

Abridged Guide to Graduate Studies in Biology at the University of Regina

The University of Regina's Faculty of Graduate Studies & Research (FGSR) continually updates rules, procedures and regulations. This document attempts to summarize some important FGSR regulations and also some specifics about the Biology Dept. Graduate programs; it's a hybrid document. In terms of FGSR regulations, this document is meant to serve as a quick-reference guide only; the authoritative version of *all regulations* is found on the FGSR website:

<https://www.uregina.ca/gradstudies/>

In general, we advise graduate students to take ownership of their program; please make sure that you know the course and credit requirements, FGSR regulations, procedures, and deadlines.

Biology Dept. Graduate Program Requirements

The Biology Dept. offers **thesis-based** graduate (MSc, PhD) programs. Both programs have course requirements (including seminars), but the major focus is on the graduate thesis.

M.Sc.

The MSc program consists of 10-16 credit hours of course work, and 14-20 credit hours of BIOL 901 (for a total of 30 credit hours). One possible, and common, program scenario would be:

- BIOL 887 - 2 credit hours
- BIOL 888 - 2 credit hours
- BIOL 8XX - 6 credit hours of graduate courses
- BIOL 901 - 20 credit hours of thesis research
- TOTAL = 30 (*after completion of 30 credit hours, register for "maintenance" hours*)

Additional graduate-level courses (BIOL 8XX) would decrease the credit hour requirements for BIOL 901 (*total credit hours remain at 30*). But, regardless of whether you take more than the minimum 10 credit hours of courses, never sign up for more than 6 credit hours in a semester; if you are taking two three credit hour courses in a semester, then don't sign up for anything else (which does not mean that you don't need to do anything else in that semester). Credit hours, especially BIOL 901, are simply an accounting tool used by FGSR; use BIOL 901 to round out the required credit hours for the program.

Supervision of M.Sc. Candidates

Supervisory Committee consists of:

- Student's supervisor(s).
- At least 1 additional member of the principal academic unit. Biology recommends a minimum of two committee members, in addition to the supervisor(s).

Biology also recommends that M.Sc. supervisory committees be in place within the first semester and should meet periodically to ensure satisfactory progress through the program. However,

FGSR regulations state that a Master's supervisory committee can be assembled as late as just prior to a defence.

Ph.D.

Typically the PhD program is entered following the completion of a Master's program. The Biology PhD program consists of 10 to 16 credit hours of course work and 44 to 50 credit hours of BIOL 901 for a total of 60 credit hours. One possible scenario would be:

- BIOL 887 - 2 credit hours
- BIOL 888 - 2 credit hours
- BIOL 801 - 3 credit hours
- BIOL 802 - 3 credit hours
- BIOL 901 - 50 credit hours of thesis research
- TOTAL = 60 (*after completion of 60 credit hours, register for "maintenance" hours*)

Additional graduate-level courses (BIOL 8XX) would decrease the credit hour requirements for BIOL 901 (*total credit hours remain at 60*).

Supervision of Doctoral (Ph.D.) Candidates

Supervisory Committee consists of:

- Student's supervisor(s).
- Two or more additional members from the principal academic unit.
- One internal/external member from a department other than the principal one.
- Graduate Coordinator (or alternate), who chairs committee meetings (this is a Biology Dept. regulation).

The Supervisory Committee is expected to be in place within the first year and *required to meet at least once annually*. An *annual written report to FGSR is also required*; the form for the written report is available in the "Forms" section of the FGSR website. Progress reports are signed by the student, the supervisor(s), and, in the Biology Dept., the Biology Dept. graduate coordinator. Completed forms are emailed to grad.executiveassistant@uregina.ca.

Transfer from a Thesis-based Master's Degree to a Ph.D. Program (FGSR Regulations)

Academic units are expected to reserve this option for only those students with demonstrated superior scholarly performance at the undergraduate and graduate levels. The request is to be vetted through the appropriate graduate committee in the academic unit and the recommendation is to be made by the Head (or Dean as appropriate). Only after an academic unit is satisfied that a prospective Ph.D. student has demonstrated a standard of excellence in study and research consistent with the requirements for the degree will a recommendation be forwarded to the Dean of FGSR.

The following conditions are to be met before a transfer request will be considered:

1. The request will normally be made between 12 and 24 months of full-time study towards a thesis-based master's degree. This is to allow sufficient time to evaluate both the course work and thesis research progress of the candidate.

2. The student's academic performance in undergraduate and graduate classes must be of uniform first class (i.e. 80% or more) standing. It is normally expected that such candidates would be at the level sufficient to obtain, or be in very serious contention, for a national award, if eligible.
3. The student's research progress during the period of the master's program under consideration must exceed normal expectations. Typically, a research report written by the student will be provided to support this claim.
4. The proposed Ph.D. research topic should be a natural extension of, or be closely related to, the master's research topic. Therefore, it is expected that in most instances the already completed master's research will form part of the PhD thesis.
5. The request must receive the approval of the candidate's supervisor(s) as well as the Head of the academic unit.

The completed recommendation for transfer will be sent to the Dean of FGSR for consideration. The proposed supervisory committee should be identified at the time the request is forwarded.

Other Information Related to Transfer to the PhD (regulations & Biology Dept. Practices):

- *There is a form called "Request for Transfer within a Graduate Program"; this form is available to students via UR Self-Service.*
- *Total program credit hours = 90 (this is an FGSR regulation).*
- *In the Biology Dept., the PhD supervisory committee must be identified and in place at the time of request for program transfer.*
- *The request for transfer to the PhD program must include a breakdown of the 90 credit hours, including how the already-completed credit hours (from the MSc program). This is an FGSR requirement.*
- *Any subsequent changes to the program must be approved by FGSR. Requests for changes to an approved program of studies must be initiated by the student, supported by the student's supervisor, the Graduate Program Coordinator and the Associate Dean (Grad) of the faculty associated with the program. The request should be made through UR Self Service -> Students -> Graduate Student Requests.*
- *The standard package that gets forwarded to FGSR is:*
 - *Request for Transfer within a Graduate Program form.*
 - *Memo from the supervisor, making the case the student requesting transfer is a superior student, with an outline of the credit hour breakdown, and describing the composition of the PhD supervisory committee.*
 - *Memo from the Graduate Coordinator or Dept. Head, stating they support the transfer.*

Academic Standards

FGSR regulations state that a grade of 70% is the passing grade for all normal graded course work for both M.Sc. and Ph.D. students; however, students subject to a qualifying or probationary period may be required to achieve a higher overall average in the required course(s).

Types of Graduate Courses, Number of Instructors

FGSR lists four types of graduate courses (for details, please see

<https://www.uregina.ca/gradstudies/current-students/grad-calendar/program-reqts.html#courses>):

- Graduate 800/900 level courses of specific title and description
- Graduate 800/900 Selected Topics Courses
- Graduate 800/900 level Special Topics or Directed Readings Courses
- Integrated courses

There are FGSR regulations about the distribution of course work between course types and instructors (from <https://www.uregina.ca/gradstudies/current-students/grad-calendar/reg-rules.html>):

- Up to half the course work in a graduate program may consist of non formalized Directed Readings/Special Topics courses. Therefore, at least half the program must be comprised of stand-alone or integrated courses.
- No single instructor, including a supervisor or co-supervisor, may teach more than 50% of the course work in a student's program.

Minimum Course Requirements – M.Sc. Biology

BIOL 887 - 2 credit hours in total (two registrations)

BIOL 888 - 2 credit hours in total (two registrations)

BIOL 8XX - 6 credit hours (= two regular courses)

BIOL 887 - All students must successfully complete two credit hours. One credit hour will be given for presentation of a departmental seminar (an “exit seminar”) based on the thesis research, to be delivered towards the end of the program. The second credit hour will be earned by participation in the Graduate Student Seminar Series. Please check the information on the Biology Dept. website for information regarding which semesters students should register for BIOL 887.

BIOL 888 - Seminars by invited speakers. All Graduate Students must register for two semester hours, but should attend each semester while in residence. This course is given in conjunction with BIOL 488 during the fall and winter semesters.

Minimum Course Requirements – Ph.D. Biology

BIOL 887 - 2 credit hours in total (two registrations)

BIOL 888 - 2 credit hours in total (two registrations)

BIOL 801 - 3 credit hours

BIOL 802 – 3 credit hours

BIOL 801 - A departmental committee will examine the candidate’s knowledge in the area(s) of Biology related to the student’s research proposal. Students will submit a comprehensive research proposal, which will serve as the basis for an oral examination. Graded as

Credit/No Credit. Required of all Ph.D. students, to be completed in the first 12 months of the program. *(Details about the format of the research proposal are available on the Biology website. For students who transfer from the MSc to the PhD programs, BIOL 801 must be completed within two semesters of the transfer).*

BIOL 802 - The student will write and present an in-depth literature review of current knowledge in an area of biology (selected in consultation with the department Head and supervisor). At an oral examination, a departmental committee will examine the candidate's knowledge related to the review. Assigned a numerical grade. Required of all Ph.D. students, to be completed in the first 20 months of the program. *(Details about the format of the review are available on the Biology website. For students who transfer from the MSc to the PhD programs, BIOL 802 must be completed within three semesters of the transfer).*

BIOL 801 and 802 collectively comprise the Biology Dept. "PhD Comprehensive Exam".

Registration Status

FGSR regulations require that domestic Master's students register in a minimum one out of three semesters; no more than two semesters may elapse between registrations. International Master's students must register as "full-time" (6 credit hours) in the Fall and Winter semesters, and can be registered as "part-time" in the Spring/Summer semester. PhD students (domestic and international) are full-time every semester.

Full-time

- registration in 6 credit hours or more in a semester;
- registration in GRST 995AA for post program for students who have completed course and other program credit hour requirements, but have not finished writing or defending the thesis/project/practicum;
- registration in GRST 996AA, for students who have received approval for an extension;

Part-time:

- Registration in less than 6 credit hours in a semester.
- Registration in GRST 995AB for post-program students using university facilities.
- Registration in GRST 996AB, for students who have received approval for an extension.
- Registration must be for a minimum of 3 credit hours for students who have credit hours remaining on their program

Note: scholarship eligibility, tax status, and student loan repayment status are all impacted by your status as full vs. part time. Make sure you understand the consequences of your particular situation.

Credit Hour Minimum and Maximum

It is not possible to register for fewer than 3 credit hours in a semester. The maximum number of credit hours in a semester is 12; special permission is required in order to register for more than 12 credit hours.

Registration Planning

Never register for more than 6 credit hours in a semester. For example, if you are taking BIOL 887 (1 credit hour) and BIOL 803 (3 credit hours), then register for 2 credit hours of BIOL 901.

If you are taking two regular courses (total = 6 credit hours) in a semester, then do not sign up for BIOL 901 (note: this does not mean that you are not expected to do any research that semester).

Registration in the Semester of a Thesis Defence

A student must be registered in the semester in which the thesis, project, practicum, or exhibition is examined. Students who are program complete will register in GRST 995 or 996 as may apply.

Submission of Thesis, and Relevant Forms and Procedures:

The thesis, with the forms listed below, can be submitted to grad.thesis@uregina.ca (please include the student name in the subject line) or paper copies can be brought to FGSR. The submission can be made by the student or the supervisor. The submission must include:

- The ready to defend thesis (as a PDF). (Once submitted, no further edits of the thesis are permitted until after the defense).
- Copies of your ethics forms if the research involves human or animal subjects

Required Forms:

1. **Committee Thesis Release Form** signed by all committee members, and the department head or designate, agreeing to the acceptability of the thesis to go to defence
2. **Nomination Form: External Examiner** - a current CV is required for nominees who are not accredited members of the U of R Faculty of Graduate Studies & Research (this includes all non-U of R examiners)
3. **External Examiner Conflict of Interest Form**
4. **Checklist for Submission of a Thesis Form**
5. **Lab Departure Checklist**

The *thesis and the forms #1 - #4* should be sent to grad.thesis@uregina.ca: form #5 is not submitted to FGSR. Either the student or the supervisor may submit the thesis and the forms. Forms #1 - #4 are available at <https://www.uregina.ca/gradstudies/forms.html>, while form #5 is available at <https://www.uregina.ca/science/safety/index.html>. Forms #1 - #4 may also be submitted as hard copies to FGSR (but do not submit a hard copy of the thesis).

Faculty of Science Lab Departure Procedure (Form #5): All departing graduate students (and other personnel) in the Faculty of Science must participate in the official lab departure process (see <https://www.uregina.ca/science/safety/index.html>). This is a Faculty of Science regulation, and is enforced by FGSR (e.g. the Checklist for Submission of a Thesis Form requires that the process be carried out).

The Lab Departure procedure involves a Biology Dept. technician and the soon-to-be-completed graduate student jointly inspecting the student's work and desk areas in order to fill out the Lab

Departure Checklist. The student's supervisor is welcome (encouraged) to attend the inspection, but this not obligatory. The Lab Departure Checklist states that keys must be submitted to Science Keys as part of the Lab Departure Procedure. However, in the Biology Dept. we do not insist that keys be handed back to Science Keys until after the graduate defence.

Research involving Humans or Animals: For students whose research has involved humans (somewhat rare in the Biology Dept.) or animals (common in Biology), the appropriate ethics approval forms must be submitted along with the thesis but not included in the thesis. All work involving humans (including simple questionnaires) must have prior approval from the U of R Research Ethics Board (REB), and work involving animals (including observation) must have prior approval from the U of R President's Committee on Animal Care (PCAC). Biology recommends that theses that include work involving humans or animals include a statement in the Materials & Section indicating that *the appropriate ethics approvals (REB or PCAC) were obtained.*

Length of Thesis (page limits)

M.Sc. - 50-110 pages of text

Ph.D. - 150-300 pages of text

Note: figures, illustrations, and appendices that push the thesis beyond the maximum are acceptable; the length limits refer to text. Also, please check the FGSR thesis formatting requirements; FGSR is very picky about thesis format (see https://www.uregina.ca/gradstudies/current-students/Thesis_and_Defense/Writing/index.html).

Attribution of Work (Biology Dept. Guidelines)

In a thesis it is important to be clear about the contributions of others. An attribution statement outlines the student's contribution to any collaborative work that has been included in the thesis, and clearly defines the work that was performed by others (e.g. data collection, analysis, writing).

The attribution may be included in various ways or places in the thesis:

- Acknowledgements section (but keep in mind that FGSR specifies that this section is maximum one double-spaced page).
- Separate section that comes after "Acknowledgements" entitled "Preface".
- For chapter-based theses, on the Chapter page.
- In the Materials and Methods section.

Thesis Oral Defence

MSc Defences

- Supervisor co-ordinates a date and time for the defence
- Supervisor arranges a Chair for the defence
- Supervisor completes Notice of Defence form after approval of thesis
- Chair, supervisor or co-supervisor, and at least 1 committee member must be present for the defence.
- The External Examiner must participate in the defence (video or telephone conference is acceptable).

PhD Defences

- FGSR co-ordinates a date and Chair for the defence
- FGSR completes Notice of Defence form after approval of thesis
- Chair, supervisor or a co-supervisor, and two members of the supervisory committee (other than a co-supervisor) must be present for the defence.
- The External Examiner must participate in the defence (video or telephone conference is acceptable).

The Chair of the examination committee is impartial and ensures that the treatment of the candidate is fair. The Chair is not an additional examiner, but rather is the facilitator of the examination process. The defence is a formal event, and appropriate conduct is required of all participants.

Timelines for Defence

Students should be aware that determining a mutually agreeable date for the examination might require additional time and should take this into consideration when planning for completion and graduation. *At least four weeks for master's candidates and six weeks for doctoral candidates is required from the time of submission of the draft of the thesis to the FGSR office to the date of the defence.*

Additional details about M.Sc. and Ph.D. defences are available on the FGSR website. Everyone involved in arranging a defence needs to understand that trying to organize a meeting with many busy people can sometimes be a challenge. It is recommended to get started on this process well in advance of the anticipated defence date, and perhaps to use Doodle or similar software to arrange a date and time.

Thesis Binding

Information about hard cover binding is available on the FGSR website (<https://www.uregina.ca/gradstudies/current-students/thesis-defence/thesis/FinishingAndDefending/PostDefence/thesis-binding.html>). Neither FGSR nor the Biology Dept. require submission of a hard copy of the thesis. Electronic copies of theses are made available via oURspace (<https://ourspace.uregina.ca>).

Time Limits for Completion of Program

Ph.D. - maximum of 6 years; 4-5 years is typical.

M.Sc. - maximum of 5 years; 2-2.5 years is typical.

Extensions to Graduate Program Time Limits

In general, Biology discourages the use of extensions. The specified maximum time limits for the graduate degrees should be sufficient (for MSc degrees, five years is in fact far too long in most instances). However, it is possible to apply to FGSR for a one-semester extension (note that it is

FGSR that makes the decision); this extension is often granted. A second extension is *sometimes* granted, while a third extension is *never* granted by FGSR.

Financial Support of Graduate Students - Dept. of Biology Policies

- The Biology Dept. requires that all incoming graduate students must be guaranteed a minimum stipend of \$18,000 (= total from all sources) for the first year of the program. “Self-funded” graduate students may be considered for admission, but this is an unusual situation and must be clarified in writing prior to admission.
- *Recommended* minimum ongoing stipend (i.e. after year one of the program): \$18,000 per year.
- Sources of funding: a combination of scholarships, TAsHips, and research stipends.
- Financial support package should be discussed in detail with your faculty supervisor(s) prior to starting the program, and financial arrangements (amount of funding, duration of funding) should be clearly documented in writing (see “Letter of Understanding” below). Funding is partially contingent upon availability of research funds, and is also contingent upon satisfactory progress through the graduate program.
- Students should check regularly for scholarship opportunities both within the University of Regina and elsewhere.

International Students

All international graduate students must fill out the **Verification of Academic Status for the Eligibility to Work on Campus** form prior to each semester in which they perform paid work on campus. This work includes TAsHips, but scholarships are not considered to be paid work. This form is available only in hard copy format, and only from UR International. Late submission of this form results in payroll delays, as payroll cannot be processed without this form.

Letter of Understanding – Dept. of Biology Policies

The Canadian Association of Graduate Studies (CAGS; <http://www.cags.ca/index.php>) strongly suggests that there should be a “letter of understanding” between each graduate student and supervisor (see “Best Practices” section of the CAGS website, which also includes a possible template for the letter); the Biology Dept. highly recommends this practice.

This letter should outline expectations and responsibilities for both the student and the supervisor, will be written by the supervisor, signed by both the student and the supervisor, and will be kept on file with the Biology Dept. Office. Note: this letter does not represent an official acceptance into the graduate program (a “letter of offer” may only come from FGSR), but rather represents an agreement between student and supervisor if the student is accepted into the graduate program by FGSR.

Tuition & Fees

The cost of tuition changes periodically; consult the Faculty of Graduate Studies & Research webpage for the most current information:

<https://www.uregina.ca/fs/students/fee-schedule.html>

M.Sc. Winter 2021

- Domestic: \$1,922.35 / full-time semester (tuition & fees)
- International: \$3,114.10 / full-time semester (tuition & fees)

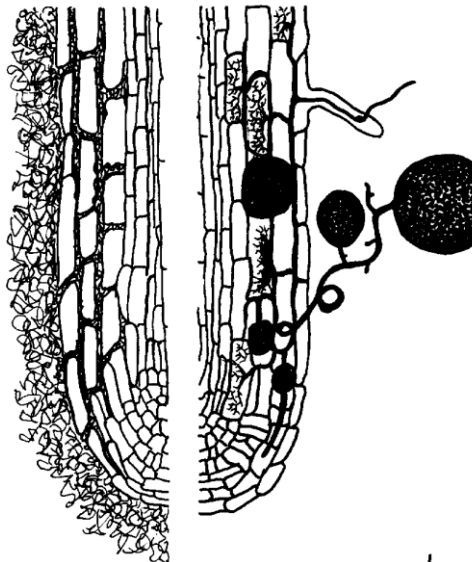
Ph.D. Winter 2021 (PhD students are always full-time)

- Domestic: \$2,064.10 / semester (tuition & fees)
- International: \$3,255.85 / semester (tuition & fees)

Additional Information & Special Circumstances

If you cannot find the information you need in this document, please consult with the Graduate Calendar, the Biology Graduate Coordinator or Department Head, and/or the Faculty of Graduate Studies & Research directly. You should keep your supervisor informed of your program status throughout your degree, and ask questions as necessary. Ultimately the responsibility to ensure that program requirements are met belongs to the student.

21 December 2020.



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