

Guide to Graduate Studies

Department of

Geological Sciences & Geological Engineering

(2009 - 2010)

Queen's University at Kingston



TABLE OF CONTENTS

1. Introduction	1
2. Graduate Admissions and Program Committee	1
3. General Liaison and the Handling of Student Concerns	2
4. Financial Support of Students	2
5. Teaching Assistantships	
a) Eligibility and Allocation of Teaching Assistantships	3
b) Financial Considerations	4
c) Supervision, Training and Evaluation	4
d) Workloads and Resolution of Disputes	5
6. Safety	
a) Worker Safety	5
b) Laboratory Safety	5
c) Field Safety	5
d) Accident Reporting	6
7. Office and Research Space	
a) Office, Lab and Storage Space	6
b) Security	6
8. Registration	
a) Regular Registration	7
b) Late Registration	7
c) Part-time Off-Campus Registration	7
d) Failure to Register by November 1	7
e) Readmission	7
9. M.Sc. (Two Year - Pattern I Research) Program Requirements	
a) Research Supervisor	8
b) Course Requirements	8
c) Thesis	8
d) Residence Requirements	9
e) Language Requirement	10
10. M.Sc. (One Year - Pattern II & III Non-Research) Program Requirements	
a) Supervision	10
b) Course and Residence Requirements	10
c) Project	10
11. Promotion from M.Sc. to Ph.D. Program	11

12. Ph.D. Program Requirements	
a) Supervisor(s) and Supervisory Committee	11
b) Course Work	12
c) Preliminary Evaluation	12
d) Residence Requirements	12
e) Language Requirement	12
f) Comprehensive Examination	12
g) Thesis	14
13. Collaborative Research	14
14. Academic Dishonesty	14
15. Grievance and Appeal Procedures	
a) Procedures for Appeal of a Grade	15
b) Procedures for Departmental Appeal of the Consequences of a Grade	15
c) Procedures for Appeal of the Results of a Thesis Defense	15
d) Procedures for Grievance of Non-Academic Matters	15
Appendix	
Accident Reporting	17
Directory of Telephone Numbers	18
Library Resources	19

QUEEN'S UNIVERSITY

Guide to Graduate Studies in the Department of Geological Sciences & Geological Engineering (2008-09)

1. Introduction

This guide outlines the Department's structure for the administration of graduate studies as well as its regulations and procedures for each program. Students should also consult the Calendar of the School of Graduate Studies & Research (<http://www.queensu.ca/calendars>) and the Procedures Manual of the relevant Division of the School.

Within the administrative framework of the School of Graduate Studies and Research, the Department of Geological Sciences & Geological Engineering offers three graduate-level programs, the M.Sc. (Pattern I, Research), the M.Sc. (Pattern II, Mineral Exploration) and the Ph.D. Students register in either Division IV (Mathematics and Physical Sciences) or Division III (Engineering and Applied Science) of the School of Graduate Studies & Research.

2. Graduate Administration

Graduate studies in the Department of Geological Sciences & Geological Engineering are administered by the Coordinator of Graduate Studies, who is assisted by two committees: a Graduate Curriculum and Liaison Committee, which provides general oversight for the graduate program and acts as a liaison between faculty and graduate students, and a Graduate Admissions Committee that advises on the suitability of applicants for admissions to one of our graduate programs. Both committees operate under the authority of the Head of the Department. All Departmental policy regarding the operation of the graduate program is consistent with the relevant regulations enacted by the School of Graduate Studies and must be approved by vote of the academic staff and student representatives present at a Departmental Meeting.

Coordinator of Graduate Studies

The Coordinator of Graduate Studies oversees the day-to-day operation of the Departmental graduate program, with responsibility for the admission of students, the establishment of funding packages, the oversight of student progress and the arrangement of Comprehensive Examinations and Thesis Defenses. The Coordinator also acts as the Departmental liaison with the School of Graduate Studies, and is the formal point of contact between the Department and the graduate students.

Graduate Admissions Committee

The committee consists of the Coordinator of Graduate Studies (Chair) and two or more members of the academic staff who are recruited on an *ad hoc* basis to evaluate applications for admission to graduate studies. Faculty representatives on the Committee consist of those individuals who have research expertise in the area(s) specified by the applicant and thus are capable of evaluating the academic qualifications and background experience of the candidate and who may have an interest in supervising the candidate. The Committee reviews carefully all material provided by the candidate as part of his/her application and evaluates the candidate's suitability for graduate studies. A student will be admitted only if: his/her preparation is judged to be acceptable by the Committee and one or more of the Committee members indicate their willingness to supervise the student. The overall purpose of the Committee is to maintain the integrity and academic standards of the graduate program and to provide advice to the Head of the Department and the Coordinator of Graduate Studies on such matters.

Graduate Curriculum and Liaison Committee

The Graduate Curriculum and Liaison Committee consists of the Coordinator of Graduate Studies (Chair), two other faculty members, and two graduate representatives elected by the graduate students from among their numbers. The Committee is responsible for:

- (i) continuous review of all aspects of the graduate program, including the curriculum and methods of graduate-student training and assessment;

- (ii) acting as a liaison between graduate students and staff on any matter relevant to graduate training in the Department, including but not limited to curriculum, financial matters, teaching assistantships (TA) assignments and workloads, and office and research space assignment and conditions;
- (iii) the formulation of recommendations for changes to Departmental regulations; and
- (iv) advising students or staff members concerning specific individual problems.

3. General Liaison and the Handling of Student Concerns

The Department of Geological Sciences & Geological Engineering fosters an open and collegial atmosphere in which students, faculty and support staff are treated with mutual respect. In general, all concerns that graduate students may have should be directed first to the most directly involved faculty or support-staff member (e.g. research supervisor, course instructor, TA supervisor, laboratory technician, etc.) in order to arrive, if possible, at a mutually acceptable resolution. If this approach does not work and/or the student is uncomfortable doing this, then the student should bring the concern to one or more of the Head of Department, Coordinator of Graduate Studies and/or the Departmental Administrative Assistant. All of these individuals have an “open-door” policy; students are encouraged to bring concerns to them rather than allow the concern(s) to remain unresolved.

Concerns of the more general nature relating to academic matters (e.g. curriculum issues, the availability of courses, and the application of Departmental regulations) should be brought to the Coordinator of Graduate Studies and/or the Head of Department. The Graduate Liaison and Curriculum Committee is the formal body that considers issues raised by students, although it may be possible to resolve them in a less formal manner. The formal procedures for the Grievance and Appeal of various academic decisions and non-academic matters are summarized in section 15 of this Guide.

Concerns relating to office space, TA matters and/or financial matters should initially be directed to the Departmental Administrative Assistant.

While it may not be possible to resolve a particular concern, students have our assurance that an honest effort will be made to arrive at a solution.

4. Financial Support of Students

Financial support comes from a variety of sources:

- (i) external scholarships (e.g. NSERC Postgraduate Scholarships, Ontario Graduate Scholarships, industry and private scholarships);
- (ii) internal scholarships (Queen's Graduate Awards, Reinhardt, Lindsley, Bowen and Bruce scholarships; all awarded by the Department);
- (iii) teaching assistantships (awarded by the Department); and
- (iv) research assistantships (awarded by individual faculty members from their research funds).
- (v) tuition bursaries for foreign students to bring them to domestic fees

The Department of Geological Sciences & Geological Engineering endeavors to arrange financial support in internal scholarships, teaching assistantships and research assistantships for up to 5 terms of full-time study on the M.Sc. (research) program and up to 12 terms of full-time study on the Ph.D. For 2007-2008, this departmental support, calculated on an annual basis from September to August, is presently a minimum of \$18,500 for M.Sc. research students and a minimum of \$21,000 for Ph.D. students. This amount is composed of \$12,000 scholarship; a teaching assistantship of between \$1,656 and \$2,691 for two one-term courses and a research assistantship to bring the total support to the minimum funding level.

Since research students are eligible for research assistantships from individual faculty research funds, they in practice receive significantly more than just the scholarship and teaching assistantship components. The precise amount is determined in consultation with the supervisor/advisor, but a general departmental guideline is that the total funding package should reach a minimum of \$18,500/yr. Once the terms of departmental support (categories (ii) and (iii)) have expired, support typically comes solely from category (iv). For information, note that Queen's now has a university-wide policy that all Ph.D. students should be funded at the minimum overall level of \$18,500/yr for four years and the department has a record of exceeding this official requirement. You may also want to consult the NSERC (www.nserc.ca) and OGS (osap.gov.on.ca) web pages for the current levels of support those agencies provide.

Students in the one-year M.Sc. (MinEx) program are eligible for financial support over the ten month period September 1 to June 30. The exact amount of financial support varies with number of students and available funds, but generally will be sufficient to cover tuition fees. MinEx students are not allocated teaching assistantships.

Note that the Provincial Government has decreed that a full-time graduate student is limited to a maximum of an average of 10 hours per week (including preparation time and marking, etc.) on work outside the degree program.

Students who hold major external awards such as NSERC Postgraduate Scholarships or Ontario Graduate Scholarships may accept reasonable additional funding in the form of research and/or teaching assistantships. Major awards have their own limitations on hours worked and total remuneration, and award holders should apprise themselves of this information.

There is no limit on the level of funding a student can receive from a company, although a student receiving such funding should not expect University scholarship support concurrently. **Part-time registration is required if the student is working more than 10 hours per week on non-thesis work.** A student may work full-time for a company and maintain full-time registration only if the work is entirely related to the thesis. In this case the student and the supervisor at Queen's must satisfy the Department and the School of Graduate Studies that the work is indeed thesis work and that the supervisor has appropriate knowledge of, input into, and control over the student's work.

5. Teaching Assistantships

The duties, obligations and responsibilities of graduate students, faculty and departments associated with teaching assistantships are described in the document "Policy Guidelines Governing the Employment of Graduate Students as Teaching Assistants at Queen's University", which was adopted by the School of Graduate Studies and Research in 1993.

It is expected that teaching assistants will discharge their duties in a conscientious and professional manner. This includes adequate preparation, courteous interaction with students, and impartial evaluation.

The following paragraphs describe the policies and practices of the Department of Geological Sciences & Geological Engineering regarding teaching assistantships.

a) Eligibility and Allocation of Teaching Assistantships

Assignment of teaching assistantships in the Department of Geological Sciences & Geological Engineering follows the priorities listed below:

- i) Full-time graduate students in the Department of Geological Sciences & Geological Engineering within their program time limits who are eligible for financial support. No distinction is made here between incoming and continuing students.
- ii) Full-time graduate students in the Department of Geological Sciences & Geological Engineering within their program time limits but whose program has extended beyond the period of eligibility for financial support. In such cases teaching assistantships are contingent on satisfactory performance in the degree program.
- iii) Upper-year undergraduate students in the Department of Geological Sciences & Geological Engineering.
- iv) Other personnel.

The Department affirms the principles of employment equity. In addition, no student will be excluded from consideration for a teaching assistantship on the grounds that he or she holds a major external scholarship.

The School of Graduate Studies & Research requires all students wishing to be a teaching assistant and whose acceptance at Queen's required them to pass a TOEFL test, to undergo an English language skills assessment prior to undertaking their duties. This assessment is conducted by the Instructional Development Centre and those students for whom this test is mandatory should make arrangements with the Department soon after their arrival.

In a case where the English language skills of a teaching assistant are not adequate to ensure effective classroom performance, arrangements may be made to assign duties to the student which do not depend critically on oral communication (e.g. lab set-up, marking, curating). In order to be considered for a teaching assistantship, a continuing student must complete an application for a teaching assistantship before leaving campus in the spring. An incoming student should see the Departmental Administrative Assistant to be assigned a teaching assistantship as soon as possible after arriving at Queen's and, in any event, before the first day of Fall-term classes. The Department attempts to match the background qualifications and subject preference of the graduate student with course requirements.

In certain circumstances where the nature of a student's research program is such that acceptance of a teaching assistantship may prejudice satisfactory research progress, a teaching assistantship may be denied if alternate financial support is available.

Because of the heavy course load on students in the MinEx M.Sc. program, these students are not permitted to take on demonstrating duties.

b) Financial Considerations

Teaching assistants are paid at an hourly rate of \$32.50 set by the University. For a two-hour lab, the TA is paid for five hours per week (two hours of contact and three hours of preparation and marking) for a total of 60 hours over a 12-week term. For a three-hour lab, the TA is paid for six and one half hours per week or 78 hours per term.

The Department strives to maintain student support through teaching assistantships during a student's period of study, but this is contingent upon the student's teaching performance, the student's progress towards fulfilling the degree requirements, the availability of funds, and the need for teaching assistants. Continuing Graduate students wishing to TA must complete a TA application form.

c) Supervision, Training and Evaluation.

The Head of the Department (or delegate) oversees matters relating to teaching assistants in the Department.

The Departmental Administrative Assistant assigns TAs to the various courses and prepares letters of appointment and employment contracts. The Administrative Assistant also coordinates scheduling of training sessions, offered through the Instructional Development Centre, dealing with issues such as teaching and marking techniques. **All TAs are encouraged to take advantage of these training sessions.**

All graduate students in Geological Sciences & Geological Engineering are required to attend training sessions that deal with laboratory (WHMIS) and field safety. **TAs are obligated to observe and enforce safety regulations in laboratories and in the field and to report hazardous conditions to the appropriate authority. TAs have a responsibility to set a good example for the students under their instruction.**

The faculty member responsible for a course is the direct supervisor of the teaching assistants assigned to that course and is responsible for informing the teaching assistants of their assigned duties, at the beginning of the course and periodically throughout the term. **Both the instructor and the TA are responsible for ensuring that the TA is adequately prepared with regard to the subject matter of the course.** TAs should be given adequate notice of weekly variations in work load and of unusual duties such as proctoring exams or taking part in field trips. A TA's period of responsibility extends from the beginning of lectures to the due date for course marks.

A TA's performance is monitored through observation by the faculty member responsible for the course and evaluated by means of the QUEST Departmental Course Evaluation survey completed by students in the course. The results of the survey will be made available to the teaching assistant on request to the course instructor.

If a graduate student's performance of duties as a teaching assistant is deemed to be unsatisfactory, the student will be informed of the nature of the problem in writing, together with suggestions for improvement. If the performance remains unsatisfactory, the assistantship may be withdrawn or the salary reduced. In such a situation, neither the Department nor the supervisor is obliged to replace the funds which the student thereby forfeits.

A graduate student may be asked by the Head of Department to take full responsibility for the teaching of a course. It is the responsibility of the Head to ensure that the student is qualified to accept this appointment and that the duty is performed satisfactorily. Such a student will normally be appointed at the rank of Adjunct Instructor, and

the stipend will be significantly above the level received by a student who is performing a support role as a teaching assistant.

d) Workloads and Resolution of Disputes.

It is recognized that some variation in the workload of teaching assistants in different courses is unavoidable. While the Department tries to keep this variation within reasonable limits, the indulgence of teaching assistants is appreciated. A TA who feels unreasonably burdened should take the matter up in the first instance with the course instructor and, subsequently, if necessary, with the Head of Department (see Section 15 (d), below).

6. Safety

a) Worker Safety

Under the Health and Safety Act of Ontario, safety of all employees in the workplace is the responsibility of both the employees (including supervisors and workers) and the Employer (Queen's). Queen's and supervisory staff can be charged by the Ministry of Labour in the event of death or critical injury to a worker. A student or visitor who is injured as a result of authorized activities could bring suit against Queen's and any staff or student involved in the activity. Workers (including teaching assistants and research assistants) are expected to comply with the Act and its regulations, to use all safety equipment required by the employer, and to report defects and hazards in the workplace. They are specifically constrained from removing or deactivating safety devices; from operating equipment in a way that could be hazardous to themselves or others; and from engaging in "horseplay" in the workplace.

Safety in the Department is monitored by the Departmental Safety Officer (Mr. Alan Grant) and the Departmental Health and Safety Committee. The Safety Committee comprises the Safety Officer (ex officio) and one member elected by each employee group in the Department (faculty, administrative support staff, unionized technical staff, and graduate students). The Committee elects a Chairperson from among its members. The Committee keeps a general watch over safety matters in Miller Hall/Bruce Wing, keeps workers informed of safety issues, and deals with reports of hazards received from workers. The Committee is independent of the administration of the University and has powers to ensure that safety hazards are dealt with in a satisfactory manner so that workers are not endangered. Workers are not required to work in conditions which they deem to be unsafe. Workers should promptly report safety hazards to the appropriate lab supervisor and then to the Safety Officer or the Safety Committee.

b) Laboratory Safety

Provincial legislation requires that all persons exposed to hazardous materials in the workplace be properly trained to recognize the hazards, take appropriate precautions to avoid exposure to such materials, and deal appropriately with accidental exposure should it occur. This legislation puts in place the Workplace Hazardous Materials Information System (WHMIS).

In order to work in laboratories that contain designated hazardous materials, individuals must undergo suitable training provided by the Employer. Queen's University's Department of Environmental Health & Safety provides such training for all employees whose work involves potential exposure to such hazards. **Graduate students employed as Teaching Assistants or Research Assistants fall into this group of workers.**

The Department requires that every incoming graduate student must successfully complete WHMIS training soon after arrival. Information about WHMIS can be obtained from the Departmental Safety Officer, Mr. Alan Grant.

Each laboratory in the Department has a designated supervisor (normally a member of the faculty). The supervisor is responsible for ensuring that anyone who works in the lab is aware of hazards that may be encountered therein. Before starting work in a research laboratory, a graduate student must seek permission to work in that lab. Such permission must not be granted by the supervisor until the supervisor has ensured that the student has the requisite knowledge of the potential hazards and appropriate safety practices relevant to work in that lab.

The Department has in place regulations governing the handling and storage of radioactive rock and mineral specimens. A student whose research involves such materials must abide by these regulations, a statement of which is available from the Curator of the Miller Museum or the Head of the Department.

c) Field Safety

Geological field work is inherently dangerous, and all members of the Department are encouraged to maintain a high level of vigilance against the hazards associated with work in rugged terrain and remote areas. Graduate

students are provided, upon arrival in the Department, with a brief statement on "*Safety in the Field*", a document entitled "*Accident Reporting*" which describes the procedures that must be followed to report an injury, and a copy of the booklet, "*Safety Manual: Mineral Exploration in Western Canada*", published by the British Columbia and Yukon Chamber of Mines (1989). Students are asked to sign a statement acknowledging receipt of these safety documents, and are strongly encouraged to read the booklet thoroughly. Students are required to practise its precepts at all times when in the field.

Students are also expected to ensure that they and their supervisors adhere to the guidelines set down in the Queen's University document "A Guidelines for Safety in Field Research".

This includes the preparation of a Safety Planning Record in advance of undertaking any thesis-related field work (<http://www.safety.queensu.ca/policy/activity/>).

Students who are participating in official Departmental field trips are required to wear suitable eye protection when rock hammers are in use, and to wear hard hats when at outcrops where there is a hazard from falling rock (especially road-side rock cuts).

d) Accident Reporting

Provincial legislation (Workplace Safety and Insurance Act) requires that work-related accidents be reported promptly to the Employer, so that the Employer can report the incident to the Workplace Safety and Insurance Board within 72 hours of the incident. Failure to report, and failure to report within the established time limit, can subject the Employer to substantial fines. This requirement applies to all injury-causing accidents, even those which may seem at first glance to be minor. **It also applies to accidents, which occur remote from the normal workplace (for example accidents in the field, even in another province or country).** All employees of the University (e.g., members of faculty, graduate students employed as teaching assistants or as research assistants engaged in thesis work, and persons employed as field assistants) are required to report injuries to the Department of Geological Sciences & Geological Engineering immediately, in order that the Department can report the incident within the 72-hour time frame.

A more detailed description of the procedures to be followed in the event of an accident is given in the Department's document, "*Accident Reporting*", a copy of which is given to each student upon first registration in a graduate program (see Appendix).

7. Office and Research Space

a) Office, Lab and Storage Space

The Department will provide office space for the period during which the Department has guaranteed financial support. The Administrative Assistant, Ms. Dianne Hyde, is responsible for assigning office space to graduate students. After this period (5 terms for an M.Sc. student and 12 terms for a Ph.D. student), the Department may no longer be able to provide office space. In this case the student's supervisor may provide a desk within the supervisor's research lab if space is available.

Keys are allocated by Dianne Hyde. A security deposit is levied when keys are handed out, and this will be refunded when the keys are returned.

Limited space is available in the "East Stope" (east basement of Miller Hall) for temporary storage of working collections of rock samples. Mr. Roger Innes is responsible for assigning such space. No materials should be deposited in the East Stope without his prior approval, and unauthorized deposits may be discarded without warning. All materials left in the storage area should be identified with the owner's name.

Before submitting the final copies of the thesis for binding, the student must clean up his/her office space, return all books to the library, return all borrowed keys and equipment, and sort and label rock collections that are to remain in the Department to the satisfaction of the Supervisor. Roger Innes should be consulted about storage of archive collections. Excess samples must be disposed of properly.

b) Security

Occupants of Miller Hall and Bruce Wing share a responsibility for building security. Incidents of petty theft by casual visitors have occurred in the past.

Occupants are strongly advised not to leave valuables at their work-places, and to lock their office door when leaving the room vacant, even momentarily.

If you as a member of the Department should encounter an individual whom you do not recognise as a legitimate occupant of Miller-Bruce, or an individual whose behavior is suspicious, you should either challenge the individual by asking their name and business in the building, or you should report your suspicions to a member of

the Departmental staff or to Campus Security (telephone 533-6111 or use the special security phones located in Bruce Lobby and in Bruce 4th floor corridor). It will be helpful if you can give a detailed description of the individual. **You are cautioned not to take any action that could put you in personal danger.**

Keys are issued to occupants of Miller and Bruce for their own use and are not to be loaned to other individuals at any time. Under no circumstances should you admit a stranger to the buildings during hours when the exterior doors are locked (normally 5:00 p.m. to 7:00 a.m. during weekdays and throughout weekends).

Under no circumstance are exterior doors to be propped open when they are locked!

8. Registration

a) Regular Registration

All registration, except for incoming students, is done electronically on QCARD. It is the responsibility of each student to ensure they keep themselves informed about the registration procedure annually. Information about registration is available early in the Spring and no one will be excused late fees because of absence from the Campus.

If you will be in the field and unable to get on QCARD to register, you should make arrangements with the Graduate School and the Registrar's Office to register early and pay your fees **before** you leave.

b) Late Registration

Students who register after August 15th will be charged a **Late Registration Fee of \$150 (Full-time) or \$50 (Part-time)**.

(c) Part-time Off-campus Registration

A change to part-time status may be considered if:

1. the student has been offered full-time employment (provide documentation); or
2. the student has been accepted in another full-time university program; or
3. the student has family, medical or other circumstances that make it impossible for the student to devote themselves full-time to their graduate program.

Application for permanent part-time status should be submitted with supporting documentation along with a request to be granted part-time fees. For a student who obtains a summer job, the same procedure must be followed. All applications for change to part-time status must be submitted to the Department and the Graduate School before leaving Campus. Please see Linda Brown for the appropriate form. No application for part-time status will be considered after the government enrolment count date for the term concerned (November 1, February 1, and June 30).

d) Failure to Register by November 1

The Provincial Government audits the University's enrolment as of November 1 each year, and the University's government funding is established on the basis of that count. Thus, registration after November 1 results in lost revenue for the University, and the University has adopted the policy of charging departments for this lost revenue. Consequently, it is the policy of the Department of Geological Sciences & Geological Engineering that **no student's registration form will be signed by the Head after November 1**. The effect is that a student who does not register by November 1 will be deemed to have withdrawn from their program of study and will be required to apply for readmission. Furthermore, the

School of Graduate Studies will charge such a student the **Late Registration Fee of \$150 (Full-time) or \$50 (Part-time) PLUS \$250 for missing the Provincial count date.**

e) Readmission

A student who fails to register and pay tuition fees for any term before the degree requirements are completed is normally considered by the School of Graduate Studies to have withdrawn from the degree program. Such a student will be required to apply for readmission. Upon readmission, the student will be assessed tuition fees at the appropriate current rate per term for the number of terms of lapsed registration (to a maximum of three terms).

9. M.Sc. (Two Year - Pattern I Research) Program Requirements

a) Research Supervisor

M.Sc. students normally select a Research Supervisor and a thesis committee from among the Department's faculty. In some cases, two faculty members may serve as co-supervisors. A thesis committee consists of two faculty members, inclusive of the supervisor(s). The supervisor(s) and thesis committee will oversee the student's program, including choice of courses and selection and execution of thesis research.

The student is responsible for ensuring that all other degree requirements are fulfilled prior to submission of the thesis.

b) Course Requirements

All M.Sc. (Research) students must complete the equivalent of two sessional (or four term-length) graduate courses with a minimum standing of 65% in all courses. In certain instances, graduate credit may be allowed for an advanced undergraduate (sessional or term-length) course. However, to conform with Ontario Council on Graduate Studies guidelines, students enrolled in a Pattern I MSc program are advised that only one of their four primary courses can contain more than 50% undergraduate students. Exceptions must be approved by the Supervisor(s) and the departmental Coordinator of Graduate Studies.”

The relevant Graduate Calendar statement can be found at:

<http://www.queensu.ca/calendars/sgr/pg338.html>

c) Thesis

The Supervisor(s) and thesis committee should ensure that a thesis proposal, outlining the scope and direction of the M.Sc. project, is prepared by the student for approval by the committee as soon as possible after initial registration in the M.Sc. program, no later than 12 months after the start of the program. A copy of this proposal is to be given to the Coordinator of Graduate Studies for inclusion in the student's file.

Final Submission of Theses:

The supervisor(s) shall nominate members for the Master's Thesis Examination committee and propose a date, time and place for the examination. The applicable departmental form is completed and signed by the supervisor(s) and the Departmental Graduate Coordinator.

The completed departmental form to schedule a Master's Oral Thesis Examination will be delivered to the departmental graduate assistant by the supervisor no later than 10 working days prior to the scheduled date of the examination. The departmental form will include a list of the examiners and the Chair of the committee, the date of the examination and its location. Notice of the examination will be emailed to all members of the Examining Committee.

A copy of the thesis will be distributed to each member of the Examining Committee no later than 10 working day prior to the examination. The delivery of the thesis is the student's responsibility.

Membership and Convening of Thesis Examination Committee: Doctoral Students

Membership and Convening of Thesis Examination Committee for Doctoral students shall follow the General Regulations of the School of Graduate Studies and Research.

Oral examination/thesis submission deadlines

Master's: 10 working days before the tentative examination date

Doctoral: 25 working days before the tentative examination date

<http://library.queensu.ca/webir/e-theses/sgs-index.html>.

-OR-

Go directly to the **QSPACE login page**, here:

<https://qspace.library.queensu.ca/ldap-login>

At the time of completion of degree requirements, the School of Graduate Studies will also accept a maximum of 2 paper copies for permanent binding.

The bound copies will be returned to:

i. Student (at address provided at time of submission)

ii. Supervisor (c/o Department)

Exceptions to submission of an electronic copy of the thesis will be made by the School of Graduate Studies on a case-by-case basis. If it is decided that no electronic copy can be submitted, at least one paper copy revised as recommended by the Thesis Examining Committee and finally approved by the supervisor/committee must be submitted to the School of Graduate Studies in fulfillment of degree requirements.

The student must prepare a satisfactory thesis and successfully defend it. The thesis should demonstrate that the candidate is capable of original and independent work, and it should be concise. It must conform to the standards of form that are acceptable to the Department and the School of Graduate Studies. Before preparing the thesis manuscript, the student should examine the document, *General Form of Theses*, which can be obtained from the Geological Sciences graduate secretary (Linda Brown) or from the web at www.queensu.ca/sgsr/index.html.

The student is required to give a brief presentation and defend the results of the research before an examining committee following submission of the thesis for examination. The examining committee normally consists of: the Chair of the Division (or delegate) who will act as Chairperson of the examination; Head of Department (or delegate); Supervisor(s); one or two other faculty from the Department; one faculty member from another department, or an examiner external to the university (subject to approval by the appropriate Division of the School of Graduate Studies and Research).

The examination is based primarily on the thesis although the student may be asked to demonstrate his or her background knowledge. The student should be:

- (i) fully familiar with all experimental or analytical procedures used in the thesis;
- (ii) prepared to discuss and defend all approaches to the problem, the procedure, the results, and the conclusions;
- (iii) prepared to discuss and defend the format and preparation of the thesis; and
- (iv) prepared to evaluate the significance of the results and to suggest further work.

d) Residence Requirements

While the Graduate School has no formal requirements for length of residence, to become fully involved in a field of study and to be satisfactorily in contact with members of the Department and students in the field, it is necessary to be studying on a full-time basis and be full-time on-campus for some part of the degree program. Programs must be

completed within 15 terms unless an extension is granted by the School of Graduate Studies upon recommendation of the Department, but such extensions are not guaranteed.

e) Language Requirement

Candidates proceeding by thesis to any degree are expected to become familiar with the literature of their subjects, in whatever language it is written.

10. The Master of Science in Applied Geology (Non-Research PATTERN II & III)

The **Master of Science in Applied Geology** is a one-year, course-based program leading to enhanced knowledge in mineral exploration/resource geology (Stream A) or geological engineering (Stream B). The program normally commences in September and can be completed by the end of April of the following year.

Application process

Potential advisors must be contacted prior to admission into the program. Applicants can find the list of available advisors on the departmental web pages. The Department limits the number of students into the program, subject to the availability of advisors. In addition to the normal academic qualifications required for entry to a Master's program, the Applied Geology program requires that candidates should have previous geological/geoengineering experience in industry or with government agencies.

Funding

There is no departmental or university funding available for Pattern II or Pattern III students. Candidates are expected to obtain external funding prior to admission in the program.

Courses

The M.Sc. in Applied Geology program is based either on a project pattern (pattern II) or a course work pattern (pattern III). Under the project pattern II program, a student is required to complete six half course credits, one of which must be GEOL-800*, and a project (GEOL-898). At least four courses must be taken in the Department of Geological Sciences & Geological Engineering. The project culminates in a written report.

The requirements for the course work pattern III program are eight half-course credits, one of which must be GEOL-800*, and at least four courses must be in the Department of Geological Sciences & Geological Engineering. Selection of courses is subject to Advisor and Graduate Coordinator approval. The student must obtain satisfactory standing in all courses.

PATTERNS II & III: The Master of Science in Applied Geology

This is a one-year, non-research program leading to enhanced knowledge in mineral exploration/resource geology or geological engineering. The program normally commences in September and can be completed by the end of April of the following year. In addition to the normal academic qualifications required for entry to a Master's program, the Applied Geology program requires that candidates should have previous geological/ geoengineering experience in industry or with government agencies.

The M.Sc. in Applied Geology program is based either on a project pattern (pattern II) or a course work pattern (pattern III). Under the project pattern program, a student is required to complete six half course credits, one of which must be GEOL-800*, in addition to a project (GEOL-898). At least four courses must be taken in the Department of Geological Sciences & Geological Engineering. The project culminates in a written report.

The requirements for the course work pattern program III are eight half-course credits, one of which must be GEOL-800*, and at least four courses must be in the Department of Geological Sciences & Geological Engineering.

Selection of courses is subject to Advisor and Graduate Coordinator approval. The student must obtain satisfactory standing in all courses.

Possible courses for each stream, as well as available advisors and caps on student numbers will be posted on our web site in September of every year for the subsequent year (e.g. Web post in Sept 2009 will advertise the Sept. 2010 program).

11. Promotion from M.Sc. to Ph.D. Program

Students showing exceptional potential and progress, and conducting a research project that can be upgraded to the Ph.D. level, may transfer directly from the M.Sc. program to the Ph.D. program, bypassing the M.Sc. thesis. The transfer must be done no earlier than the end of the student's second semester at Queen's, and no later than the end of the fifth semester at Queen's.

Students who wish to transfer to the Ph.D. program:

- If in Division III:
 - Should have completed at least 3/4 of the course requirements of the MSc. Program (3 of 4 courses). The remaining M.Sc. courses must be completed before the Ph.D. comprehensive examination. The normal Division III course load for a Ph.D. is 4 additional courses beyond those credited towards an M.Sc. In the case of a direct transfer to the PhD program this additional requirement is reduced to 3 courses (Division III regulations). Courses credited towards the M.Sc. requirements cannot be counted towards the Ph.D. The total course requirement in this case is therefore 7 half term courses.
- If in Division IV:
 - Should generally have completed all course requirements of the M.Sc. program. If such a requirement is not met (due to exceptional circumstances), the M.Sc. course requirements must be completed before the Ph.D. thesis examination
- Must maintain a minimum 80% average in Graduate courses
- Must have the support of their thesis supervisor(s), as well as commitments to funding the Ph.D. research.
- Must submit a written research proposal to the Graduate Coordinator that includes:
 - Problem definition and proposed methodology
 - Summary of completed work
 - Research plan for future work
 - Proposed budget outlining costs of research
 - Timeline outlining the main milestones and deliverables
- Must have the support of the department, which first entails establishing a "promotion assessment" committee. This committee will consist of a chairperson (normally the Graduate Coordinator), and four other members appointed by the Graduate Coordinator in consultation with the Head and the Supervisor(s). The four members will include the supervisor(s) and up to three others. The student must then formally present (in both oral and written form) the research proposal to the committee, who will evaluate the merits of the proposal as well as the qualifications of the student to undertake Ph.D. research (in a manner similar to the Ph.D. Comprehensive Examination). The Committee Chair will then prepare a report and make a recommendation to the Head.
 - For positive recommendation, the Graduate Coordinator will make a recommendation to the Graduate School on behalf of the Department. Three members of the "promotion assessment" committee then becomes the student's Ph.D. supervisory committee. The student who successfully transfers to the Ph.D. program is exempt from the Ph.D. Comprehensive Examination.
 - For negative recommendation, the student maintains his/her status in the M.Sc. program currently enrolled.
- **As per the School of Graduate Studies rule, a student who is fully promoted to the Ph.D. program may not revert to the M.Sc. program.**

12. Ph.D. Program Requirements

a) Supervisor(s) and Supervisory Committee

Ph.D. students normally select a Research Supervisor and a thesis committee from among the Department's faculty. In some cases, two faculty members may serve as co-supervisors. A thesis committee must consist of three faculty, inclusive of the supervisor(s). If necessary a committee may also be assigned by the Coordinator of Graduate Studies or the Head. A suitably-qualified individual who is external to the Department (e.g., a Research Scientist with the Geological Survey of Canada or a member of faculty of another university) may, with the approval of the Head, serve as co-supervisor or member of the thesis committee.

The supervisor(s) and thesis committee are responsible for monitoring the student's progress in the Ph.D. program, for advising the student on matters relating to definition and performance of the research, and for scheduling the Comprehensive Examination. The student is responsible for ensuring that all other degree requirements are fulfilled prior to submission of the thesis.

The thesis committee is not obliged to meet on a fixed schedule. It normally meets early in the student's program to discuss the student's background and possible coursework, and the language requirement. It also meets at the Comprehensive Examination. Other meetings may be called either by a member of the committee or by the student, as needed. If the student requests a meeting of the committee and the meeting is not held within a reasonable time, the student should inform the Head or the Coordinator of Graduate Studies who will ensure that the meeting is held. Each meeting of the committee should be recorded by a brief note (including a summary of decisions reached) prepared by the supervisor and lodged in the student's file.

b) Course Work

The Department has no minimum formal course requirement (beyond the M.Sc. program requirements) for Ph.D. students. Individual students may be counselled or required to take certain courses to rectify deficiencies in their background preparation as identified in the Preliminary Evaluation (below) or in the Comprehensive Examination (see below).

The relevant Graduate Calendar statement can be found at:

<http://www.queensu.ca/calendars/sgsr/pg338.html>

c) Preliminary Evaluation

The Department requires Ph.D. students to be evaluated by the supervisory committee at a meeting held early in the first term of the student's registration in the Ph.D. program. The committee may recommend that the student make up deficiencies identified at the evaluation meeting, by taking an appropriate course (or courses) for credit or audit.

d) Residence Requirements

While the Graduate School has no formal requirements for length of residence, to become fully involved in a field of study and to be satisfactorily in contact with members of the Department and students in the field, it is necessary to be studying on a full-time basis and be full-time on-campus for some part of the degree program. Programs must be completed within 21 terms unless an extension is granted by the School of Graduate Studies upon recommendation of the Department, but such extensions are not guaranteed.

e) Language Requirement

Candidates proceeding by thesis to any degree are expected to become familiar with the literature of their subjects, in whatever language it is written.

f) Comprehensive Examination

Ph.D. candidates with a conventional geological undergraduate background are expected to have a broad knowledge of the principles of the Earth Sciences as well as to display more in-depth knowledge of the fields associated with their own projects. Candidates without formal geological training will not be expected to display the same level of geological sophistication as students with such a background. The purposes of the comprehensive examination are:

- (i) to establish the candidate's general knowledge and
- (ii) to demonstrate to the examining committee that the candidate is capable of and has the clear potential for completing a satisfactory Ph.D. thesis in the chosen area.

Ph.D. students will normally take the comprehensive examination within one year of initial registration in the program and must do so within 18 months unless extenuating circumstances exist. The supervisor(s) or Supervisory Committee, in consultation with the student, will determine the appropriate time for the sitting of the exam.

The examination committee will consist of a chairperson and four other examiners appointed by the Head in consultation with the Coordinator of Graduate Studies and the Supervisor. The Coordinator of Graduate Studies or the Head of Department will normally chair the examination. The examiners will include the supervisor(s) and up to three others (normally including members of the candidate's supervisory committee and possibly including

appropriate members of other departments at Queen's or other institutions). The candidate may appeal the composition of the examination committee prior to the examination, if the possibility of a conflict of interest or bias is perceived. Such an appeal may be made personally or via the supervisor(s) to the Coordinator of Graduate Studies or the Head. The members of the appointed committee are obliged to familiarize themselves with the candidate's academic background as soon as possible.

The candidate must submit a typed research proposal to the Coordinator of Graduate Studies who will then schedule the examination for the time proposed by the student and supervisor(s). The proposal must be received at least three weeks prior to the proposed examination date. The actual examination date may vary from that proposed depending on the availability of committee members. The Chair of Graduate Studies will submit a form to the Graduate School prior to the examination attesting that the student has been provided with the appropriate information concerning the department's procedures, timing of the examination and the criteria used to judge the outcome of the examination.

The research proposal should be between 1000 and 3000 words in length exclusive of figures, literature references and appendices. It is recognized that some students may not have precisely defined their topic of thesis research. In such cases a general statement of the field of interest will suffice.

Immediately prior to the examination the examining committee will discuss the topics that each examiner intends to probe.

The examination should include a brief presentation (20 minutes maximum) of the research proposal and the scope and direction of future research. This will be followed by questions from the examining committee. These questions will be directed towards establishing that the candidate's general knowledge of the geological sciences and/or geological engineering is appropriate as a background for the more specific knowledge required by the research project. The general nature of the questions may be discussed between the candidate and the members of the examination committee prior to the examination.

Following the examination, the committee will sit *in camera* to discuss the candidate's performance. Each examiner will submit to the chairperson, in writing, an assessment of the candidate's performance on the examiner's own questions, a general assessment of the candidate's performance on the other examiners' questions, and a recommendation as to the result of the examination. This assessment should be based not only on the background knowledge displayed by the candidate but also on his/her ability to synthesize or analyze other scientific information. Examiners will also identify areas in which the candidate is deemed to be deficient, and will recommend corrective action. The committee will then discuss the results and come to collective judgment. The chairperson will prepare a written summary of the reports and will report the outcome of the examination and any conditions which the student must satisfy. This examination report will become part of the candidate's student file.

A Confidential Report is to be submitted directly to the Dean of the Graduate School after the examination by each member of the committee as well as the candidate. This report allows each participant an opportunity to comment on the conduct of the examination in light of the approved procedures.

The candidate may obtain a *pass with distinction*, a *pass*, a *conditional pass with identified deficiency*, or may *fail* the examination. Normally, the chairperson of the committee will inform the candidate about the outcome immediately after the examination. However, the committee may also defer its decision and invite the candidate to submit to a written examination on some or all aspects of the subject matter covered in the oral. Such a written examination will normally be taken within one month of the oral. In the case of a conditional pass with identified deficiency, the candidate may be required to take appropriate courses for credit. Such courses will be deemed to have primary significance to the student's program. The Committee may recommend other remedial action. The "conditional pass" status will be changed to "pass" once each member of the committee is satisfied that the deficiency has been corrected. The thesis may not be submitted for defence until the "conditional pass" status has been removed.

A student who fails the examination must withdraw unless, due to special circumstances, the examiners recommend that the student be permitted to retake the examination within six months. A student who fails this second examination must withdraw. The candidate may appeal the decision of the committee according to the procedures for appeal of a grade outlined in paragraph 15 of this guide.

A student who fails to complete the thesis within 21 terms, if granted extension, may be required by the Department to repeat the comprehensive examination.

The relevant Graduate Calendar statement can be found at:

<http://www.queensu.ca/calendars/sgsr/pg337.html>

g) Thesis

The student must prepare and defend a thesis which should demonstrate that the candidate has made an independent, original and substantial contribution to research in the field, and should be of such value as to merit publication. The thesis must conform to the standards of form that are acceptable to the Department and the School of Graduate Studies. Before preparing the thesis manuscript, the student should examine the document, *General Form of Theses*, which can be obtained from the Geological Sciences graduate secretary or on the web at www.queensu.ca/sgsr/index.html.

The thesis must be defended before an examining committee that normally consists of: Chairperson (Dean of Graduate School or delegate); Head of Department (or delegate); Supervisor(s); one or two members from the Department; one faculty member from another department; and an External Examiner from outside Queen's University.

The examination is based primarily on the thesis although the student may be asked to demonstrate his or her background knowledge. The student should be:

- (i) fully familiar with all experimental or analytical procedures used in the thesis;
- (ii) prepared to discuss and defend all approaches to the problem, the procedure, the results, and the conclusions;
- (iii) prepared to discuss and defend the format and preparation of the thesis; and
- (iv) prepared to evaluate the significance of the results and to suggest further research directions.

13. Collaborative Research

Graduate students are encouraged to publish results from their thesis research in the scientific literature. Since thesis research is usually supported through the supervisor's research grant(s), and the thesis research is usually a collaborative effort involving student and supervisor, some form of joint authorship is usually appropriate. The following policies represent the practice followed by many individual faculty members in Geological Sciences & Geological Engineering:

- (i) The graduate student is usually first author on publications arising directly from his/her thesis research.
- (ii) Where a significant amount of additional research or analysis is required to produce publishable results, or where the student does not contribute to the writing of the paper, the supervisor might be expected to claim first authorship.
- (iii) If a student expects to be sole author on publications based on all or part of his/her thesis research, this should be discussed in advance with the supervisor, keeping in mind the financial and intellectual contributions to the research program made by the supervisor.
- (iv) Students employed as research assistants for data collection or analysis should not expect joint authorship unless they have made significant original contributions to the research program.
- (v) Common courtesy demands that assistance received from Departmental professional, technical and clerical staff be duly acknowledged in theses or other publications.

While graduate students may consider research materials and data (field and lab notes, maps, analyses, photographs, etc.) and samples collected during the course of their research to be their property, the financial and intellectual contributions of the Supervisor(s) and the use of facilities provided by the University clearly give the Supervisor(s) and Queen's University proprietary interests in these materials. Such materials are not to be removed from the University without the expressed consent of the Supervisor(s) and the Head of the Department of Geological Sciences & Geological Engineering.

14. Academic Dishonesty

Queen's University and the SGSR in particular have policies regarding academic dishonesty, which includes

plagiarism. The relevant Graduate Calendar statement can be found at:

<http://www.queensu.ca/calendars/sgsr/pg335.html>

The Department expects all its members to uphold the highest standards of integrity in their work and it will follow the School and University guidelines in cases of apparent dishonesty. The first step is always to attempt to resolve the matter informally at the instructor/student/supervisor level.

15. Grievance and Appeal Procedures

The responsibility for academic decisions based on a course or a Ph.D. Comprehensive Examination rests with the instructor or the examining committee. Only the original examiner(s) may adjust a grade in the light of clerical error or of previously unknown extenuating circumstances which may have had a bearing on the performance of a student. If after reviewing a case the instructor or examining committee confirms the original grade, or submits one that leaves the student's status unchanged, no future action at other levels of the university can alter the grade. Appeals at higher levels (and actions resulting there from) must focus on (and reflect the answer to) the question of whether the circumstances justify the expunging of the grade from the student's record, or the waiving of Departmental or Graduate School Regulations.

a) Procedures for Appeal of a Grade

- (i) Within two weeks of learning of the disputed grade the student should meet with the instructor or Examining Committee and report the circumstances and issues on which the appeal for review is based. The Coordinator of Graduate Studies shall be informed by the student of the appeal and of its basis.
- (ii) The instructor or examining committee, after reviewing the grade in the light of the student's appeal, shall report the final grade to the Department Head who shall inform the student in writing of this grade. The Head shall also advise the student of the right to make a Departmental Appeal of the consequences of the grade.
- (iii) In the case of a disputed grade in a course offered in another department, the appeal procedures of that department shall be applied to establish the final mark.

b) Procedures for Departmental Appeal of the Consequences of a Grade

- (i) Within two weeks of being informed of the result of the appeal of his or her grade the student may make a Departmental Appeal of the consequences of the grade in writing to the Department Head. The Head shall in that case appoint the Coordinator of Graduate Studies or an alternate and three other members of the department to serve as a review committee. The review committee will advise the Head on whether the basis of the appeal justifies a recommendation of the expunging of the grade from the student's record, or of the waiving of Departmental or Graduate School regulations. The review committee may interview the student and the instructor or examining committee in reaching its recommendation. It is understood that neither the instructor nor any member of the examining committee shall serve on the review committee.
- (ii) On receiving the advice of the review committee, the Head shall advise the student in writing on whether the consequences of the final grade shall stand, and shall remind the student of the right to appeal to Division, and inform the Chair of the Division of the result of the Departmental Appeal.

c) Procedures for Appeal of the Results of a Thesis Defense

The mechanism for appeal of the academic decision of a thesis examining committee is specified in Regulation 8.8c of the School of Graduate Studies and Research.

d) Procedures for Grievance of Non-Academic Matters

A graduate student who perceives unfair treatment in assignment of duties relating to a teaching or research assistantship should in the first instance appeal informally to the faculty member directly involved (i.e. course instructor or supervisor). Such appeal should be lodged as soon as possible after the issue arises.

In the event that the dispute is not resolved to the student's satisfaction, the student should appeal to the Head of the Department. The Head or Coordinator of Graduate Studies may be consulted informally, but a formal appeal must be lodged with the Head in writing within two weeks of the failure to reach agreement with the faculty member. The Head will consult both parties (the student and the faculty member) and will attempt to resolve issues

relating to teaching/research assistantships by mediation. If the mediation process fails to yield agreement, the Head will rule on the matter.

The Queen's University Senate document, "Statement on Grievance, Discipline and Related Matters" (approved February 1976; published as a Supplement to Queen's Gazette, Vol. VIII, No. 32, 10 August 1976) describes the process of appeal beyond the Departmental level.

The relevant Graduate Calendar statement can be found at:

<http://www.queensu.ca/calendars/sgr/pg334.html>

QUEEN'S UNIVERSITY

Department of Geological Sciences and Geological Engineering**ACCIDENT REPORTING**

It is essential that any work-related accident involving Queen's University employees or students, on or off the university premises, and any accident that is not work-related but occurs on the campus, be reported to the appropriate University authorities as soon as possible. There are three reasons for reporting accidents:

1. The Workers' Compensation Act of Ontario imposes a legal requirement to report certain accidents (see below).
2. The University requires information about accidents involving third parties and accidents on university property because of the possibility of legal claims against it.
3. The Department (or University) must be informed of accidents so as to be able to correct unsafe conditions and educate personnel with the aim of preventing recurrence.

The question often arises, whether a particular accident is of sufficient severity or occurred in circumstances which necessitate its being reported to the University. This document addresses this question and describes the required reporting channels for a range of circumstances. The term "accident" here refers to a mishap which results either in obvious bodily injury requiring first aid or medical treatment, or in possible injury such that a medical opinion is needed.

The general rule is that you must report any work-related accident, regardless of where it occurs. An accident which is not work-related but which occurs on University property must also be reported. **If you are in doubt about whether an accident needs to be reported, then err on the side of caution and report it report it.**

Accidents should be reported as soon as possible after they occur. There is no excuse for delaying reporting of an on-campus accident beyond one business day. There is more latitude for reporting off-campus accidents (see below), but reporting should be done as soon as is practical.

A work-related accident which befalls an employee or student of the Department of Geological Sciences and Geological Engineering, either on or off the Queen's University campus, should be reported to the Departmental Safety Officer,

Alan Grant, Safety Officer
Bruce Wing, Rm. 456
Tel: (613) 533-2597/FAX: (613-533-6592)

or

General Office
Bruce Wing, Rm. 240
Tel: (613) 533-2597/FAX: (613) 533-6592

or their delegate.

A work-related accident that occurs on the campus should be reported immediately (within one business day). If such an accident occurs while the individual is away from the campus, whether in Canada or abroad (for example, while travelling to or attending a conference or while travelling to the field), it should be reported as soon as possible, preferably by telephone. An accident which occurs at a remote location, such as in the field, must be reported expeditiously, either by telephone or by mail. It is recognised that reporting such an accident quickly may be difficult, but you are expected to make the effort.

When reporting an accident, you must provide the following information:

1. Identity of the victim (name, Social Insurance Number, date of birth, home address, current address and telephone number).
2. Date, time and location of the accident.
3. Brief summary of the circumstances of the accident.
4. Name(s) of witness(es) (if any).
5. Nature of the injury.
6. Location where emergency treatment was received;
7. Name of attending physician.

An accident which occurs on University property but not in the course of University business (i.e., an accident that

Library Resources

The Liaison Librarian for Geological Sciences and Geological Engineering is Morag Coyne (morag.coyne@queensu.ca, x36975). The departmental library representative is Dr. Noel James. Library resources and services are available on the library's website: <<http://library.queensu.ca>>. Graduate students interested in group or individual consultations about their research (specifically, finding and/or organizing the research information they need) may contact Morag for an appointment.

a) Queen's Libraries

Queen's has six libraries housed in five buildings. Holdings for geology are kept in the Engineering & Science Library (Douglas building), and Stauffer Library. The Engineering & Science library houses geology books and journals. The Maps, Data and Government Information Centre (MADGIC), located in the basement of Stauffer Library, contains geological survey publications, topographic maps, GIS data and software, and air photos.

Geological maps and some geology books are kept in the Lindsley Earth Sciences Reading Room, located on the main floor of Bruce Wing. This reading room is open during the fall and winter terms, Monday to Thursday, 9 am to noon.

The online library catalogue, QCAT, contains the location records of all books, ebooks, journals, ejournals, databases, music, DVD's, government documents, and most maps at Queen's. The catalogue is available on the library's website <<http://library.queensu.ca>>.

b) Borrowing from the Library

- i) Your student card is your library card. Visit the circulation desk in any campus library to activate it. Queen's graduate students can borrow up to 100 library items at any time. Notices about your library record (e.g. fines and recalls) are sent to your Queen's email (@queensu.ca, NOT @geol.queensu.ca). Please check your queens.ca email to ensure you are receiving any library notices.
- ii) Loan periods vary from 1 hour to term loans, depending on the type of item you borrow. Term loans are due in mid-January, mid-May and mid-September, and are subject to recall after two weeks.
- iii) You may access your library account online to renew books, and view holds and recalls. From the library website <<http://library.queensu.ca>> click on **Renew Books and Check Loans**, and follow the instructions.
- iv) If Queen's Library does not have the books or articles you need, you may order these items through RACER, the interlibrary loan system <<http://library.queensu.ca/services/interlibrary/racer>>.

Photocopies of articles are \$3 each. This service is heavily subsidized by Queen's University Libraries. These fees may be charged against a Queen's grant code. The charge is submitted monthly and the article is mailed to your campus address. It is possible to pay by cash when the article is picked up from the Circulation Desk. You will be contacted by email or phone when your articles arrive at the Circulation Desk for pick up. For each item not picked up after 14 days, the \$3.00 charge will be placed on your library record.

Book loans are arranged with libraries outside Kingston for 3 weeks. There is no charge for this service. You will be contacted by email when the book is received from the lending library. All books must be picked up and returned to the Circulation Desk. A drop box is provided. Overdue fines are \$1.00 per day, per book.

- v) We welcome purchase suggestions for books, DVD's and journals. Please contact Noel James or Morag Coyne with your suggestions.

c) Specialized Resources

- i) The Library subscribes to thousands of online journals, e-books and databases. On-campus users can connect directly to these digital collections, but off-campus users may encounter subscription

barriers. Follow the **Connect from Off-Campus** link from any Library webpage to login and connect to these resources.

- ii) The Geology Subject Guide <<http://library.queensu.ca/research/guide/geological-sciences>> contains links to geology databases, geological surveys, geological societies and organizations, and selected online books.
 - iii) Graduate theses are available from several databases. Links to these databases may be found at <<http://library.queensu.ca/webeng/theses.htm>>. Queen's theses are available free to Queen's faculty and students.
 - iv) Queen's University requires students to submit their theses and dissertations (ETDs) electronically. Students can use the available MS Word template to write their theses, store and develop their thesis in a secure online environment (QShare), and submit their final, accepted thesis electronically (in PDF format) for archiving and distribution via the Queen's digital repository, QSpace. Further instructions may be found at <<http://library.queensu.ca/webir/e-theses/sgs-index.html>>.
- d) Miscellaneous
- i) Graduate students are entitled to up to ten, free, one-on-one writing tutorials at the Writing Centre during the Fall-Winter term, and up to six during the Spring-Summer term. Call the Writing Centre to book an appointment (613-533-6315) or visit their website <<http://www.queensu.ca/writingcentre/grad%20students.htm>> for more information.
 - ii) Queen's students may back up their work in Qshare, a free and secure online storage area. Personal accounts are free, and contain 200 MB of storage space. Extra space is available at cost. To set up your account, go to <<https://qshare.queensu.ca>> and login using your NetID and password. Your account will automatically be created for you. More information: <<http://www.queensu.ca/its/qshare.html>>.