee at that time.
- Schedule regular meetings with the student to monitor progress. Such meetings should include discussion of management strategies and methodological approaches after the research topic is well defined, and a review of the process of data collection.
- Discuss with the student how research is to be documented and how records are to be kept, and refer the student to the University of Manitoba Responsible Conduct of Research documents ([http://umanitoba.ca/admin/governance/governing\\_documents/research/responsible\\_conduct\\_of\\_research.html](http://umanitoba.ca/admin/governance/governing_documents/research/responsible_conduct_of_research.html)).

#### **Appendix 1.4 Responsibilities and Duties of the Advisory Committee**

The advisory committee acts as a partner with the student and the advisor in advising the student on research problems. The members are selected based on their fields of expertise, the nature and planning of the research project and to complement the expertise of the advisor in providing guidance to the student. The committee structure will depend on unit or departmental regulations as well as the guidelines and regulations of FGS.

To a reasonable extent, each member serving on the advisory committee is expected to take the following responsibilities:

- Be familiar with the research project of the student.
- Be available for meetings with the advisor and the student for preparing the annual progress report or as deemed essential.
- Be reasonably available for consultation with the student in addition to regular meetings.
- Review the thesis in a timely manner for final examination.
- Clarify with the student questions regarding intellectual property rights, primary authorship on research articles and the specific role of the student, the advisor and other collaborators in the research program.
- Hold meetings once a year, or more often as required, with the student to discuss research progress and future course of action. Ideally, these meetings are to be held at the beginning of the student's program and within the first year.
- Provide the student with the opportunity to attend and to present his/her findings at research conferences depending on the availability of funds.
- Provide the student with the guidelines for preparing the thesis (<http://umanitoba.ca/libraries/elibrary/mspace/>).
- Read and provide comments to any written material (thesis reports, etc.) submitted by the student in a timely manner (two to four weeks depending on the length of the document). Normally an advisor would require at least four weeks to provide feedback on a full thesis.

#### **Appendix 1.5 Responsibilities and Duties of the Graduate Student**

The student should look upon graduate research as a partnership with the advisor, advisory committee and the department/unit. Ultimately, the student is responsible for conducting the proposed research work and course of study. The responsibilities of a graduate student are as follows:

- Know the policies, procedures and deadlines of FGS. Each student must consult the Academic Guide and the current Graduate Calendar for specific information.
- Declare her/himself as full-time or part-time based on the time that would be devoted to graduate studies (see Academic Guide).

- Assess her/his financial needs during the tenure of the graduate program and obtain a document from the advisor outlining the type and duration of the financial support (note: student may receive a letter indicating no support is available).
- Share the responsibility with the advisor to develop a sound research plan that has an achievable timetable and milestones.
- Keep a systematic record of research work and results and be able to answer to the advisor and the advisory committee with respect to progress.
- Self-evaluate progress and productivity throughout the program.
- Become familiar with and follow the University of Manitoba Responsible Conduct of Research documents ([http://umanitoba.ca/admin/governance/governing\\_documents/research/responsible\\_conduct\\_of\\_research.html](http://umanitoba.ca/admin/governance/governing_documents/research/responsible_conduct_of_research.html)).
- Ensure that a meeting is held with the advisor and the advisory committee (where applicable) and prepare/present a FGS progress report at least once per year.
- Call additional meetings with the advisory committee after consultation with the advisor, if considered essential to the progress of the research.
- Organize and be efficient in processing the data and in the planning of future research. Keep abreast of current literature in the field.
- Take full responsibility for her/his academic and research program.
- Allow adequate time for her/his advisor or committee members to provide comments on written material. The student must consult her/his advisor and the advisory committee members to estimate the time that would be required to complete a thesis or a report.
- Ensure allocation of sufficient time to meet important deadlines (registration, thesis submission to committee members, etc.).