

Handbook of Procedures for Graduate Students

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Academic Procedures for MSc and PhD Students in Plant Sciences

Admission

You will find all the information you need to submit the online application for a graduate program in Plant Sciences at: http://grad.usask.ca/programs/plant-sciences.php#Program

<u>Application Requirements</u> – at the time an application is created, all required supporting documents are uploaded at: http://grad.usask.ca/admissions/how-to-apply.php#Applying

- Application form and \$120 CDN application fee
- CV or resume
- letter of intention indicating specific research interests and reasons for wishing to pursue graduate studies in Plant Sciences
- 3 confidential letters of recommendation (to be submitted directly from each referee)
- proof of English proficiency (international students only) meeting the fully qualified score in all four testing categories. This Department requires students meet higher standards of English proficiency than the minimum required by CGPS (https://grad.usask.ca/programs/plant-sciences.php#Admissionrequirements).
- official transcripts and degree certificates from all post-secondary educational institutions
- a confirmed commitment from a faculty member of a research project and funding (to be provided by the potential supervisor)

Students will be admitted to the College of Graduate and Postdoctoral Studies and Research (CGPS) only upon the recommendation of the Department of Plant Sciences. Recommendations are based on the evaluation of academic ability, availability of an appropriate supervisor, and establishment of suitable financial arrangements. To be admitted into an MSc program, students must have an undergraduate degree comparable to a Bachelor of Science in Agriculture (BSA) from the University of Saskatchewan. To be admitted into a PhD program, students must have an MSc from a university recognized as having standards comparable to those of the University of Saskatchewan. The option to transfer from an MSc program into a PhD program may be possible, but only on the basis a student demonstrates outstanding performance during the first year of the MSc program. The Department discourages University of Saskatchewan undergraduates from taking both their MSc and PhD in this Department.

2. Financial Assistance

It is the Department's policy that all graduate students must be assured a minimal level of funding from either scholarship or research funds provided by the Supervisor in order to assist with the costs associated with general living expenses. This funding does not constitute any tuition waiver. As of September 1, 2020, the Department minimum funding rates will be \$22,000/year for two years for MSc students and \$25,000/year for three years for PhD students. Any extension of funding will be at the discretion of the Supervisor and will be dependent on the status of the student's progress in their graduate program and the availability of funding. All students are encouraged to apply for scholarships in national competitions, from the College of Agriculture and Bioresources, or the College of Graduate and Postdoctoral Studies and Research. Students commencing a graduate program on a research stipend who subsequently receive a major scholarship will retain a minimum of \$5,000/year paid by the Supervisor above the departmental base stipend.

All students are responsible for paying their own tuition costs and student fees. However, the Supervisor will provide their international students a monthly payment in addition to their regular funding to cover the cost associated with the International Student Tuition Differential for a maximum of two years for the MSc student and three years for the PhD student.

The receipt of funding through a research stipend or scholarship is contingent upon a student's registration in the College of Graduate and Postdoctoral Studies and Research as a fully qualified, full-time student. Full-time students are expected to work 40 hours per week on their graduate program. International students must hold a valid study permit in order to receive funding. Immigration, Refugees and Citizenship Canada (IRCC) regulations allow international students with a valid study permit to work on or off campus to a maximum of 20 hours per week or full-time during scheduled school breaks, in addition to the 40 hours per week of the graduate program requirement. However, the College of Graduate and Postdoctoral Studies and Research policies state that full-time graduate students should not exceed a maximum of 12 hours per week of work that is not related to their graduate program of studies. The May to August (spring/summer) term is not considered a scheduled break as graduate students are under the continuous registration model. Scheduled breaks include Christmas, the February (spring) and November (fall) breaks, and statutory holidays.

3. Supervision and Advisory Committee Membership

Supervision of students during their course of studies is the responsibility of an Advisory Committee. In practice, the day-to-day supervision is carried out by the student's research supervisor who is a member of the Advisory Committee.

- a) **Supervisor** The Supervisor is generally a faculty member from the Department and a member of the CGPS. In cases where the student wishes to work with a scientist who is not a member of the College, this scientist may be named as Co-supervisor with a member of the Department also named as Co-supervisor. The Supervisor is expected to suggest the composition of the Advisory Committee and, in consultation with the student, recommend a research topic and course requirements. It is the duty of the Supervisor to see that appropriate examinations are arranged and that regular meetings of the Advisory Committee take place.
- b) **Chair** The Chair of the Advisory Committee will be appointed by the Department's Graduate Program Assistant (GPA) from members of the Department Graduate Student Committee. The Chair will sit on this Committee for the duration of the student's time in program and oversee all Committee meetings including the thesis defense.
- c) Advisory Committee The Advisory Committee should be appointed soon after the student's arrival. Membership will normally be limited to members of the CGPS faculty. In certain cases where qualifications warrant, permission may be obtained from the College to appoint a nongraduate faculty member to the Advisory Committee.

The MSc Committee makeup will include, at minimum, the designated Chair, the Supervisor(s) and one member from faculty in the College of Agriculture and Bioresources. The PhD Advisory Committees makeup will include the designated Chair, the Supervisor(s), and at least **two** other committee members, one of which should be a Plant Sciences faculty member. The Advisory Committee for the PhD student must also include one Graduate Faculty member from another department designated as Cognate Member. In the case of co-supervision, one additional committee member is required.

4. Graduate Student Advisory Committee Meetings

Graduate students are responsible for scheduling their Advisory Committee meetings. This includes the MSc pre-proposal meeting, MSc/PhD proposal meetings, MSc/PhD progress meetings and the PhD comprehensive exam. The GPA is responsible for scheduling the PhD qualifying exam and MSc/PhD thesis defenses.

Students must maintain good communication with their supervisor(s) and when it is determined that a meeting is required, the student will communicate with their Advisory Committee members to arrange for a date and time. The GPA will then be notified to arrange the room booking. Once all details of the meeting have been finalized, the student will send an email confirmation and an Outlook calendar invitation to all committee members and the GPA.

Student records will be monitored by the GPA to keep track of student meetings. If a student is delinquent in having a meeting scheduled that is due or overdue, the student and supervisor will receive a reminder from the GPA to schedule this meeting. Following all Advisory Committee meetings, it is important for the supervisor to submit the minutes in a timely manner in order to maintain the student's online record and Department student file with a progress report based on the minutes from the meeting.

- a) **MSc students** Within the first two to three months in program, the student will meet with the Advisory Committee (formerly MSc Entrance Interview) to select the initial coursework and present a Pre-Proposal, a brief synopsis of the proposed research. The student will receive feedback from the committee during the meeting and the student will then prepare a full research proposal to be presented to the committee for approval at a later date.
- b) **MSc and PhD students** A full proposal meeting is usually held six to nine months after entering the program. To facilitate the review process, the student must submit the proposal to their research supervisor for comments and approval before distributing it to the other Advisory Committee members. Failure to provide the proposal **at least one week** prior to the meeting could result in cancellation of the meeting. Upon approval of the full proposal, the project title, and Committee membership will be put forward to the Department Graduate Student Committee for approval. The Advisory Committee will approve program coursework, and the selected courses will be entered in **Degree Works** as the official **Program Planner**.

The student and Advisory Committee will meet at least once a year to review the student's progress. To facilitate these reviews, the student will submit a written progress report to the Supervisor and all members of the Advisory Committee. The progress report and any other documents to be discussed at the meeting must be provided to the Advisory Committee at least one week prior to the meeting. Generally, the Committee requires the student to give an oral progress report to further explain and describe the research progress. The Committee may recommend changes/additions to the student's program and changes to the research project. The Supervisor will then prepare minutes of the meeting to be submitted to the CGPS as a Progress Report. A copy of the report will be placed in the student's file.

Following the completion of the research project and all academic course work, the Advisory Committee will hold a **Permission to Write (PTW) meeting** with the student. The objective of the PTW meeting is to determine whether sufficient data have been collected for the degree

in question, the objectives of the research have been met, and to ensure that the data are of sound quality and the results are defendable.

The student will provide a report to the committee at least two weeks in advance of the meeting. The report will include the following, as a minimum:

- 1. Proposed Table of Contents for the thesis.
- 2. Introduction, hypotheses, objectives, methods, results, data analysis and presentation of data (tables and/or figures) for key research objectives, along with some synthesis, discussion and conclusions. The student should address whether the research hypotheses were accepted or rejected.

To make the report more complete, the student may include a detailed literature review section. A presentation of the report is recommended.

An agreed upon timetable to program completion needs to be included in the PTW meeting minutes. A preliminary list of potential External Examiners is to be included in the minutes.

5. <u>Program Requirements</u> (see Program Milestones, Appendix 1)

- a) **MSc** is a thesis degree program involving work on a specific research project. The MSc student is required to maintain continuous registration in PLSC 994 Research for the duration of the graduate program. The *expected* duration for time in program to completion is *two years*. Course requirements are for a *minimum* of nine (9) credit units of courses at the 800 level in addition to the PLSC 990 Seminar course and the GPS 960 Ethics and Integrity course. The Advisory Committee may determine if more courses are required if the student is lacking in the appropriate academic background. Undergraduate level courses may be added to a program in addition to the minimum graduate level course requirement.
- b) **PhD** is a thesis degree program involving work on a specific research project. The PhD student is required to maintain continuous registration in PLSC 996 Research for the duration of the graduate program. The *expected* duration for time in program to completion is *three years*. Course requirements are for a *minimum* of six (6) credit units of courses at the 800 level in addition to the PLSC 990 Seminar course and the GPS 960 Ethics and Integrity course. The Advisory Committee may determine if more courses are required if the student is lacking in the appropriate academic background. Undergraduate level courses may be added to a program in addition to the minimum graduate level course requirement.
- c) **PhD Transfer** students transferring from an MSc to PhD program must complete a total of fifteen (15) credit units of courses at the 800 level. This includes the nine (9) credit units of courses taken at the MSc level prior to the transfer.

6. Seminars

All MSc and PhD students are required to present two seminars while registered in their graduate program. Mandatory participation and one seminar presentation are required for the PLSC 990 Seminar Course. Students must register for this course from the start of their graduate program until they have fulfilled all the requirements and receive credit for the course. The second seminar to be presented is a requirement of the MSc or PhD thesis defense.

7. Ethics Course

The GPS 960, Introduction to Ethics and Integrity Course, is a mandatory, ethics course for *ALL* first year graduate students and must be successfully completed in the *FIRST* term. The purpose of this course is to discuss ethical issues that graduate students face during their time at the University. All students will complete modules dealing with integrity and scholarships, graduate student-supervisor relationships, conflict of interest, conflict resolution and intellectual property and credit. The course will be included on the student's academic record. This is an internet based course and students register through PAWS. The Course Reference Number (CRN) is listed under the subject menu on the Course Offerings Search page as Graduate Studies and Research. Deadlines to register are the same as for all other courses.

8. Academic Integrity

Integrity is expected of all students in their academic work - class participation, examinations, assignments, research, practicums - and in their non-academic interactions and activities as well.

What academic integrity means for students

- Perform your own work unless specifically instructed otherwise. Check with your instructor about whether collaboration or assistance from others is permitted.
- Use your own work to complete assignments and exams. If you are including work you have done previously, be sure to identify that work so it is clear what new work you are presenting.
- Follow examination rules.
- Cite the source when quoting or paraphrasing someone else's work. Discuss with your professor if you have any questions about whether sources require citation.
- Discuss with your professor if you are using the same material for assignments in two different courses.
- Be truthful on all university forms.
- Use the same standard of honesty with fellow students, lab instructors, teaching assistants, sessional instructors and administrative staff as you do with faculty.

Integrity in non-academic activities - Misconduct that disrupts the activities of the university or harms the legitimate interests of the university community could be the cause for non-academic disciplinary action.

Academic misconduct defined - Academic Misconduct is the term the university uses to describe cheating. Types of cheating are listed in the **Student Academic Misconduct Regulations** of University Council, https://secretariat.usask.ca/student-conduct-appeals/academic-misconduct.php#StudentAcademicMisconductRegulations

There is an onus on every student to become informed about academic misconduct.

Academic misconduct processes -

a) Informal procedure

Sometimes misconduct is the result of carelessness, misunderstanding of the rules, or miscommunication. The instructor should discuss the matter with the student informally, where possible. The instructor is to consult with the college's academic administrator to determine whether an informal resolution would be appropriate in the circumstances. If it is determined to be appropriate and the student concedes the misconduct, the instructor has the authority to impose one or both of the following penalties:

- Reduce the grade on the assignment or exam by a percentage appropriate to the degree of the academic misconduct, to as low as zero.
- Require the student to rewrite the assignment or exam.

A student who disagrees with the allegation of cheating or with the suggested penalty may request a formal hearing. An informal resolution of academic misconduct is recorded on a form signed by the student and the instructor that is then kept by the student's college for at least five years or until the student completes their degree program. Prior informal resolutions are used to determine if a subsequent offense should go to a formal hearing.

b) Formal procedure

For more serious misconduct, or in cases where the student disputes the allegation or the penalty, a college hearing board will hear the matter. Procedures for hearings are described in the Regulations. The hearing board has the authority to impose sanctions if the student is found to have committed academic misconduct, such as:

- reprimand or censure the student,
- reduce the grade on the assignment, exam, or entire course, to as low as zero,
- require the student to rewrite the assignment or exam,
- require the student to submit an essay or a presentation on academic misconduct,
- suspend or expel the student, and
- postpone, deny or revoke the student degree, diploma or certificate

A penalty imposed by a hearing board is reported to the student's college and to the university, and becomes part of the student's record. A finding of misconduct in research funded by an external agency is reported to that agency. Further appeal of a hearing board decision or penalty is permitted only on grounds of lack of jurisdiction, bias, substantial procedural error or new evidence.

https://secretariat.usask.ca/documents/student-conduct-appeals/process_revised_2017.pdf

9. Examinations

The scheduling and format of all examinations is the responsibility of the Department. Examinations may differ from those given in other departments, but must meet the general regulations of the CGPS. Oral examinations are intended to determine the level of the student's factual knowledge and the extent to which that knowledge can be applied to problem solving. Students will be evaluated by the quality of answers they give. Students who, in the majority opinion of the Examining Committee, have a sufficiently high level of knowledge and a sufficient ability to apply that knowledge will be judged satisfactory; those who are deficient in knowledge or weak at application will be judged unsatisfactory.

a) **PhD Qualifying** – The PhD Qualifying Examination is conducted within three months of the student's admission by an examining committee comprising the student's Advisory Committee. The purpose is to evaluate the student's background and determine if the student has the potential to obtain sufficient knowledge of the chosen general field of study to proceed in a PhD program. This exam may be waived for students with an MSc degree from this university. The exam may be repeated once. A repeated exam will include a written portion.

The student is expected to answer general questions on all aspects of plant sciences and more specific questions in the area of specialization. The Committee Chair will assign specific areas for questioning to each Examiner.

- b) **PhD Comprehensive** The purpose of this exam is to determine whether the student has a mature and substantive grasp of the field as a whole. It covers a broad aspect of the appropriate disciplines and is used as a means of judging whether the student has adequate knowledge in the field of research and can apply this knowledge to problem solving. This exam will come at or near the end of course work and at least one year before anticipated completion of the PhD thesis. The Supervisor, in consultation with the Committee Chair, will assign areas of questions to each member of the Examining Committee. The student should have at least 60 days' notice of the areas of questioning prior to the exam. The exam may be repeated once with the permission of the Disciplinary Committee of the College. When repeated, it will consist of a 6-hour written exam. Additional course work may be required before the exam can be repeated.
- c) **MSc Thesis Defense** The student is responsible for providing sufficient copies of the final thesis to all Advisory Committee members for review in order to receive permission to proceed with scheduling of the thesis defense. The evaluation of the written thesis and the oral examination of the student are carried out by an Examining Committee consisting of the Advisory Committee and an External Examiner selected by the Advisory Committee. If possible, the External Examiner should be a member of the Graduate Faculty or University academic community. If required, a recommendation may be submitted to the CGPS for approval for a person to serve as an External Examiner who is not a member of the Graduate Faculty or University academic community and must include the person's CV. The External Examiner represents the Dean of the CGPS as a voting member of the Committee, and provides the Dean with a report of the exam.

Notice of the MSc thesis examination must be given to the CGPS a minimum of *three weeks* prior to the scheduled defense. The defense will include a 25-30 minute seminar presentation by the student and will be followed by the oral thesis examination. The student will be asked general questions on all aspects of plant sciences as well as those specific to their thesis. The Examining Committee will determine if the thesis is satisfactory in form and content and if the student's defense was satisfactory.

d) **PhD Thesis Defense** - The student is responsible for providing sufficient copies (hard copy or electronic) of the final thesis to all Advisory Committee members for review. Once the Committee has determined the thesis is ready to proceed with the defense examination, a Memo to Schedule a Defense is submitted to the CGPS via the CGPS Service Desk. A CV of the first choice for External Examiner and the student's thesis will be submitted with the Memo. The Examining Committee will consist of the Dean of Graduate Studies and Research (or the Dean's designate), the External Examiner, and the Advisory Committee.

Notice of the PhD thesis examination must be given to the CGPS a minimum of *five weeks* prior to the scheduled defense. The defense will include a 25-30 minute seminar by the student and will be followed by an oral examination. The Examining Committee will determine if the thesis is satisfactory in form and content and if the student's defense was satisfactory.

e) Transfer from a MSc to a PhD Program - In cases where a student is enrolled in a MSc program, where outstanding academic and research performance is evident, consideration may be given to transfer to a PhD program. Transfer from an MSc program to a PhD program shall take place after the end of the first year and no later than the end of the second year in the program. Recommendation to transfer must be initiated through a formal meeting of the student's Advisory Committee, which will forward its recommendation through the academic unit to the

CGPS. The following conditions must be met:

- The student shows great promise both in terms of academic accomplishments and in potential for research.
- The student has completed at least 9 credit units at the 800-level, and has achieved a minimum average of 80% and no grade below 70%.
- There is evidence of good writing and oral communication ability.
- There is evidence the student has requisite research skills and knowledge to be able to successfully complete a PhD dissertation.
- The student has successfully completed a PhD Qualifying Examination prior to being recommended for transfer. For this qualifying exam, the Examining Committee are the members of the MSc Advisory Committee. It is recommended by the CGPS to invite the proposed PhD Cognate Member to participate. This examination for the purposes of transfer can only be taken once. A student failing the Qualifying Examination or any part thereof cannot be recommended for transfer.

10. Other Training

At the start of the graduate program and at the earliest intake date available, students are required to take two safety courses, *Safety Orientation for Employees* and *Laboratory Safety*. The student's Supervisor may also recommend other courses beneficial to a student's particular needs (*Safety* channel in PAWS). In addition, students are responsible for making themselves aware of any health and safety issues relevant to their particular workplace. Students are responsible for seeing that no hazards are created to themselves, to others, or to any property through unsafe use of chemicals and equipment. The Supervisor of each student is responsible for seeing that the student understands the risks involved in use of materials both in the laboratory and the field. A student must not work alone after normal working hours if carrying out a potentially hazardous experiment such as working with toxic, volatile or radioactive chemicals, or working with equipment such as tractors and combines. Students who carelessly endanger life or property will be severely reprimanded.

Non-credit courses and workshops, professional skills development, critical thinking and teaching strategies are available to graduate students through the Gwenna Moss Centre for Teaching Effectiveness: Graduate Student and Postdoc Teaching https://teaching.usask.ca/teaching-support/graduate-teaching.php#CoursesandWorkshops.

11. Final Year in Program and Extensions

The Time in Program set by the CGPS allows for the MSc program to be completed in five years and the PhD program to be completed in six years. If the student is at the end of year four in the MSc program, or five in the PhD program, and entering into their final year in Time in Program, CGPS policy requires a "Schedule for Completion" of the graduate program to be developed by the student and the Advisory Committee prior to the start of the final year of study. The format of the "Schedule of Completion" should be submitted as a Progress Report. Requests for time extension should specifically address the question of why the "Schedule of Completion" was not followed. Students requesting an extension to time in program must complete the Request for Extension to Time in Program Form. The request must be approved by the student's supervisor and Advisory Committee and the Department Graduate Chair. Extension requests are approved by CGPS and only one request per student will be allowed. If the student does not complete their program by the end of the

extension period they may be required to discontinue their program.

A student on extension to Time in Program is expected to be working full-time on the graduate program in order to complete requirements as soon as possible. Employment is not considered a valid reason for requesting or granting an extension. As full-time students, those on extension will be charged full-time student fees.

12. Steps in Preparing for Thesis Defense

- a) Thesis requirements are outlined in the Graduate Calendar and the Graduate Student Handbook. Students are advised to familiarize themselves with these requirements. The supervisor will guide the student regarding progress, thesis preparation and publication, and should discuss this at the outset of the Program of Studies. It is expected that the student's research will result in publishable data. For published papers, or papers submitted for publication which follow a common theme, the student will be the first author on all publications used in the thesis. A draft manuscript should be completed as soon as the experimental work and analysis are completed, but in no case later than six months after the submission of the thesis, after which time first authorship may be assigned to the person drafting and submitting the manuscript for publication. Typically, general introduction and general discussion, and general conclusion sections will be written so that the thesis forms a body of work constituting an integrated whole.
- b) Once the research work is completed and the thesis outline prepared by the student, the Advisory Committee must meet with the student to consider the adequacy of the research, review the thesis outline (proposed table of contents), and consider possible candidates to serve as the external examiner. The Committee can then grant the student 'permission to write'. (https://students.usask.ca/graduate/thesis-preparation.php)
- c) Once the thesis is completed to the satisfaction of the Supervisor(s), the final version (including any recommended revisions and editing) is to be distributed to all members of the Advisory Committee. Committee members will then indicate whether they are of the opinion that the thesis is ready for release to an External Examiner. When selecting an appropriate individual to serve in this role, the CGPS requires that the External Examiner have an arm's-length relationship to both the Supervisor and the student. The Supervisor should check with the selected External Examiner to assure willingness to serve and to secure a date for examination.
 - For the MSc defense, one copy of the final thesis will be sent to the External Examiner by the GPA. For the PhD defense, one electronic copy of the final thesis is submitted to the CGPS. That office will then forward a copy to the External Examiner and one to the Dean's Designate. In both instances, the student must NOT make contact with the External Examiner.
- d) For both an MSc and PhD thesis examination, once all Advisory Committee members indicate the thesis is ready for defense, the Department will submit a Memo to Schedule a Defense to the CGPS via the CGPS Service Desk indicating the proposed Examining Committee and the selected External Examiner. For a PhD thesis examination, the Department must also submit a CV for the proposed External Examiner.
 - The CGPS provides reimbursement to a maximum of \$2,000 for travel expenses incurred by the External Examiner for a PhD defense. The matter of covering any additional expenses must be discussed with the Department Head prior to submission of the Memo. There may also be consideration made by the CGPS for reimbursement for an External Examiner travelling to

participate in an MSc defense.

e) For a PhD defense, the student must prepare a dissertation summary and submit it to the CGPS at least seven days prior to the defense.

13. Procedures Following Thesis Defense

Students should submit their Application to Graduate. This can be submitted prior to the defense. Following a successful defense and completion of all recommended revisions to the thesis:

- a) The student is required to submit an Electronic Thesis or Dissertation (ETD) to the CGPS site http://etd.usask.ca. The ETD procedure is as follows:
 - Convert final approved version thesis or dissertation to Adobe PDF
 - Go to ETD website
 - Log in using the username NSID@mail.usask.ca and password
 - Enter fields with biographical information
 - Attach PDF of thesis
 - Click on "submit" button and wait for "Approved" email

If a thesis is formatted correctly, the student will receive an automated "approved" email (this is also sent to the Advisory Committee members email addresses). If there are issues that need to be addressed, the student will receive an email stating fixes required.

- b) Students are also required to upload a completed and signed GPS 404 Final Thesis Confirmation Form along with their thesis on the ETD site.
- b) Students hold copyright to their thesis. They are expected to include in the front of their thesis a statement in paragraph form granting permission to use the thesis under specifically stated conditions and indicting the address of the position, department, or college to which requests for such permission should be sent.
- c) The student and Supervisor are required to retain copies of the raw research data for a period of seven years following completion of the degree.

14. Intellectual Property Rights

Intellectual property is the term used to describe the creative results of research and scholarly activity which may have immediate realizable value or value upon further development and commercial use or production. It may take various forms, such as patentable discoveries and inventions, copyrightable works (books, painting, photographs, computing software, graphics, etc.) non-patentable technical know-how and trade secrets. University faculty and staff assign intellectual property ownership rights to the University on appointment. The Department of Plant Sciences applies the same principle to graduate students. By definition, within the terms of external funding, any Intellectual Property (IP) rights remain with the University.

General Information for Graduate Students in Plant Sciences

1. Safety and Emergency Regulations

- a) Fire In the event of a fire;
 - Pull an alarm station **AND** dial 9-911 (from a campus phone) or 911 from a cell phone. Give details of fire Building, Room number, et cetera.
 - Dial 5555 (from a campus phone or 306-966-5555 from a cell phone) to alert campus personnel.
 - Meet firefighters at nearest entrance and direct them to fire.

 If the fire alarm sounds (more than ten seconds) you must leave the building immediately.
 - Leave in an orderly fashion by the CLOSEST SAFE EXIT.
 - OBEY THE FIRE MARSHALLS (Lists posted on bulletin boards).
 - DO NOT USE ELEVATORS.
 - Leave all DOORS CLOSED BUT NOT LOCKED.
 - TEACHING STAFF are responsible for the evacuation of all students in their class/lab at the time of an alarm.
 - Assist HANDICAPPED PERSONS to evacuate. If not possible, wait with them until firefighters arrive.
 - If evacuation is impossible, WAIT IN A ROOM THAT HAS A WINDOW AND IS CLOSE TO A STAIRWELL.
 - DO NOT RE-ENTER THE BUILDING until permission has been given by the Fire Department, the Chief Marshall or the Vice-Marshall.
- b) Accidents In the case of a serious accident where someone can be in danger from bleeding or respiratory failure, it is important to get them to the Emergency Department either by private car or ambulance (phone 9-911 from a campus phone or 911 from a cell phone). If the victim is at risk through movement (broken bones, internal injuries), keep the victim warm until arrival of qualified medical personnel (phone 9-911 from a campus phone or 911 from a cell phone).

All accidents involving injury must be reported immediately to the Head of the Department. First aid kits are available in the Mail Room (Agriculture 4D26), the Coffee Room (Agriculture 4D38) and in various laboratories (see up-to-date list on the Health and Safety bulletin board in the hallway beside main office).

2. Keys

Keys, as required and as approved by the Department Head, may be ordered through the Department Main Office. Keys are stamped with a personal identification number and must not be loaned to other users. All keys (including mail key) must be returned to the General Office on completion of studies in order to clear the University's security record for the student. File cabinet keys should be left in the student's office. Students should leave a forwarding address when they leave.

3. Space Allocation for Students

- a) Office space Graduate students are assigned an office for up to two and one-half years (MSc) or four years (PhD). In the case of an MSc student transferring to a PhD program, one additional year of assigned office space will be provided (five years). After that, students are provided with access to shared office space (scramble format) in Agriculture 4Do3 and have a locked filing cabinet (2nd floor) for a maximum of 12 months. After that point, the Department no longer guarantees access to office space. Lockers may be available in the Agriculture Building through application to the Dean's office.
- b) Laboratory space and equipment The field and greenhouse research areas are considered laboratory space and are subject to the same general regulations as laboratory and phytotron space in the Agriculture Building, the Crop Science Field Laboratory, the Horticulture Field Laboratory and the Kernen Crop Research Farm. All space and equipment is property of the University of Saskatchewan, but is not available for general usage without specific permission, scheduling and supervision. Students must arrange for the use of laboratory space and equipment, including vehicles, through their Supervisor. The Supervisor will make necessary arrangements (including financial) with the laboratory supervisor, the Growth Facility Committee, the Phytotron Manager, the Field Experiments Committee, or the Horticulture Field Experiments Committee. Requests for field space must be made early to facilitate evaluation by the Committees and assignment by the Field Superintendent. The Field Superintendent is responsible for allocation of all field research equipment.

Students using field and growth facilities are responsible for arranging control of weeds, insects and rodents. The use of pesticides and herbicides in growth chambers and greenhouses must be approved by the Chair of the Growth Facilities Committee or of the Field Experiments Committee and applied only by qualified staff. All users must clean laboratory space, growth rooms, storage areas, etc. during and after use.

Students cannot expect assistance from department technical staff or summer students. They are encouraged to share work with other students for their mutual advantage.

4. Graduate Student Administrative Services, Telephones, Faxes, Email and Supplies

The Graduate Student Administration Office, Agriculture 2D14, is one of two offices of contact for graduate students in Plant Sciences. The Department **GPA** is located here. This office will be the main contact area for any information or administrative assistance required relating to the actual graduate program. The scheduling of all examinations and defenses, as well as all data entry and updates for each student's graduate file will be done through this office

Upon arrival in the Department and at the initial start of a graduate program, all students will check in with this office to obtain an official 'Letter of Offer' which provides information on the length of term of the graduate program, the funding amount to be provided, and information pertaining to taxes and deductions. International students are required to provide a copy of their study permit and should apply for a Social Insurance Number (SIN) in order to receive employment funding. A copy of the SIN must then be provided to the Graduate Student Administration Office.

The Plant Sciences General Office, Agriculture 4D36, is where the Department *Operations Assistant* is located. This office will be the main area of contact for inquiries of a more general nature considered

non-program related, such as office assignments, ordering of keys, picking up mail and acquiring a photocopy account. Graduate students requiring approval for travel to scientific meetings and conferences must complete an Authority to Travel and Travel Expense Claim form and have these forms approved through this office. Students must provide their own stationery/office supplies and postage for correspondence. Students may use the Campus mail system for on-campus correspondence.

The Supervisor will cover the costs for photocopying required for research purposes only. Students should obtain a user code in order to access one of the Department's copy machines (Agriculture 4D87 or 2C31). Copy totals will be recorded every three months and charged back to the Supervisor's research account. For access to copiers outside of the Department, copy cards may be purchased at the Main Library and the Place Riel Kiosk.

Students are responsible for all costs relating to preparation of all copies of preliminary and final drafts of their thesis (including photographs and photocopying), and all binding expenses.

Long distance telephone charges cannot be accepted by the Department. Students should not use staff telephones and should not direct calls to staff telephones.

5. Computer Laboratory Facilities, Access and Printing

All graduate students have access to the Department Graduate Student Computer Lab, Agriculture 4C75. Students will log on to the computers using their NSID and password, making sure to sign out and log off at the completion of each session.

The computers in the lab have been modified in order to protect the software settings from being improperly configured. These computers are mainly for use by Plant Sciences graduate students. However, technicians, post-doctoral fellows, etc. may also have access with their supervisor's permission if they do not have access to another computer, i.e. in their research lab or office. Access will only be given if the computers are required for work related use. Access will not be given to those whose only computer need is to read email or to "surf the net". These computers are not intended for use by people outside of the Department, including families of staff and students. The College of Agriculture maintains undergraduate computer laboratories (IBM in Agriculture 2D15 and 3D67, and MAC in Agriculture 3D85) to which graduate students may be given access. Accounts can be purchased on a yearly basis from Place Riel.

Most students make use of software for statistical analysis (SAS on the University computer; or MiniTab on the University computer, in the College laboratory and in the Departmental laboratory) and for word processing (MS Word in the College and Departmental laboratories). The Department does not offer any formal training in any of these software programs. Training is available through ICT Services (http://www.usask.ca/ict/).

Students are expected to abide by rules established for the various computing facilities. Failure to do so will result in withdrawal of computing privileges. Most facilities will have rules governing security of the equipment, prohibiting food or drink, and honouring software copyrights.

6. <u>Library and Reading Room Facilities</u>

Each student should obtain a library card and abide by current regulations for the University library system.

Students should be aware that library facilities at the Agriculture & Agri-Food Canada Research Station and the Plant Biotechnology Institute (both on campus) may provide access to journals or books that are not available in the University system.

The Department does not house a library. However, a student Reading Room in Agriculture 4D27 is available for all students for study purposes.

Virginia Wilson is the librarian for the College of Agriculture and Bioresources. She is embedded in the College and you can find her in her office in the **Agriculture Building 2E74**. Virginia is here to help you during your graduate studies with any library-related question: searching databases, conducting a literature review, refining your research question, getting library books, choosing a reference manager, research data management, and much more. virginia.wilson@usask.ca

Important library links:

- Library homepage: https://library.usask.ca/
 You can get to the library homepage from here or you can find a link on your PAWS page.
- Department of Plant Sciences research guide: https://libguides.usask.ca/plantscience
 This guide lists a host of library resources pertaining to plant sciences.
- Grad Help: https://libguides.usask.ca/gradhelp
 This guide brings together resources on topics such as student/supervisor relationships, the thesis/dissertation process, publishing, and more.
- Grad Research Support Workshops:
 https://library.usask.ca/studentlearning/workshops/grad-research.php
 Throughout the academic year, the library presents workshops specifically focusing on graduate students' research needs. Check this page to keep up to date on up-coming sessions.
- Grad Writing Workshops: https://library.usask.ca/studentlearning/workshops/grad-writing.php

Throughout the academic year, the library presents workshops specifically concentrating on graduate writing. Check this page to keep up to date on up-coming sessions.

For any library assistance during your studies, please contact Virginia: virginia.wilson@usask.ca. She is looking forward to getting to know you and to supporting you throughout your graduate studies at the University of Saskatchewan.

7. Travel Assistance for Attendance at Scientific Conferences

It is the policy of the Department that students should be encouraged to attend at least one scientific conference during their study. The Department has some funds to support such activity. A student may formally request up to \$500 in travel assistance when presenting a poster or talk at a scientific conference. Supervisors may have funds that can be used to support student attendance at conferences, meetings or field days. For a group of students attending a scientific conference, the Department may be able to assist in group transportation.

8. Vacation Time

Graduate Students are not normally required to work on a fixed schedule. They are expected to conduct themselves in a professional manner with diligence and self-discipline. They may be required to observe fixed schedules when working with other employees in lab or field research. Students are eligible for two weeks of vacation per year, excluding weekends, statutory holidays, and regularly scheduled University holidays (Christmas break). Students must work out vacation schedules with their Supervisors.

9. Use of Department Lounges

Students are invited to use the Department Lounges (Agriculture 4D38 and 2C25) for breaks and lunches, and are encouraged to use the lounges to meet with staff and students at these times. Supplies (tea, coffee, milk and sugar) are to be paid for by individual users. Please make sure that equipment is used in a safe and proper manner. If using the Lounge outside of normal break hours (10:00-10:30 a.m., 12:00-1:00 p.m., and 3:00-3:30 p.m.) please be considerate of others and keep the volume of conversation down. Users must clean up after themselves and turn off equipment after each use. Users must also contribute their share to cleaning the cupboards, microwaves and the refrigerator.

10. The Graduate Students' Association

The University of Saskatchewan Graduate Students' Association (GSA) is a not-for-profit organization that represents over 4000 graduate students at the University of Saskatchewan. The GSA provides professional, academic, and social activities and services, and promotes awareness of issues relevant to graduate students. All graduate students at the University of Saskatchewan are members of the GSA and thus have the right to vote in elections, referenda and at general meetings. The general membership is the highest decision-making body of the GSA.

The GSA has donated funding to the University Emergency Crisis Aid program to best support graduate students when they are faced with a crisis or extenuating circumstances and are in need of urgent aid. Students experiencing emergency situations may contact the Graduate Students' Association for support.

Graduate students are encouraged to participate in the Plant Sciences Graduate Student Association and in Departmental social events.

11. General Information

Students should be aware of the no-smoking policy that applies to ALL University buildings.

Each student must show consideration for other students and staff when using community facilities (lounges, mail boxes, reading room, computer room, laboratories). Time should be taken to clean space used and assure that equipment is turned off or left on according to circumstances.

Students should pick up their mail regularly or arrange for someone else to do it for them. They should also check department bulletin boards regularly for current notices.

Parking on campus is controlled by the University Parking Office. Some parking is set aside for graduate students for allocation before undergraduate students return for fall courses. Information on academic regulations and regulations for preparation and submission of theses is available through the CGPS General Office. Most regulations and graduate student checklists are available at: http://www.usask.ca/cgps/

Graduate students may view the CGPS Policy and Procedures Manual online at: https://cgps.usask.ca/policy-and-procedure/index.php

Revised November 2021

Appendix 1 - Program Milestones

M.Sc.

Within the first month

 Work with your supervisor to identify your Advisory Committee and select initial coursework

Within the first two to three months

- Develop mini-proposal
- ·Hold first committee meeting
- ·Finish selecting courses

Within six to nine months

- ·Develop full proposal
- •Hold full proposal meeting (no later than 12 months in program)
- ·Begin research project

Research and writing

- Meet with Advisory Committee at least once every 12 months to provide progress report
- Once research and basic data analyses are complete, hold permission to write meeting

At least two months prior to desired date of completion

•Circulate a complete, supervisor-approved draft of your thesis to your Advisory Committee

At least four to six weeks prior to desired date of completion

•Receive Advisory Committee approval to defend thesis

Three weeks prior to defense

- •Final thesis to Examiner Examiner
- Arrantements for defense finalized

Post-defense

•Expect to spend at least two weeks on revisions

Ph.D.

Within the first month

 Work with your supervisor to identify your Advisory Committee and select initial coursework

Within the first three months

- •Complete Qualifying Exam
- ·Finish selecting courses

Within six to nine months

- Develop full proposal
- Hold full proposal meeting (no later than 12 months time in program)
- ·Begin research project

Once coursework is completed

•Complete Comprehensive Exam (no later than one year prior to completion of program)

Research and writing

- Meet with Advisory Committee at least once every 12 months to provide progress report
- Once research and basic data analyses are complete, hold permission to write meeting

At least three months prior to desired date of completion

 Circulate a complete, supervisor-approved draft of your dissertation to your Advisory Committee

At least six weeks prior to desired date of completion

Receive Advisory Committee approval to defend thesis

Four weeks prior to defense

- •Final thesis to External Examiner
- Arrangements for defense finalized

Post-defense

•Expect to spend at least two weeks on revisions