Guidelines for Thesis Based MA, MSc, PhD

This document contains departmental regulations for the MA, MSc, and PhD degree programs in Geography, which supplements Academic Regulations from the Faculty of Graduate Studies (FGS) that are stated in the Graduate Calendar http://www.ucalgary.ca/pubs/calendar/grad/current/.

Students are also expected to be familiar with university policies and guidelines for graduate students provided on the Faculty of Graduate Studies website at: http://grad.ucalgary.ca/current.

Academic Standards

The policy for academic standards within the program, adheres to the guidelines of the Faculty of Graduate http://grad.ucalgary.ca/current/graduate-calendar.

Normally, students admitted to a thesis-based graduate program in the Department of Geography will be registered as full-time students and are expected to make an appropriate commitment (e.g., 40 hours per week) to program-related activities. Students who cannot fulfill a full-time commitment should consult with the Graduate Program Director about whether a change to part-time studies might be available to them, or if a leave of absence may be required.

Registration/Courses

The Graduate Calendar lists course requirements for each thesis-based graduate degree program in Geography. Course selection is determined via consultation between students and their supervisor. Registration is completed through the online Student Centre, accessible at http://my.ucalgary.ca. To maintain graduate student status, all students must register annually, regardless of whether they are taking courses or not. If you have any questions or concerns, please contact the Graduate Program Administrator at 220-4838.

Supervisors and Supervisory Committees

Typically, every graduate student admitted to the Department of Geography will have a supervisor identified at time of admission. Within the first four months of their graduate program, students are required to complete an Appointment of Supervisor form and a Student-Supervisor Checklist (both available from the Graduate Program Administrator). Copies will be retained on the student’s file.

Students also have the option to have a co-supervisor appointed, which should be done in consultation with the Supervisor.

Should a change in supervision occur, including the appointment of a co-supervisor, a Change of Supervision form must be completed by the Student and approved by Supervisor, Graduate Program Director, and the Dean of Graduate Studies.

PhD students are required to have a Supervisor Committee appointed by the Department, in addition to their Supervisor(s). Supervisory committees should consist of the Supervisor (and Co-Supervisor, if appointed), plus at least two additional faculty members.
Please refer to the Graduate Calendar for Academic Regulations regarding supervisors and supervisory committees. Further guidance is available on the Faculty of Graduate Studies website at: http://grad.ucalgary.ca/current/managing-my-program.

Graduate Thesis Proposals

All thesis-based graduate students in Geography are required to prepare an approved thesis research proposal as part of their program requirements. Normally, the thesis proposal will be defended by the Student prior to undertaking any substantive components of their thesis research.

Thesis proposals are detailed documents that outline the research that will be undertaken for the MA, MSc or PhD degree. The proposal must contain a statement of objectives, methods, and anticipated results, and must include a timetable and a budget section. The proposal represents a serious effort by all concerned to provide an initial 'road-map' for the research component of the graduate degree. Copies of previous thesis proposals are on file in the Department of Geography Collections Room.

MA and MSc students are required to prepare and defend their proposal before the end of the 12th month in the program. If the student does not have a Supervisory Committee appointed by the department, the Department will appoint a Thesis Proposal Examination Committee comprised of the Supervisor(s) plus two additional faculty members that are knowledgeable about the research area, one of which must be from the Department of Geography.

PhD students normally defend their proposal by the end of the 20th month in program. The thesis proposal and proposal defence constitute part of the Doctoral Candidacy Requirements. Further details about PhD Thesis Proposals and Defences can be found in the Geography Doctoral Candidacy Requirements document, on our Resources page: https://geog.ucalgary.ca/graduate/resources.

The oral defence of all thesis proposals is chaired by the Supervisor, who organizes rounds of questions from the examiners. A brief (15 minute) presentation by the student typically precedes the questioning, which must not exceed two hours duration. Proposal defences in Geography are not considered to be a formal examination, and typically the questioning allows for plenty of informal discussion regarding the research plan. The over-arching goal of the proposal defence is for the Student to receive valuable advice from their Committee to best prepare them to undertake their thesis research.

At the end of the proposal defence, the Committee is required to make a judgement about whether the proposal can be approved. The proposal may be placed into one of three categories: (i) accept without modifications, (ii) accept with minor modifications, or (iii) reject the proposal. Students are permitted one re-take of the thesis proposal defence.

Once approved, students are required to submit two copies of their thesis proposal to the Department within four weeks: one for the Department file and one for the Collection's Room. The Department will also accept the proposal electronically in Adobe PDF document. Failure to submit an approved thesis proposal after two attempts may lead to the student being required to withdraw from the program.

Doctoral Candidacy Requirements

Admission to candidacy for the doctoral degree is a judgment by faculty members in Geography that the student is prepared to successfully complete the requirements of the doctoral degree program.
Doctoral Candidacy Requirements for PhD students in Geography can be found on our Resources page: https://geog.ucalgary.ca/graduate/resources.

Further information regarding Doctoral Candidacy Requirements and Field of Study Examinations can be found on the Faculty of Graduate Studies website at: http://grad.ucalgary.ca/current/managing-my-program/examinations.

Annual Department of Geography Graduate Research Conference

In March of each year, all second-year MA and MSc and third or fourth year PhD students must participate in the Annual Department Conference, normally through the delivery of an oral or poster presentation. Participation in the Department Conference is a departmental program requirement, identified in the Graduate Calendar.

A committee of graduate students organizes the Conference. An announcement and call for abstracts is normally issued in February. All abstracts are compiled in the Annual Conference Proceedings and are distributed at the Conference.

Thesis Oral Examinations

The Graduate Calendar lists requirements and regulations regarding thesis examinations, and students and supervisors are expected to be familiar with this information. Further details, including examination policies, can be found on the Faculty of Graduate Studies website at: http://grad.ucalgary.ca/current/managing-my-program/examinations.

In consultation with the Student, Supervisors will schedule the Thesis Oral Examination through the Graduate Program Administrator no later than thirty days prior to the expected date of the Examination. Normally, a draft of the thesis must have been prepared prior to the scheduling of the Examination, and the Supervisory Committee (or if one has not been appointed, the Supervisor) must agree that the research is complete and that a defendable draft of the thesis can be provided to the Examination Committee within three weeks of the Examination date.

Thesis Guidelines

Requirements for theses are detailed in the Graduate Calendar. Complete information on the formatting, printing, submission and distribution of the thesis is contained in the Faculty of Graduate Studies Thesis Guidelines, available at http://grad.ucalgary.ca/current/thesis.

In addition to thesis requirements by the Faculty of Graduate Studies, the Department of Geography requires that two bound copies of the approved thesis be submitted upon completion. Your Supervisor(s) and committee may want a copy as well.

Program Milestones

MA, MSc students:

- Approval of a thesis proposal within the first twelve months in the program
- Research presentation at the Annual Department Conference in Year 2 of the program
- Completion of course work (see Graduate Calendar for details) within a two-year period
Four semesters of Geography 601 (Graduate Research Seminar)

Thesis Oral Examination, which normally takes place before the end of Year 2 of the program

PhD Students:

- Approval of a thesis proposal before the end of the 20th month in program (or 4 months prior to Field of Study examination)
- Completion of course work (see Graduate Calendar for details) within the first two years of the program
- Four semesters of Geography 601 (Graduate Research Seminar)
- Completion of the Field of Study Examination within the first 24 months of the program
- Research presentation at the Annual Department Conference in Year 3 or 4 of the program
- Thesis Oral Examination, which normally takes place before the end of Year 4 of the program

**Annual Progress Reports**

The Faculty of Graduate Studies requires that all students prepare an Annual Progress Report, which must be approved by the Supervisor and Graduate Program Director. The Annual Progress Report is assigned electronically (by email) to students in May and is due in September each year (the form is completed online through the Student Centre). The Report details the accomplishments of the student in the past academic year and provides a record of milestones achieved. Failure to provide an approved Annual Progress Report indicates lack of satisfactory academic progress and may have implications for scholarship or TA funding.

**Student Appeal Policies and Procedures**

Students are entitled to appeal any decision surrounding a program requirement, including grades from coursework or the outcome of program examinations (e.g., Field of Study Examination or Thesis Oral Examination). In all cases of appeal, the Student must first consult the Graduate Calendar, as well as their Supervisor and/or Supervisory Committee, for advice. Unless otherwise directed by the Graduate Calendar (e.g., Thesis Examinations, which a Faculty of Graduate Studies ruling, not a Departmental ruling), appeals should be made to the Graduate Program Director and/or Head of the Department. All requests for appeal must be received in writing no later than two weeks following notification of the contested decision, and the request must include compelling, clearly articulated reasons why an appeal is being requested.
Guidelines for MGIS Students

This document contains Department of Geography regulations concerning the course-based Masters of GIS graduate degree program, which supplements the Academic Regulations detailed in the Graduate Calendar (http://www.ucalgary.ca/pubs/calendar/grad/current/) The Graduate Calendar defines common rules and regulations for all graduate students at the University of Calgary. The additional regulations below are specific to students enrolled in the MGIS Program in the Department of Geography.

The MGIS graduate program is administered by the Department Head and the Graduate Program Director in the Department of Geography.

Courses

MGIS students are required to take ten courses in their program. These ten courses must include the five core courses (see below). The remaining five options will be chosen by the student and their supervisor, and will generally either build on the student's GIS skills or enhance their knowledge of their application specialty.

To enter the Core Courses (GIS: GEOG 647, Remote Sensing: GEOG 633, Spatial Modelling/Statistics: GEOG 639) the student must possess a strong background (e.g., minimum of one intermediate-level undergraduate course) and hands-on experience with the topics. The equivalent prerequisite would be two undergraduate courses for each core course topic area. If this background is lacking, the student must complete the "upgrade" course before enrolling in the advanced core course. These upgrade courses will count toward the ten courses taken in the program.

Core Courses: The five mandatory "core" courses that each student in the MGIS program must take are:
Geog 647: Advanced Research and Applications in GIS
Geog 633: Research and Applications on Remote Sensing
Geog 639: Advanced Spatial Analysis and Modelling
Geog 681: MGIS Project: Theoretical Issues
Geog 683: MGIS Project: Application

Upgrade Courses: Students without a strong GIS or remote sensing background will use their option courses to build their spatial analysis skills and experience.
Geog 603: Remote Sensing: Basics and Beyond
Geog 605: Statistics: Basics and Beyond
Geog 607: GIS: Basics and Beyond

Registration

Course selection is determined in consultation with the Supervisor at the beginning of the term admitted. Registration is done through the Student Centre. To maintain your status, you must register annually regardless if taking any courses. If you have any questions or concerns, please contact the Graduate Program Administrator at 220-4838 or geograd@ucalgary.ca.

Academic Standards
The policy for academic standards within the MGIS Program adheres to the guidelines of the Faculty of Graduate Studies (http://www.ucalgary.ca/pubs/calendar/grad/current/)

IT Account (https://ucalgary.service-now.com/it)

Student Report Procedures

1. At the end of their first term in program, all new graduate students are required to submit a First Term Progress Report and, if requested, meet with the Graduate Program Director.

2. The Annual Progress Report is a requirement of the Department of Geography. The purpose of this report is to provide an opportunity for the student and their Supervisor to review and discuss matters pertaining to their progress in the program. The review is meant to ensure the student receives evaluation and feedback of their progress in the MGIS Program, including guidance to improve their performance. It also provides an opportunity for the Department of Geography to monitor the progress and success of the students within the Program.

The First Term Progress Report is due in the 5th month of the student's program. The Annual Progress Report must be submitted annually every September until all program requirements are complete.

Appointment of a Supervisor

Each MGIS student should identify a Supervisor that has agreed to oversee their work at the time of admission. Students are permitted to switch supervisors during the course of their Program, if the switch is approved by the proposed new Supervisor, the existing Supervisor, and the Graduate Program Director. Please refer to the Graduate Studies website for changes to Supervisor http://www.grad.ucalgary.ca/current/managing-my-program/supervision

Comprehensive Oral Examination & Exit Requirements

The Supervisor is responsible for scheduling the final comprehensive oral examination, at the student's request, once all course requirements are fulfilled.

• All course work must be completed with final grades finalized before the exam can be scheduled. This includes Geog 681 and Geog 683.

• The Examination Committee consists of the student’s supervisor and two qualified examiners. The supervisor is the Chair of the committee. Examiners that are external to the Geography Department must be approved by the MGIS Director.

• Normally, three weeks before the examination is to take place, the supervisor is to arrange with the Graduate Administrator the date, time and location of examination. The supervisor is to provide the Graduate Administrator with the names and contact information of the other examination committee members.

• The Graduate Administrator will provide the examination committee members with the formal notification of examination and information on the courses the student has taken as part of their program. Course outlines/syllabi of the courses taken by the student can also be provided, on request
• The student is to supply the examination committee members with their MGIS final project, once the formal notification has been distributed. The final project is normally delivered to the examination committee two weeks in advance of the oral exam, however, it may be requested earlier from a committee member under certain circumstances. For guidelines on the formatting of the project, students can refer to the guidelines used for thesis http://grad.ucalgary.ca/files/grad/fgs-thesis-guidelines_aug2016.pdf

• The comprehensive examination is designed to determine if the student has achieved a comprehensive understanding of the breadth of topics covered throughout their course work of their program.

• The MGIS final project represents a major component of the student’s effort in the program and can serve as inspiration for questions for examiners. However, examiners are also expected to pursue questioning in any of the courses taken by the students. Normally, emphasis will be placed on the three core areas (i.e. GIS, Remote Sensing, Spatial Statistics). The chair of the examination committee is responsible for ensuring that questions remain relevant to the program.

• As the MGIS final project has already been graded in the Geog 681 and Geog 683 courses, the examination committee is NOT evaluating the project, only the performance of the student in the oral comprehensive examination.

• The student may give a short presentation (15 minute maximum) on their MGIS final project before the questioning begins.

• Questioning must be completed within two hours of the start of the exam.

• The outcome of the exam is either Pass or Fail. In the event of a Fail, a decision must be made on whether to allow a re-take of the exam (only one permitted) or to withdraw the student from the program. If a re-take is recommended it must be scheduled no sooner than two months from the original exam and no later than six months from the original exam.

• Immediately following the oral exam, the student will be verbally notified of the results. If the result of the exam is a Fail, the student will be officially informed of the outcome in writing by the Graduate Program Director.

• Within one month of the examination, the student must submit the following to the Graduate Program Administrator: (i) two bound copies and one digital copy of the MGIS final project, (ii) a printed copy of the final project poster and a copy on CD - all keys, lab cards and any other University property.

• Upon successful completion of the Comprehensive Examination AND completion of all Post Examination requirements, the department will notify the Faculty of Graduate Studies that all requirements for the MGIS degree program have been satisfied.

**Department Conference**

In March of each year, the Department of Geography holds its Annual Department Conference. MGIS students are required to participate, either orally or by poster submission, as part of their Program Requirements. Students are not required to be present at poster presentations, although this is encouraged if possible.
Appeal Policies and Procedures

All students have the right to appeal decisions regarding their program requirements. In all cases of appeal the student must first consult the supervisor for guidance. If the concern cannot be resolved with the Supervisor, students may submit a written appeal to the Graduate Program Director or Head of the Department. Written appeals must clearly articulate why the student believes a decision was unfair or made in error and must be supported with evidence. The Department will respond to student appeals within 10 business days. If the student is not satisfied with the judgement by the Department, they may advance their appeal to the Faculty (students should consult the Graduate Calendar for details on appeals processes).
General Information/Administrative Policies

Office Space

The student's supervisor is responsible for providing office space to thesis-based graduate students who require it for the program-related activities. Normally, thesis-based students are provided office space within their supervisor's research space. MGIS students share an office on the 4th floor.

Keys/Lab Access

Access is provided to office/lab space as required.

Long Distance Calls

The department absorbs the cost of monthly rental on the office telephones. All long-distance calls are considered as personal charges. For information regarding long distance access, please contact the Department Manager.

Postal Services

Graduate students have a shared space for incoming mail in the Geography Main Office. Incoming mail can be addressed to you, c/o Department of Geography, University of Calgary, 2500 University Drive NW, Calgary, Alberta T2N 1N4. All incoming mail should be related to program activities.

See the staff in the Main Office if you have outgoing mail that is related to program activities. Charges for outgoing mail services may apply.