

Department of Earth and Environmental Science
M.Sc. (Geology) student regulations

Every incoming student should obtain a copy of the Graduate Calendar, or view it on the university website. This calendar contains the rules and regulations that apply to all graduate students within the University. In addition, the Department of Earth & Environmental Science has certain departmental requirements and regulations which are specific to M.Sc. students in Geology, as outlined below:

1. Supervisor/Graduate Student Relationship

The student and supervisor(s) will consider the appended Form 1: Supervisor/Graduate Student Relationship, and sign off in agreement within the specified timeframe.

2. Course requirements

M.Sc. students are required by the University to take 12 h of courses, at least 6 h of which must be at the 5000-level. In addition, the Department of Earth & Environmental Science requires a further 3 h, making a total of 15 h, at least 6 h of which must be at the 5000-level. No graduate credit is given for any course below the 3000-level.

3. Further recommendations about courses

Although technically only 6 h of graduate courses must be at the 5000-level, it is strongly recommended that M.Sc. students avail themselves of more than the required 6 h at the 5000-level.

M.Sc. students are strongly encouraged to register for GEOL 5903 (Graduate Seminar). This course involves independent reading and literature review, and the preparation of two seminars, normally one in the fall term and one in the winter term. One of these seminars is related to the student's thesis research.

4. Thesis proposal

All students must submit a thesis proposal and have it agreed upon with the supervisor normally before beginning field or lab work or data acquisition. In any case, it must be submitted and approved within 9 months of beginning the graduate programme. The proposal should include the following components:

- Thesis statement
- Evidence of serious consideration of the literature
- Approach/methods being used (e.g., amount of field time, necessary equipment, analytical techniques, etc.)
- Preliminary results and discussion if applicable
- Work plan including timetable
- Implications of research
- List of references

The thesis proposal will be submitted to the graduate coordinator (or Head of Department if the graduate coordinator is the supervisor) who will arrange for circulation among all faculty in the department over a period of approximately two weeks. Faculty are encouraged to read and comment on the proposal. It is then returned to the graduate coordinator/Head who will return it to the supervisor, who will oversee any modifications that he/she considers to be necessary. Normally within one month of its return to the supervisor, the final proposal will be either:

- (i) deemed acceptable by the supervisor and signed by the student, supervisor, and graduate coordinator/Head, who will place it in the student's file, or
- (ii) deemed unacceptable by the supervisor, at which point the student may be asked to withdraw from the programme.

5. Thesis preparation

Preparation of the thesis will be under the direction of the supervisor(s). The thesis format should be in keeping with theses recently completed at Acadia, and follow the guidelines published by the Office of Research and Graduate Studies. References should be presented in the format used by the Canadian Journal of Earth Sciences.

Graduate students are also permitted to write a thesis in the form of a publishable paper (or papers). In this case, the student must be the first author on any co-authored paper, and should include a statement regarding his/her contribution to any co-authored papers. Any thesis produced in this format will require a separate introductory section, a methodology section, a concluding section that integrates the findings of all parts, and a common reference list.

6. Thesis meetings

A meeting will be held involving the student, supervisor(s) and graduate coordinator/head of department to inquire of progress no later than 12 months after starting, and approximately every 4 months thereafter as deemed necessary. The appended Form 2 will be used as a basis for these meetings.

7. Thesis defence

The thesis defence will follow the format described in the guidelines published by the Office of Research and Graduate Studies. In particular, three copies of the completed thesis are to be submitted four weeks in advance of the defence date. This includes all appendices, tables, figures and maps. The external reader is normally selected by the supervisor in consultation with the graduate coordinator and is formally invited by the Office of Research and Graduate Studies. The internal reader is appointed by the department. At the defence, the student will be invited to make a 15-20 minute presentation on the thesis work, and will then be questioned on the work by the examining committee which consists of the external and internal readers, department head, supervisor, and Director of Research and Graduate Studies (or delegate), who will chair the defence. The defence is open to the public.

8. Materials and supplies

Office supplies are not provided to graduate students. Each graduate student is permitted up to 500 photocopies per year for course seminars, projects, departmental presentations, etc. The student must pay for photocopies over this limit. Printing of posters for conference presentations is normally covered by the department.

Graduate students have access to a departmental printer for printing of documents related to courses and thesis research. Final printing of the thesis is the responsibility of the student and/or supervisor.

Interlibrary loan requests should be signed by the supervisor.

Thin sections will be made according to the following policy:

- i) Thin sections required for teaching have top priority.
- ii) M.Sc. students may make up to 80 thin sections. Rocks should be cut and chips trimmed to 7 mm by the student. The rock room technician will complete the manufacture of thin sections. Additional thin sections may be authorized, but must be justified in the thesis proposal.
- iii) Samples for polished (thin) sections should also be prepared by the students.

9. Thesis collections and final deliverables

Representative collections of thesis materials should be left behind by all Masters students. These are normally in the form of a suite of rocks, labelled and accompanied by brief descriptions. The thesis collection may be retained by the supervisor for further reference and/or investigation, or given to the departmental technician who will ensure they are properly curated.

A pdf format of the final thesis is required by the library. The department also requires a complete printed version of the final thesis, and a CD or DVD containing all pertinent data in accessible format.

Department of Earth and Environmental Science - Acadia University
Form 1: The Supervisor/Graduate Student Relationship

(document modified from draft prepared by Research & Graduate Studies, Acadia University)

The most important relationship in any graduate program is that between the graduate student and that student's supervisor(s). Mutual understanding of the goals and expectations of both student and supervisor(s) can be developed only through regular communication. Early in the first year of a student's program, or as soon as a supervisor/student relationship is established, the process of clarifying expectations and responsibilities should begin.

Outline of Suggested Discussions between Student and Supervisor(s):

1. Frequency of Interaction

Discuss the desirability of meeting weekly, bi-weekly or monthly to talk about student progress, new research literature, growing understanding of theoretical concepts, forthcoming seminars and conferences, research ideas, time commitments, etc. Decide whether you will schedule regular meeting times or each take informal responsibility for meeting at agreed to intervals.

2. Managing problems

Point out relevant academic appeal procedures in the Graduate Calendar. Discuss the role of supervisors, course professors, the Department's Graduate Co-ordinator and the Office of Research and Graduate Studies in managing concerns and conflicts.

3. Involvement in research

What opportunities are available to the student? What involvement is required; what involvement is possible, should the student choose? How is authorship determined?

4. Other experiences

Is the student expected to attend conferences? Is the student encouraged to prepare a conference presentation? Research and Graduate Studies can usually provide some financial assistance to students presenting papers at conferences **once** during their programme but planning and budgeting are required of the student and supervisor.

Is the student interested in gaining teaching experience? Various workshops will be available during the year and students should be encouraged to watch for these events if interested. Supervisors might be able to offer teaching experiences in addition to that acquired through AGA duties if the student is interested.

5. Timeline for degree completion.

Students beginning graduate studies directly from an undergraduate program might not realize the extent to which graduate work is self directed. A clear understanding of what must be accomplished by when if the degree is to be completed within the normal timeframe is helpful. At the same time, it is useful to acknowledge that research can be delayed when subjects are not available, when equipment breaks down, when documents are missing, while funding is sought, etc. It is often useful to develop a 'degree program plan' with timelines included and to keep such a plan on file.

6. Sabbatical Leave

If, during the student's program, the supervisor plans to be away from campus for longer than one month, discuss how the student's work will proceed during the supervisor's absence. A colleague might be empowered to act as supervisor; regular electronic communication can be established, etc.

7. Scholarship and grant applications

Are there expectations that the student will apply for NSERC or other scholarships and/or grants?
Advise the student of deadlines, location of information and application forms and assistance available.

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Confirmation of discussion

Date: _____

_____ (Supervisor) and

_____ (Graduate Student)

We have met and discussed the expectations of Supervisor and Graduate Student. These expectations will be re-visited at future meetings as necessary as well as at the annual review meeting.

(Document to be signed and returned to the Department of E&ES Graduate Co-ordinator by October 1 for September registrants or February 1 for January registrants. The document will be placed in the student's file for future reference.)

TO BE COMPLETED BY SUPERVISOR

1. Comments on the student's progress since the last report:
2. Comments on the student's objectives for next 12 months:
3. Considering the overall professional development of the student (e.g. stage in programme, conference presentations, publications, etc.), is he/she making satisfactory academic progress? If not, explain why.

Supervisor

Date