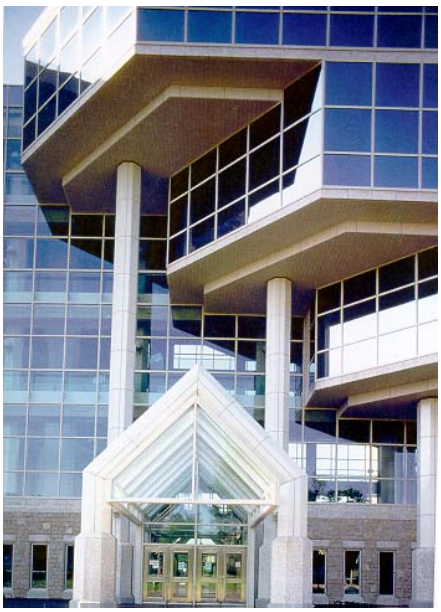
UNIVERSITY OF SASKATCHEWAN



The Department of Agricultural and Resource Economics

Graduate Orientation Handbook

September 2025

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INTRODUCTION

The faculty and staff in the Department of Agricultural and Resource Economics (ARE) would like to take this opportunity to welcome you to the department and congratulate you on your decision to pursue graduate studies at the University of Saskatchewan.

The Department of Agricultural and Resource Economics (ARE) formerly Bioresource Policy, Business & Economics was established in 1925. This is a dynamic multifaceted department where you will be able to pursue a variety of research areas related to the food, natural resource and agricultural sectors. Recent and ongoing research encompasses areas such as innovation (biotechnology, plant breeders rights, bioproducts), rural communities, resources & the environment (climate change, water resources, forestry), agri-food marketing and supply chains, food safety, international trade, entrepreneurship, and much more.

We have one of the friendliest departments on campus and are sure you will feel quite comfortable here before too long. We host several social events throughout the year and encourage you and your family to attend.

- Annual Welcome Social - This is an informal social function where all, graduate students, faculty and staff are strongly encouraged to attend as it will be a "get-to-know-one-another" event. **(In an effort to maximize student and faculty interaction at the beginning of the year, spouses and friends are not invited to this event).**

- October and February: There is an International Pot Luck supper. Families are welcome and everyone is encouraged to bring a dish from their home country.

- December: We will host the annual department Christmas Banquet.

The department has a social committee that meets on a regular basis to organize and plan events for the department during the academic year. We welcome new members to help provide us with new ideas and energy. The social events planned are a wonderful way to bond with classmates, faculty and staff. If you are interested in participating please watch for emails.

Good luck in the upcoming year! We wish you every success!

AREAS OF FACULTY RESEARCH INTERESTS

Ken Belcher	Ecosystem goods and services, natural resource and environmental policy, land conservation and wildlife and biodiversity conservation.
Richard Gray	Agricultural research funding; biofuels; intellectual property rights, agricultural policy
Hayley Hesseln (Department Head)	Environmental economics; forestry economics; natural resources
Jill Hobbs	Supply chain management, food safety, traceability, ag systems, marketing
Sabine Liebenehm	Applied Microeconomics; Development Economics; Behavioral and Experimental Economics, Social Networks
Patrick Lloyd-Smith	Environmental and Resource Economics, Water Economics, Environmental Valuation, Consumer Behaviour
Tia McDonald	Data science and analytics, applied microeconomics, agricultural finance, agricultural profitability in a changing climate, rural and regional economics
Eric Micheels	Agribusiness marketing & management, agribusiness strategy, value chains
James Nolan	Evolution of grain processes, Canadian transportation regulation, logistics and supply chain analysis, cross-contamination of GM crops, Aboriginal policy
Bailey Peterson-Wihelm	Behavioral and experimental economics, agricultural policy, international agriculture
Rob Roy (Undergrad Advisor)	Agriculture commodity marketing alternatives and associated risks, commodity market analysis
Tristan Skolrud	Agricultural economics and productivity analysis, natural resource and environmental economics, applied econometrics
Peter Slade (Graduate Chair)	Canadian Canola Growers Association Agricultural Policy Chair
Stuart Smyth (990 Seminar Coordinator)	Regulation and liability as it relates to innovation, agricultural biotechnology
Nicholas Tyack	Economics of genetic resource and biodiversity, Agricultural innovation, Environmental and development economics; Experimental economics

THINGS TO KNOW

Address changes

It is each student's responsibility to update PAWS with any name or address change. It is essential that this information is kept up to date.

Bus

Schedules and University U-Pass information is available from the Graduate Students' Association, http://www.gsa.usask.ca/services/u-pass.php or visit Saskatoon Transit website: http://www.saskatoon.ca/DEPARTMENTS/Utility%20Services/Saskatoon%20Transit/Pages/default.aspx

Campus Rec Calendar

Contains information about sports events and facilities. It is available from the Information Kiosk, Upper Place Riel or Room 120 Phys Ed Building.

Card Office

U of S student I.D. card is available at the Main Floor of Place Riel (by the bank machines) until mid-September. Throughout the remainder of the year at the Main Campus Bookstore, Marquis Hall.

CGPS

College of Graduate and Postdoctoral Studies

Class Timetable

A copy of the class timetable is posted around the department. If you have a scheduling conflict, please talk with the professor teaching the class, and we will try to accommodate you.

Coffee Room

Room 3D37, is a great place to get to know the people in the department at lunch and break time. This room also contains general bulletin boards and a wide variety of newspapers and magazines (these must remain in the coffee room). There is a microwave and refrigerator and food storage areas. Please feel free to use the equipment but please clean up after yourself. It is everyone's responsibility to keep the coffee room clean and tidy.

Computer Usage

Desktop units have been provided in the grad lab (3D40) for you in your first year. Both chairs and computers are department property so must remain at the station. No unauthorized hardware or software upgrades are permitted. If you have any questions about the computer please see Lori Hagen. (lori.hagen@usask.ca). It will be up to your supervisor to provide any computers or computer support after your 1st year.

Conflict Resolution

University support against discrimination or harassment is available through https://wellness.usask.ca/safety/discrimination-harassment.php

For academic conflicts with a student or supervisor, please discuss with the Graduate Chair. After the Graduate Chair, you could make an appointment with the Department Head. Minutes should be recorded and confirmed from any meeting. All concerns will be handled confidentially. See https://governance.usask.ca/student-conduct-appeals/academic-misconduct.php.

Department web site

Check here for general and graduate specific information:
http://agbio.usask.ca/departments/agricultural-and-resource-economics.php

Email Addresses

E-mail addresses on campus are usually in the following format: nsid@mail.usask.ca. To create an alias (first name.last name@usask.ca), go to http://www.usask.ca/its/services/email/personal_address.php)

Fitness

The Physical Activity Complex (PAC) is free for students with i.d. (cost for membership is included in student fees). Hours are 6:30 a.m. to 11:00 p.m., 7 days a week!

Graduate Chair

The current Graduate Chair is Dr. Peter Slade. Professor Slade's phone number is 966-4038 and his office room 3E78. To schedule appointments email him directly at peter.slade@usask.ca.

Graduate Seminar

Registration in AREC 990 Seminar Course is required. This is a non-credit course for which there is no fee. Participation is **mandatory**. Notices for seminars will be emailed to you. The seminars are most Fridays from 3:00 p.m. to 4:20 p.m. in Room 2E25 Agriculture. The instructor responsible for the 2023-2024 seminar course is Dr. Jill Hobbs. Please clear any absences with her at: jill.hobbs@usask.ca.

Graduate Student Funding

If you are entering into the program with funding, please note that in order to qualify for your funding, students must maintain final grades of at least 70% (80% required for scholarship consideration).

Graduate Supervisors

The supervisor is a mentor, advisor and senior colleague and will provide support and an environment to successfully complete the academic program. Early in the program it is the responsibility of the supervisor the guide the choice of members for the Graduate Student Advisory Committee (SAC), which will be composed of the supervisor, a committee chair and one to three other members selected for your specific topic. This committee meets ***at least*** once per academic year. Along with an external examiner, this advisory committee will form your Examining Committee for your oral defence. They will assist you with your program of studies, your research and thesis. Any changes to your Program of Studies, courses, etc., must be approved by the Graduate Chair and recorded by the graduate program assistant.

Keys

Keys are managed by the ARE office. The keys are coded with personalized numbers and are not to be given to anyone else or exchanged. Any lost or stolen keys are to be reported immediately. Keys must be returned when your program completes. Failure to do so will result in a $50 fee.

Library Resources

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 Agriculture and Resource Economics research guide: https://libguides.usask.ca/AgResourceEcon
  This guide lists a host of library resources pertaining to agriculture and resource economics.
- 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
  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
  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.

Lockers

Lockers are located outside room 3D40 AGRI for student use. If you need one, please see staff in the Dean's Office (2D26 AGRI).

Mail Services

Graduate students have individual mail slots in Room 3D40. The mail arrives Mondays, Wednesdays and Fridays around 8:30 a.m. If you have outgoing mail from a specific research project, please deliver to the main ARE office (3D34).

Printing support and Faxes

Faxes can be sent from the main office. Lori Hagen in the front office is available to assist with printing and outgoing faxes.

Office Space

Space is assigned during the summer after the first year. Office space assignments are handled through ARE main office. We do our very best to ensure that comfort and productivity are met in these placements. If you have any issues or concerns about your working space, please see Lori Hagen. Any computer needs should be discussed with your supervisor. On completion of your program the office space must be cleaned out and personal items removed.

PAWS

(http://www.paws.usask.ca) is your Personalized Access to Web Services on Campus.

Payroll

Any student receiving university funding (eg. scholarships, teaching or research assistantships) must fill out the following forms and submit them to Melissa in 2D14 AGRI (Melissa.zink@usask.ca)

- TD1 and TD1SK tax forms
- Copy of Social Insurance Number
- Copy of study permit

Photocopy and Printing

There is a dedicated printing station in 3D40 Grad lab, Cubicle #12. The printer can be added in the run command \\printq AGRI-3D40. You will need to log in with your NSID and password. Please ensure you log out of each session. A photocopier is located in 3D40 AGRI for student use.

Registration

Please start your year by making an appointment with your supervisor and/or the Graduate Chair to determine your classes and to answer any questions you may have about the graduate program. Register online with PAWS. To avoid a late registration fee, register by mid **September**. Term 2 classes can be added until mid **January (**See link for exact dates**)**
https://students.usask.ca/academics/classes.php#Registrationdeadlines. Every graduate student must register in AREC 990 in terms 1 and 2. Every Master's student must register in AREC 994 (thesis) terms 1, 2 and spring/summer (EVERY term) until they have successfully defended their thesis and have had their revisions approved by the examining committee (if requested at time of defence).
Every PhD student must register in AREC 996 (thesis research) in terms 1, 2 and spring/summer (EVERY term) until they have successfully defended their thesis and have had their revisions approved by the examining committee (if requested at time of defence). Our graduate program assistant will be

continuing to monitor your program of studies to ensure it is accurate. Please notify her of any changes agreed upon for your program of studies.

Safety

See the Safety channel in PAWS

Campus Safety is available 24 hours a day

Call any of the following numbers for assistance/referral:

Security Services 966-5555
Safety Resources 966-4675
Discrimination & Harassment Prevention 966-4936
Student Counselling 966-4920
Student Health 966-5768
Safe Walk 966-7233
Faculty, staff, students and visitors can receive an escort to and from their car or place of residence in close proximity to the campus.

- Safe Walk is a volunteer-based program that provides an escort to or from your vehicle or place of residence (if close to the campus; as far east as Preston Avenue, as far west as Clarence Avenue, and south down to 14th St.). Safe walkers are equipped with two-way radios, safety vests, identifying jackets and flashlights. Safe Walk operates from 8:30 p.m.-11:30 p.m., Sunday to Thursday. To request service, use the Safe Walk call 306-966-SAFE (7233). After Safe Walk hours, Campus Security can be contacted by calling 306-966-5555.

- It is **important** that your office, lockers and desk drawers are locked. Purses and laptops have been stolen.

Social Committee

The department has an internal social committee. We welcome new members to help plan and provide us with new ideas and energy.

Textbooks

See lists in the Bookstore or ask your professors; purchase from the University Bookstore or second-hand from senior students.

Thesis Library (U of S)

https://harvest.usask.ca/handle/10388/381

Travel Forms

A travel request must be completed in advance of all out-of-province travel in Concur. Access to Concur can be found at http://paws.usask.ca/go/concur. All receipts, including prepaid tickets, boarding passes, travel itineraries and registration fees pertaining to your trip must be kept and submitted after your return in Concur. For assistance with Concur please see http://www.usask.ca/fsd/resources/documents/travel/Getting_Started.pdf. You can contact Connection Point at connectionpoint@usask.ca or in person support is available in ARTS Building Room 258, Monday to Friday, 9am to 4 pm.or Lori in the main office for assistance.

Travel Funding Awards

The department can provide financial assistance to graduate students to enable their participation in academic related conferences and other formal academic activities. Students who meet eligibility requirements may be awarded $350 for conferences and meetings within Canada and $500 for conferences outside of Canada. Details of the eligibility requirements and application process are available from the department's graduate program assistant.

Tuition

https://students.usask.ca/money/tuition-fees/pay.php
Each student is responsible for making their own arrangements for paying tuition.

University of Saskatchewan Policies

It is imperative that you are aware of the university's policies specifically around copyright, examinations and student conduct. Please access them at the following link and review:
http://www.usask.ca/secretariat/#honesty

Useful Links for Students:

U of S College of Graduate & Postdoctoral Studies - - https://cgps.usask.ca//
U of S Access & Equity Services - https://students.usask.ca/health/centres/access-equity-services.php
U of S International Student & Study Abroad Centre - https://students.usask.ca/international/issac.php
U of S Student Services - https://students.usask.ca/
U of S Student Housing - https://students.usask.ca/essentials/housing.php
U of S Parking Services - http://www.usask.ca/parking/index.php

Vacation and Hours of Work

Students are entitled to **two weeks paid vacation** per year after consultation with their supervisor and informing the Graduate Chair. Funded, full-time students are expected to work a minimum of 40 hours per week in order to qualify for their funding. For leaves longer than two weeks, please have written permission from your supervisor.

Van Vliet Library

This is a meeting room booked through the main ARE office and is equipped with a computer, monitor and video-conference system.

GRADUATE PROGRAMS IN AGRICULTURAL AND RESOURCE ECONOMICS

The Department of Agricultural and Resource Economics at the University of Saskatchewan offers degree programs leading to a Master of Science in Agricultural Economics and a Doctor of Philosophy in Agricultural Economics.

MASTER OF SCIENCE (MSC) DEGREE

Residence Requirement and Time Limit

In general, the MSc should be completed in 20-24 months. The first eight months (September - April) are devoted to course work, then an 8 – 10 month (May – March) period is used for research and thesis work. With the final 4 – 6 months to complete the final draft of the written thesis, schedule the oral defence and complete final revisions.

Candidates for the MSc degree are required to complete their degree within four years, unless an extension is granted by CGPS and approved by the supervisor. This time is measured from the beginning of the first term of registration for work, which is included in the program of studies (this may include course work done at the University of Saskatchewan or elsewhere and includes thesis work).

Time in Program	**Program Guidelines**
Year 1	Course work: 18 credit units- required 6 credit units Microeconomics and 3 credit units Econometrics; 9 credit units of electives plus AREC 990, GPS 960. GPS 961 or 962 may also be required MSC Thesis Proposal: A research proposal should be approved by the advisory committee within 12 months of program start. Research and data collection may begin at any time after all required research permits or Ethics Certificates are secured, and with approval of the advisory committee.
Year 2	AREC 990 attendance requirements continue through residency. The student is also required to present one seminar in AREC 990. All course work identified on the Program of Studies should be completed by no later than 24 months of the program start date. A draft of the thesis must be approved by the advisory committee and students must obtain a permission to defend prior to arrangements for a thesis defence.

Program of Study/Course Requirements

The MSc program requires a minimum of 18 credit units of graduate course work. Required courses for the M.Sc. degree: 6 credit units Microeconomics (two courses; AREC 820: Applied Microeconomic Theory is strongly recommended) and 3 credit units Econometrics (one course; ECON 808 is strongly recommended).

The remaining 9 credits (3 courses) of elective courses will be chosen based on the student's area of specialization. These courses must be approved by the supervisor and the student's advisory committee, and the College of Graduate and Postdoctoral Studies. Courses may be taken outside the department, but in an area related to the area of specialization. Courses are generally taken at the graduate level. However, one course may be at the senior undergraduate level on approval of the student's advisory committee. Credit may be granted for graduate-level courses taken previously at this or another university, provided they have not already been credited toward a bachelor's or advanced degree. A M.Sc. student will normally complete the course requirements in the first year of full-time study. All required courses must be noted on the program of studies.

Students are also required to register in AREC 990: Graduate Seminar (no credit units) and AREC 994: Thesis (no credit units). The requirements for AREC 990 are met by attending and participating in ARE departmental seminars and presenting the results of thesis research. All students will make a seminar presentation. This is usually scheduled when you are in the later part of your program. Your supervisor will confirm your readiness. Completion of the thesis requirements is met when the thesis is successfully defended and approved.

All graduate students at the University of Saskatchewan are required to complete GPS 960: Research Ethics, and may be required to take either GPS 961: Ethics and Integrity in Human Research or GPS 962: Ethics and Integrity in Animal Research, depending on the nature of their thesis work. These courses must be completed within the first 12 months of registration in the program and prior to the acceptance of the research proposal

At the beginning of the program (usually within the first four months), the supervisor will work with the student to develop a program of studies. This program indicates the nature of the research, the members of the committee, and all course and other requirements. The program of studies must be approved by the advisory committee. Any changes made to the program of studies must be approved by the advisory committee and must be recorded in writing and submitted to the department and to the College of Graduate and Postdoctoral Studies.

Passing grades: To maintain your status in the program, you must maintain an average of 70% or greater (with a minimum of 60% in each graduate course, 70% in an undergraduate course.) If you have a lower grade than that listed as minimum, please contact the office as soon as possible and we will assist you. To maintain eligibility for all departmental scholarships from the devolved fund students must maintain a minimum 80% average and/or satisfactory progress in the graduate program.

Writing Assessment

Each incoming student will complete a writing assessment. The writing assessment will be used to determine if students require additional support in order to write at a graduate level. If necessary, students will be provided with recommendations to take additional training and provided information about accessing other campus resources

The assessment of writing will take place during the first week of your program. The assessment will take approximately one hour. Exact details of the assessment will be provided by the Graduate Chair prior to the beginning of the program

Thesis Proposal

During the first year of residence the student will refine a thesis research topic and prepare a thesis proposal. The student will be guided in this by their supervisor and advisory committee. The proposal should clearly establish the objectives of the research, outline the theoretical context of the research, and identify the methods used to meet the research objectives. The proposal should be submitted and defended within 12 months of program initiation.

The thesis proposal is submitted to the student's supervisor for review. Once the proposal is judged satisfactory by the supervisor, copies of the proposal are provided to the other members of the advisory committee. The student will present the proposal and the committee will determine, by consensus, if the proposal provides a satisfactory basis for thesis research. Written confirmation of approval must be filed with the AREC graduate program assistant and the supervisor will ensure a copy of the approved thesis proposal is placed in the student's file.

Ethics Approval to Conduct Research

The University of Saskatchewan Ethics Office states that the U of S adheres to the following standards regarding research ethics:

- The Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans
- The University Policy for Research Involving Human Subjects
- The University Research Integrity Policy

Approval of research by the University of Saskatchewan Ethics office is required before any subject research can be initiated. The official website of the University of Saskatchewan Ethics Office (www.usask.ca/research/ethics_review) has complete and current information.

Thesis

A thesis must be submitted in partial fulfilment of the MSc degree. The thesis must be based on original research and demonstrate judgement and scholarship on the part of the candidate. Before a defence of the thesis can be scheduled, all members of the student's Advisory Committee must indicate that the thesis is acceptable for defence. When the thesis is ready for examination, this committee forms the basis for the examining committee. The quality of the thesis is evaluated by the examining committee, consisting of the advisory committee and an arms-length examiner who is knowledgeable about the thesis topic. The advisory committee will recommend names of potential arms-length examiners to the Graduate Chair who will forward this recommendation to the College of Graduate and Postdoctoral Studies on behalf of the department. Standard procedures will then be followed on invitation of the external examiner, provision of a copy of the thesis, preparation of necessary documents, and scheduling of defence.

At least one month prior to the defence, Graduate Chair, will review and approve the arms-length examiner and then pass the information on to the College of Graduate and Postdoctoral Studies. Once approved, at least two weeks must be provided to the external examiner for reading of the thesis. These times are strictly enforced by the College of Graduate and Postdoctoral Studies and the Department.

Thesis Format

Students may prepare a thesis by traditional format or thesis by manuscript (if approved by the advisory committee). A template for the traditional format of thesis can be found at https://cgps.usask.ca/onboarding/grad-toolkit/roadmaps/thesis-roadmap/drafting.php#Formatting. Graduate students at the University of Saskatchewan must submit a final electronic copy of their thesis or dissertation to the College of Graduate and Postdoctoral Studies, and the department. Details on Electronic Thesis & Dissertation (ETD) and the process by which the thesis can be submitted can be

found at: https://cgps.usask.ca/onboarding/grad-toolkit/roadmaps/thesis-roadmap/submitting.php#Howtosubmit.

A manuscript-style thesis typically includes an introduction, a research manuscript, and a concluding chapter. The purpose of the introduction is to provide a review of the literature that establishes the student's familiarity with relevant work in the field, establishes the objectives of the thesis, places the research within the larger context of the discipline, and provides overall context for the research manuscript. The research manuscript (Chapter Two) is intended to communicate research results and will adopt the format of a peer-reviewed academic journal. The format for the manuscript would normally include a research abstract, brief introduction and statement of the research problem, synthesis of the literature, description of research methods and study area, analysis, presentation and discussion of results. Detailed guidelines for a manuscript-based thesis are provided by the College of Graduate and Postdoctoral Studies at: https://cgps.usask.ca/onboarding/grad-toolkit/roadmaps/thesis-roadmap/drafting.php#ManuscriptStyleThesesandDissertations.

Evaluation of both thesis styles is the same. Submission or acceptance of a manuscript for publication is independent of the evaluation of the thesis, which is the responsibility of the advisory committee and the external examiner.

Examination of Thesis work

An oral examination is limited to work done by the candidate for the thesis and to knowledge of directly-related material. The student is responsible for providing a short (15–20 minute) oral summary of their research at the beginning of the oral defence followed by rounds of questioning from the examining committee, beginning with the external examiner. The thesis defence is closed. At the conclusion of the examination, the examining committee meets to determine if the thesis, and its defence by the student, meets the standards for the degree. The examining committee members will decide by consensus or majority vote whether the thesis:

i. Has passed without revisions;
ii. Has passed with revisions (major or minor);
iii. Must be re-examined; or
iv. In unacceptable, and the student's program is to be terminated.

The examining committee will also determine if the oral defence:

i. Is satisfactory;
ii. Is not satisfactory, and must be repeated; or
iii. Has failed and will not be repeated.

The student is advised immediately of the examining committee's decision.

Requesting Extension to Time Limit

Students who have nearly reached the time limit of the program without completing all program requirements should consult with their supervisor. If the supervisor supports an extension, the student

must apply in writing. This must be accompanied by a detailed plan for completion of the program. The form and completion plan will be approved by the Graduate Chair, who will forward the documents to the College of Graduate and Postdoctoral Studies for consideration.

The College of Graduate and Postdoctoral Studies will grant time extensions when students have experienced difficulties or delays while actively working to finish the program.

Student Advisory Committee

The thesis research and the selection of courses are done with direction from the advisory committee. The advisory committee has the primary responsibility for directing and evaluating the student's graduate work. The advisory committee recommends a program of studies for the graduate student. The program of studies and any changes to that program recommended by the advisory committee are submitted to the graduate program assistant for inclusion in the student file and forwarded to the College of Graduate and Postdoctoral Studies.

A student, in consultation with the supervisor must determine the membership of their Advisory Committee. A student's Advisory Committee must have at least three members:

- One research supervisor (co-supervisors count as two person),
- One or two or more regular members who may or may not be a faculty member of the Department of Agricultural and Resource Economics,
- One committee chair (Graduate Chair or designate may not be required to attend regular advisory committee meetings, except during dissertation defence).

The supervisor is responsible for calling meetings of the advisory committee. Advisory committee meetings must be held **at least once a year** and as required to review the progress made by the student. The supervisor is responsible for ensuring this review takes place and is responsible for submitting the minutes of this advisory committee meeting to the committee and the graduate program assistant. The advisory committee must meet at least once each year, although more frequent meetings are possible, particularly when a defense is imminent. The minutes must clearly document any major decisions that are made (e.g., the approval of the proposal). This committee makes recommendation for the thesis defense and for the appointment of arms-length examiners to the graduate chair who, through the graduate program assistant, makes a recommendation to CGPS.

When supervisors are away from the university for an extended period (e.g. sabbatical leave they are expected to maintain a supervisory relationship with their student.

The College of Graduate and Postdoctoral Studies has developed draft guidelines regarding the roles and responsibilities of advisory committees, supervisors, and graduate students.

Role of the Supervisor: The supervisor is a mentor, advisor, and senior colleague, and provides an atmosphere of respect for the student. The supervisor has the following responsibilities toward the student: All students are required to complete a Student-Supervisor Agreement within the first twelve months on the program.

- To guide the choice of the advisory committee, program of studies, thesis topic, timeline to completion, and milestones;
- To be accessible for and encourage regular meetings with the student;
- To provide expectations, criteria and evaluation for written work, including the thesis, in a timely fashion;
- To explore, inform about, and provide funding opportunities;
- To inform of policies, regulations, expectations and standards of the department, The College of Graduate and Postdoctoral Studies, and the university with respect to course work, research, scholarships, intellectual property, academic integrity, safety, ethics, thesis, collaborative work, authorship, acknowledgements, conference presentations, and professionalism;
- To convene the advisory committee at least once yearly;
- To provide the student with the opportunity to present research at an appropriate conference;
- To ensure eligibility of the thesis for examination, to provide the names of potential suitable external examiners, and to prepare the student for defense;
- To provide letters of recommendations on request, in a timely fashion;
- To arrange for suitable supervision during absences;

Role of the Student:

The MSc student is a junior partner and colleague in a relationship of mutual respect with the supervisor and advisory committee. The student makes a commitment to the program, dedicating himself or herself to the completion of the program within an acceptable timeframe and in accordance with the policies and regulations of the department and the university. The student is entitled to mentorship, advising, guidance and yearly evaluation of progress by the advisory committee. The MSc student has the following responsibilities:

- To be accessible for and maintain regular and frequent communication with the supervisor and advisory committee;
- To be aware of the many other commitments the supervisor will have and schedule meetings and document review in a responsible manner that respects these commitments;
- To know and adhere to policies, regulations, expectations and standards of the department, the college and the university with respect to course work research, scholarship, intellectual property, academic integrity, safety ethics, thesis work, collaborative work, authorship, acknowledgements, conference presentations, professionalism, and obligations tied to funding;
- To be aware of and to meet deadlines for registration, course work, research, applications, reporting, defense and convocation preparations;
- To strive for excellence in and to take full responsibility for course work and research;
- To establish and adhere to a timeline and milestones for completion;
- To record research systematically, completely and honestly;
- To report on progress and to prepare a yearly report for the advisory committee;
- To submit work for evaluation, allowing reasonable time for review, and to give consideration to advice from the supervisor and the advisory committee;

Role of the Advisory Committee:

The advisory committee provides the student with mentorship, guidance, advice, evaluation and feedback in an atmosphere of mutual respect. The advisory committee should be chosen early in the program by the

student and the supervisor to reflect diverse expertise in the chosen field of research. The advisory committee has the following responsibilities toward the student:

- The establish a program of studies in consultation with the student, at the beginning of the program, with clear course requirements, expectations, and a projected timeline with milestones;
- To remain familiar with the research project and the student's progress;
- To meet with the student at least once yearly to review the student's progress, and then to report to the College of Graduate and Postdoctoral Studies;
- To be prepared to recommend withdrawal or alternatives if progress is unsatisfactory;
- To be available for consultation with the student on academic or research-related matters, as well as other matters which may arise, include, but not limited to: supervision, intellectual property, ethics, authorship, best practices, academic integrity, acknowledgements, medical or compassionate situations, conflict, disputes, harassment and discrimination;
- To provide feedback on the suitability of material for publication, and to suggest relevant journals for submissions;
- To examine the thesis for defense in a timely manner;
- To provide opportunities for the student to present the research at a conference;
- To be willing to provide letters of reference upon request.

Role of the Chair of Advisory Committee

The Graduate Chair, or designate, serves the *ex officio* role as the chair of advisory committee and may not attend regular meetings of the advisory committee unless requested by the supervisor. The role of the chair of the advisory committee is to maintain the standards, fairness and integrity of the process for both the student and faculty. The chair of the advisory committee will be responsible for chairing the final thesis defence. If the outcome of the defence requires the candidate complete further work the chair must see that the committee states clearly, for the candidate and the College of Graduate and Postdoctoral Studies, what work is to be done and whether or not the examining committee shall meet again before the thesis is accepted.

Master of Science Checklist

The following checklist itemizes the benchmark tasks normally completed during the first and second year of the MSc program. The list is not presented in any set order, and the program is not limited to the items on this list.

Time in Program	Program Requirements	Responsible Party
Year 1	Course Work: Required – 6 cu Microeconomics, 3 cu Econometrics, AREC 990, GPS 960 and/or GPS 962/961. 9 cu of electives approved by the student's advisory committee In normal circumstances course work should be completed in first 12 months of MSc program	Student, in consultation with supervisor and advisory committee for course selection

	Test of writing	Supervisor, graduate committee, student
	Select members for graduate advisory committee	Supervisor with student
	Program of Studies form	Student, supervisor and advisory committee
	Identify research topic and prepare thesis proposal	Student with supervisor
	Advisory committee meeting: approval of proposal	Meeting called by supervisor, recommendation made, minutes recorded and filed with GPA by committee chair
	Research and data collection can begin after required ethics approval and approval of advisory committee	Student, ethics approval filed with program of studies
	Annual Progress Report	Student and supervisor
Year 2	Permission to Write	Student, Advisory committee records recommendation and minutes
	Seminar based on thesis research and with permission of the supervisor, prior to thesis defence	Student
	Permission to Defend	Supervisor and student determine when permission should be sought. Supervisor records minutes of meeting (or email consultation) and files decision
	Thesis submission	Student
	Thesis defence	Student
	Final Copies of Thesis	Student
	Annual progress reports are required until program completion	Student and supervisor

DOCTOR OF PHILOSOPHY (PHD) DEGREE

Residence Requirement and Time Limit

In general, the PhD can be completed in four years. The first two years are typically devoted to course work, while the remaining period is used for research and thesis work. Residency in the program is considered fulfilled when all requirements are met. Candidates for the PhD degree are required to complete their degree within six years, unless an extension is granted by CGPS as approved by the supervisor. This time is measured from the beginning of the first term of registration for work which is included in the program of studies (this may include course work done at the University of Saskatchewan or elsewhere and includes thesis work).

The following is a proposed timeline for students who begin the PhD program in September:

Time in Program	Program Guidelines

Year 1	Course work: minimum 21 credit units*- required 6 credit units microeconomics; 6 credit units econometrics; 3 credit units macroeconomics; 6-15 credit units of electives plus AREC 990, GSR 960. GSR 961 or 962 may also be required. *Students are recommended to take 30-36 credit units of coursework, in consultation with their supervisor and advisory committee. Advisory committee is formed and program of studies is determined
Year 2	Additional field courses. AREC 990 attendance requirements continue through residency. All course work identified on the Program of Studies should be completed by no later than 24 months of the program start date. Comprehensive Examination: The PhD Comprehensive Examination must be successfully completed by no later than 24 months from the program start date.
Year 3	AREC 990 attendance requirements continue through residency. PhD Dissertation Proposal: A research proposal should be approved by the advisory committee within 28 months of program start. Research and data collection may begin at any time after all required research permits or ethics certificates are secured, and with approval of the advisory committee.
Year 4	The student is required to present one seminar in AREC 990. When a draft of the dissertation has been approved by the Supervisor, a 'permission to defend' meeting is held. Arrangements may then be made for the dissertation defence.

Program of Study/Course Requirements

All students will be required to obtain at least 6 credit units of approved microeconomics , 6 credit units of approved econometrics and 3 credit units of approved macroeconomics. The remaining credit units required (**minimum** 6 credit units/2 courses) will be determined in consultation with the advisory committee based on their area of specialization. The final selection of approved graduate courses will be made by the student in consultation with their advisory committee. Although 21 credit units is the minimum program requirement, students are strongly recommended to take 30-36 credit units of coursework, in consultation with their supervisor and advisory committee Courses may be taken outside the department, but in an area related to the area of specialization. Courses are generally taken at the graduate level. Credit may be granted for graduate-level course taken previously at this or another university, provided they have not already been credited toward a bachelor's or advanced degree.
PhD students will have the opportunity, and are strongly, encouraged to spend one to two terms at another university under the Western Dean's Agreement.

Students are also required to register in AREC 990: Graduate Seminar (no credit units) and AREC 996: Research (no credit units). The requirements for AREC 990 are met by attending and participating in AREC departmental seminars and presenting the results of dissertation research. All students will make a seminar presentation. This is usually scheduled when you are in the later part of your program. Your

supervisor will confirm your readiness. Completion of the research requirements is met when the dissertation is successfully defended and approved.

All graduate students at the University of Saskatchewan are required to complete GPS 960: Research Ethics, and may be required to take either GPS 961: Ethics and Integrity in Human Research or GPS 962: Ethics and Integrity in Animal Research, depending on the nature of their dissertation work. These courses must be completed within the first 12 months of registration in the program and prior to the acceptance of the research proposal

At the beginning of the program (usually within the first eight months), the supervisor will work with the student to develop a program of studies. This program indicates the nature of the research, the members of the committee, and all course and other requirements. The program of studies must be approved by the advisory committee. Any changes made to the program of studies must be approved by the advisory committee and must be recorded in writing and submitted to the department and to the College of Graduate and Postdoctoral Studies.

Passing grades: To maintain your status in the program, you must maintain an average of 70% or greater (with a minimum of 70% in each graduate course). If you have a lower grade, please contact the office as soon as possible and we will assist you. To maintain eligibility for all departmental scholarships from the devolved fund students must maintain a minimum 80% average and/or satisfactory progress in the graduate program.

Candidacy Assessment

The candidacy assessment takes place in two stages. A student must pass both stages of the exam to continue in the program.

The first stage of the candidacy assessment (called the qualifying exam) takes place after a PhD student has completed their first two terms of courses. The qualifying exam will test students on topics that are covered in the first-year courses prescribed by the ARE graduate committee, typically including courses in microeconomics and econometrics. The qualifying exam will require students to synthesize the knowledge learned in their first-year classes and apply concepts learned in these classes to agricultural problems. The timing of the qualifying exam, the grading rubric, and the examination committee will be provided early in the student's second term. In addition to the written exam, the committee may require an oral exam.

The second stage of the candidacy assessment (called the field exam) takes place after the student has completed two years of coursework and before the student has completed two full years in the program. The examination committee for the field exam consists of the supervisor and the advisory committee, or some subset of the advisory committee. This committee will develop a reading list that includes a minimum of 12 - 15 critically important papers or books in the research field. This reading list serves as a guide to the student, directing him/her to the body of literature most relevant to the topics or general area to be addressed by the field exam. The advisory/examining committee must provide this reading list, approved by the committee, to the student at least 60 days prior to the anticipated date of the field exam. The committee sets the examination date and questions for the field exam. In addition to the written exam, the committee may require an oral exam.

Upon successfully completing the candidacy assessment, the student will be considered a PhD candidate.

Dissertation Proposal

Following completion of all required course work and all components of the candidacy assessment the student will refine a dissertation research topic and prepare a thesis proposal. The student will be guided in this by their supervisor and advisory committee. The proposal should clearly establish the objectives of the research, outline the theoretical context of the research, and identify the methods used to meet the research objectives. The proposal should be submitted and defended within 28 months of program initiation.

The dissertation proposal is submitted to the student's supervisor for review. Once the proposal is judged satisfactory by the supervisor, copies of the proposal are provided to the other members of the advisory committee. The student will present the proposal and the committee will determine, by consensus, if the proposal provides a satisfactory basis for dissertation research. Written confirmation of approval must be filed with the ARE graduate program assistant and the supervisor will ensure a copy of the approved dissertation proposal is placed in the student's file.

The format and length of the dissertation proposal will vary depending on the nature of the research and the requirements of the advisory committee. As a rough guideline, Ph.D. dissertation proposals are normally 5,000 to 8,000 words. Basic content elements may include:

i. Title page
ii. Abstract
iii. Introduction
iv. Statement of research purpose, objectives, questions
v. Review of the literature/context for the proposed research
vi. Proposed research methods, study design, analytical approach
vii. Potential significance/ contributions
viii. Potential limitations
ix. Proposed research communication/dissemination
x. Research timeline
xi. Literature cited

Ethics Approval to Conduct Research

The University of Saskatchewan Ethics Office states that the U of S adheres to the following standards regarding research ethics:

- The Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans
- The University Policy for Research Involving Human Subjects
- The University Research Integrity Policy

Approval of research by the University of Saskatchewan Ethics office is required before any subject research can be initiated. The official website of the University of Saskatchewan Ethics Office (www.usask.ca/research/ethics_review) has complete and current information.

Annual Performance Reviews

Each year a student is expected to demonstrate progress towards completing program requirements. The advisory committee and student must meet annually and submit minutes from the meeting to the graduate program assistant, which has been approved by all members including the student. These performance review meetings may coincide with the comprehensive exam, thesis proposal or be held separately.

Failure to make satisfactory progress might result in a recommendation that the student withdraw from the program. Additionally, students supported by funding must maintain specific grade point averages in order to retain funding. Students failing to meet these requirements will have funding withdrawn and might face an assessment of unsatisfactory progress.

Dissertation

A dissertation must be submitted in partial fulfilment of the PhD degree. The dissertation must be based on original research and demonstrate judgement and scholarship on the part of the candidate. Before a defence of the dissertation can be scheduled, all members of the student's advisory committee must indicate that the dissertation is acceptable for defence. When the dissertation is ready for examination, this committee forms the basis for the examining committee. The quality of the dissertation is evaluated by the examining committee, consisting of the advisory committee and an external examiner not affiliated with the department who is knowledgeable about the dissertation topic. The advisory committee will recommend names of potential external examiners to the graduate chair who will forward this recommendation to the College of Graduate and Postdoctoral Studies on behalf of the department. Standard procedures will then be followed on invitation of the external examiner, provision of a copy of the dissertation, preparation of necessary documents, and scheduling of defence.

At least five weeks prior to the defence, the supervisor must submit the necessary forms to the graduate chair, who will review and approve them, and then pass them on to the College of Graduate and Postdoctoral Studies, with the assistance of the graduate secretary, indicating the date, time, and name of the proposed external examiner. Once approved, at least four weeks must be provided for reading of the dissertation and preparation of the defence. These times are strictly enforced by the College of Graduate and Postdoctoral Studies and the Department.

Dissertation Format

Students may prepare a dissertation by traditional format or dissertation by manuscript (if approved by the advisory committee). A template for the traditional format of dissertation can be found at: https://cgps.usask.ca/onboarding/grad-toolkit/roadmaps/thesis-roadmap/drafting.php#Formatting. Graduate students at the University of Saskatchewan must submit a final electronic copy of their dissertation to the College of Graduate and Postdoctoral Studies, the library and the department. Details on Electronic Thesis & Dissertation (ETD) and the process by which the thesis can be submitted can be found at: https://cgps.usask.ca/onboarding/grad-toolkit/roadmaps/thesis-roadmap/submitting.php.

A manuscript-style dissertation typically requires a series of papers that would be of a standard that is deemed acceptable for submission to a peer-reviewed academic journal. Detailed guidelines for a manuscript-based dissertation are provided by the College of Graduate Studies and Research at https://cgps.usask.ca/onboarding/grad-toolkit/roadmaps/thesis-roadmap/submitting.php.

Evaluation of both dissertation styles is the same. Submission or acceptance of a manuscript for publication is independent of the evaluation of the dissertation, which is the responsibility of the advisory committee and the external examiner.

Permission to Defend

Following College of Graduate and Postdoctoral Studies guidelines the supervisor will review the completed dissertation. When both the student and the supervisor believe it is ready, the dissertation will be submitted to the advisory committee. Prior to defending the dissertation, the student must obtain permission to defend from the committee members. The committee may require further revisions. Once the advisory committee is satisfied that the dissertation is ready, it will grant its permission to go to defence. This decision must be recorded and submitted to the graduate chair, who will then advise the College of Graduate and Postdoctoral Studies.

Examination of Dissertation

An oral examination is limited to work done by the candidate for the dissertation and to knowledge of directly related material. The student is responsible for providing a short (15 – 20 minute) oral summary of their research at the beginning of the oral defence followed by rounds of questioning from the examining committee, beginning with the external examiner. The oral defence usually is 2-3 hours in length. The dissertation defence is closed. At the conclusion of the examination, the examining committee meets to determine if the dissertation and its defence by the student meet the standards for the degree. The examining committee members will decide by consensus or majority vote whether the dissertation:

v. Has passed without revisions;
vi. Has passed with revisions (major or minor);
vii. Must be re-examined; or
viii. In unacceptable, and the student's program is to be terminated.

The examining committee will also determine if the oral defence:

iv. Is satisfactory;
v. Is not satisfactory, and must be repeated; or
vi. Has failed and will not be repeated.

The student is advised immediately of the examining committee's decision.

Requesting Extension to Time Limit

Students who have nearly reached the time limit of the program without completing all program requirements should consult with their supervisor. An extension request must be accompanied by a detailed plan for completion of the program and the amount of time required. The information must be submitted to the graduate program assistant

The College of Graduate and Postdoctoral Studies will grant time extensions when students have experienced difficulties or delays while actively working to finish the program. If necessary, students may apply for a further extension. Evidence of significant progress will be required in order for further extensions to be approved.

Student Advisory Committee

The dissertation research and the selection of courses are done with direction from the advisory committee. The advisory committee has the primary responsibility for directing and evaluating the student's graduate work. The advisory committee recommends a program of studies for the graduate student. The program of studies and any changes to that program recommended by the advisory committee are submitted to the graduate secretary for inclusion in the student file and forwarded to the College of Graduate and Postdoctoral Studies.

A student, in consultation with the supervisor must determine the membership of their Advisory Committee. A student's Advisory Committee must have at least 5 members:

- One research supervisor (co-supervisors count as one person),
- One committee chair (graduate chair or designate may not be required to attend regular advisory committee meetings, except during dissertation defense),
- Two regular members,
- One cognate member (a member external to the department),
- The Dean of the College of Graduate and Postdoctoral Studies is an ex-officio member of every advisory committee.

The supervisor is responsible for calling meetings of the advisory committee. Advisory committee meetings must be held **at least once a year** and as required to review the progress made by the student. The chair of this committee is responsible for ensuring this review takes place and the supervisor is responsible for submitting the minutes of all advisory committee meetings to the committee. The supervisor must endorse this report, and then send it to the advisory committee, the graduate chair and the graduate program assistant. The advisory committee must meet at least once each year, although more frequent meetings are possible, particularly when a defense is imminent. The minutes must clearly document any major decisions that are made (e.g., the approval of the proposal). This committee makes recommendation for the dissertation defense and for the appointment of external examiners to the committee chair who, through the graduate secretary, makes a recommendation to CGPS.

When supervisors are away from the university for an extended period (e.g. sabbatical leave), they are expected to maintain a supervisory relationship with their student.

The College of Graduate and Postdoctoral Studies has developed draft guidelines regarding the roles and responsibilities of advisory committees, supervisors, and graduate students. The supervisor has the

following responsibilities toward the student: All students are required to complete a Student-Supervisor Agreement within the first twelve months on the program.

Role of the Supervisor: The supervisor is a mentor, advisor, and senior colleague, and provides an atmosphere of respect for the student. The supervisor has the following responsibilities toward the student:

- To guide the choice of the advisory committee, program of studies, dissertation topic, timeline to completion, and milestones;
- To be accessible for and encourage regular meetings with the student;
- To provide expectations, criteria and evaluation for written work, including the dissertation, in a timely fashion;
- To explore, inform about, and provide funding opportunities;
- To inform of policies, regulations, expectations and standards of the department, The College of Graduate and Postdoctoral Studies, and the university with respect to course work, research, scholarships, intellectual property, academic integrity, safety, ethics, dissertation, collaborative work, authorship, acknowledgements, conference presentations, and professionalism;
- To convene the advisory committee at least once yearly; completes the minutes of each meeting, records votes and files the records with the advisory chair and the graduate secretary.
- To provide the student with the opportunity to present research at an appropriate conference;
- To ensure eligibility of the dissertation for examination, to provide the names of potential suitable external examiners, and to prepare the student for defense;
- To provide letters of recommendations on request, in a timely fashion;
- To arrange for suitable supervision during absences;

Role of the Student:
The PhD student is a junior partner and colleague in a relationship of mutual respect with the supervisor and advisory committee. The student makes a commitment to the program, dedicating himself or herself to the completion of the program within an acceptable timeframe and in accordance with the policies and regulations of the Department and the University. The student is entitled to mentorship, advising, guidance and yearly evaluation of progress by the advisory committee. The PhD. student has the following responsibilities:

- To be accessible for and maintain regular and frequent communication with the supervisor and advisory committee;
- To be aware of the many other commitments the supervisor will have and schedule meetings and document review in a responsible manner that respects these commitments;
- To know and adhere to policies, regulations, expectations and standards of the department, the college and the university with respect to course work research, scholarship, intellectual property, academic integrity, safety ethics, dissertation work, collaborative work, authorship, acknowledgements, conference presentations, professionalism, and obligations tied to funding;
- To be aware of and to meet deadlines for registration, course work, research, applications, reporting, defense and convocation preparations;
- To strive for excellence in and to take full responsibility for course work and research;
- To establish and adhere to a timeline and milestones for completion;
- To record research systematically, completely and honestly;
- To report on progress and to prepare a yearly report for the advisory committee;

- To submit work for evaluation, allowing reasonable time for review, and to give consideration to advice from the supervisor and the advisory committee;

Role of the Advisory Committee:
The advisory committee provides the student with mentorship, guidance, advice, evaluation and feedback in an atmosphere of mutual respect. The advisory committee should be chosen early in the program by the student and the supervisor to reflect diverse expertise in the chosen field of research. The advisory committee has the following responsibilities toward the student:

- The establish a program of studies in consultation with the student, at the beginning of the program, with clear course requirements, expectations, and a projected timeline with milestones;
- To remain familiar with the research project and the student's progress;
- To meet with the student at least once yearly to review the student's progress, and then to report to the College of Graduate and Postdoctoral Studies;
- To be prepared to recommend withdrawal or alternatives if progress is unsatisfactory;
- To be available for consultation with the student on academic or research-related matters, as well as other matters which may arise, include, but not limited to: supervision, intellectual property, ethics, authorship, best practices, academic integrity, acknowledgements, medical or compassionate situations, conflict, disputes, harassment and discrimination;
- To provide feedback on the suitability of material for publication, and to suggest relevant journals for submissions;
- To examine the dissertation for defense in a timely manner;
- To provide opportunities for the student to present the research at a conference;
- To be willing to provide letters of reference upon request.

Role of the Chair of Advisory Committee
The role of the chair of the advisory committee is to maintain the standards, fairness and integrity of the process for both the student and faculty. The chair of the advisory committee cannot pass judgement on matters that are not normally addressed by the committee, such as academic dishonesty. The chair of the advisory committee will be responsible for chairing the final thesis defence. The chair of the advisory committee is entitled, although not required, to ask questions. If the committee is able to come to a consensus about the quality of the dissertation, the chair need only record the consensus decision. If consensus cannot be reached among the committee and a vote must be taken, the chair must record the outcome of the vote. If the vote is tied, or where the committee and the external examiner do not agree on the vote, the chair must vote. In this case, abstention by any member of the examining committee, including the chair, will be interpreted as a negative vote. If the outcome of the defence requires the candidate to complete further work the chair must see that the committee states clearly, for the candidate and the College of Graduate and Postdoctoral Studies, what work is to be done and whether or not the examining committee shall meet again before the dissertation is accepted.

Doctor of Philosophy Checklist

The following checklist itemizes the benchmark tasks normally completed during the first, second, third and fourth year of the PhD program. The list is not presented in any set order, and the program is not limited to the items on this list.

Time in Program	Program Requirements	Responsible Party
Year 1	Course Work: Required – six cu of approved microeconomics, six cu of approved econometrics, and three cu of approved macroeconomics AREC 990, GPS 960, GPS 961 and/or GPS 962. At least six cu of electives approved by the student's advisory committee	Student, in consultation with supervisor and advisory committee for course selection
	Select members for graduate advisory committee	Supervisor with student
	Needs assessment – within first five months of PhD program.	Student, supervisor and advisory committee.
	Program of studies form	Student, supervisor and/or committee chair
	Research and data collection can begin after required ethics approval and approval of advisory committee	Student, ethics approval filed with program of studies
	Annual progress report	Student and supervisor
Year 2	Course work continues – in normal circumstance course work should be completed within 20 months of starting program	Student
	Comprehensive examination – the PhD comprehensive examination must be successfully completed by no later than 24 months from the program start date	Student - supervisor and advisory committee responsible for setting comprehensive exam.
	Research and data collection can continue	Student
	Annual progress report	Student and supervisor
Year 3 to program completion	PhD dissertation proposal – a research proposal must be approved by the advisory committee no later than 28 months from the program start date.	Student Recommendation made, minutes recorded and filed with GPA by committee chair
	Research and data collection continue	Student
	Annual progress report	Student and supervisor
	Seminar based on thesis research and with permission of the supervisor, prior to thesis defence	Student
	Permission to defend	Supervisor and student determine when permission should be sought. Advisory committee chair records minutes of meeting (or email correspondence) and files decision
	Dissertation submission	Student
	Dissertation defence	Student and advisory committee

	Final copies of the dissertation	Student
	Annual progress reports are required until program completion	Student and supervisor

GRADUATE STUDENT SUCCESS
ACADEMIC HONESTY AND INTEGRITY

Instances of plagiarism have been on the increase and faculty throughout the university are diligently aware of this when reviewing your written reports. **Always acknowledge the source of someone's, OR YOUR OWN PREVIOUSLY WRITTEN, words or ideas or data. Discuss specific guidelines with your instructor.**

Completion of GPS 960 online Introduction to Ethics and Integrity is required by the College of Graduate and Postdoctoral Studies.

See the following web sites for details: https://governance.usask.ca/governance/guidelines-for-academic-conduct.php.

All members of the academic community are expected to engage in scholarly activities with **honesty and integrity, and to avoid bias or conflict of interest**.

Student misconduct includes cheating; plagiarism; forgery; fabrication; theft of instructional material or tests; unauthorized access to or manipulation of laboratory or clinical equipment or computer programs; alteration of grade books, clinical records, files or computer grades; misuse of research data in reporting results; use of personal relationships to gain grades or favours or other attempts to obtain grades or credit through fraudulent means; unprofessional conduct related to patient care; threats to university personnel; and other conduct inconsistent with academic integrity.

Cheating includes giving or receiving unauthorized aid in academic work such as the improper use of books, notes, or other students' tests, papers or lab reports; the buying or supplying of term papers, lab reports, essays or analyses; passing off the artistic work of others as one's own; taking a dishonest competitive advantage (for instance, preventing others from fair and equal access to library resources); or using work done for one course in fulfillment of the requirements of another, without approval of the teachers involved.

Plagiarism is the theft of the intellectual creation of another person, OR YOURSELF, without proper attribution. It is the use of someone else's words or ideas or data, OR YOUR OWN PREVIOUSLY CREATED WORK, without proper documentation or acknowledgment. Quotations must be clearly marked, and sources of information, ideas, or opinions of others must be clearly indicated in all written work. This applies to paraphrased ideas as well as to direct quotations. A student must acknowledge and fairly recognize any contributions made to their personal research and scholarly work by others, including other students.

Fabrication includes furnishing to a university office or official or faculty member a written or oral statement known by the student to be false or misleadingly incomplete. This includes, but is not limited to, medical information and student data for financial aid and admission. Unauthorized access includes clandestine entry into any university facility or property, unapproved use or manipulation of university documents, records, or files, including computer data and programs. Unacceptable use of computing services and violation of copyright law are also considered to be academic misconduct.

Students who fail to identify themselves at examinations or who participate in any misrepresentation of the identity of a student at an examination will be considered to be engaged in academic misconduct.

Assisting in or covering up any academic dishonesty is itself misconduct. A student should report academic misconduct to the appropriate authority.

GRADUATE STUDENT SUCCESS
RULES TO USE AND MISTAKES TO AVOID IN TECHNICAL WRITING

Overview

- Effective writing is part of our job, and doing it well requires effort and skill. Learning to write well is a worthy investment. Useful references include *The Economist Style Guide, Fowler's Modern English Usage (Oxford University Press) Economical Writing Second Edition (by Deirdre McCloskey).*
- Courtesy and professionalism demand that, when presenting something for someone else to read, the author takes the time to proof-read the document, including checking it for grammar, punctuation, and other stylistic points, as well as reviewing the substance.

Writing style:

- Write in the active voice, not the passive voice. ("There is almost always a better way to start a sentence than with `there i s ' J. Alston.)
- Don't forget to use paragraph breaks. No paragraph should be more than a few sentences long.
- Views differ between use of personal ("We estimated the following model:") vs. impersonal ("The following model was estimated:") styles. Probably the personal style is becoming more common, and it makes for easier, less ponderous reading.
- Never introduce important new information in a conclusions section.

Footnotes:

- Every footnote should be at least one complete sentence.
- The footnote should make sense if read on its own.
- Do not use footnotes solely to indicate references or citations.
- Never place footnotes in the middle of a clause. Place them at the end of a sentence if possible, or after a punctuation mark, such as a comma, within a sentence.
- The reference to the footnote goes after the punctuation mark, e.g., the period or comma, not before it.
- Footnotes are easier to read if they are at the bottom of the page instead of at the end of the manuscript. For stylistic considerations, use a smaller font, e.g., 10 or 10.5 point, than you use for the main text. Note: many journals say that footnotes should go at the end of a paper. This requirement usually pertains to papers that have been accepted by the journal, and is intended to facilitate printing. It is probably best to put them at the bottom of the page in versions that are being reviewed, so as to make it easier for the reviewers.
- Your footnotes should have the same left and right margins as the main body of your text.

Rachael Goodhue and Rich Sexton prepared an initial draft of this document based upon their observations of common writing errors made by graduate students. The present version has benefited from suggestions by Julian Alston, Jim Chalfant, Dan Sumner, and Jeffrey Williams.

References:

- Any time you cite a paper, you must include it in a reference list.
- Your reference list should include only the papers that you cite, i.e., it is not a bibliography.
- There are many styles for reference lists. A good rule is to adopt the style used by the journal to which you are submitting your paper. Many agricultural economics journals use the style of the *American Journal of Agricultural Economics.* That style is a good "default" style to learn and use. Another good alternative is the style used in the *Journal of Political Economy,* which is based on the *Chicago Manual of Style.*
- Whatever referencing style you adopt, be consistent throughout your reference list. Your reference list is an easy way for a referee to get an impression as to the care you've taken.
- Here are some general rules to adopt for references: (i) list the references alphabetically by the first author's last name, (ii) list multiple works by the same author in chronological order, with oldest first, (iii) use italics for the names of books and journals, (iv)don't cite personal communications with colleagues in the reference list. Instead you can give those people credit in acknowledgements.

Making citations in the text:

- Styles differ here, but the most common ones are to indicate a citation by using the authors' last names or the authors' last names and the year of the publication. *AJAE* uses author last names, unless there are multiple citations to the same authors, in which case the year of publication must be used to distinguish among them. Thus, any of the following would work: "Chalfant suggests that Fourier functions are best for applied work." Chalfant (1985) suggests that Fourier functions are best for applied work." "Fourier functions are useful in applied work (Chalfant)." "Fourier functions are useful in applied work (Chalfant, 1985). Probably the more active, first styles make for better reading. Although it shouldn't be necessary to say it, note that needs to be a space between the author's name and the year of publication, i.e., it is not "Chalfant(1985)".
- You should use *et al.* (and others) only in the case of four or more authors, and you should never use *et al.* in your reference list. Notice very carefully how *et al. is* punctuated. Further, it is "Chalfant *et al.",* not "Chalfant, *et al."* In other words, if you wrote "Chalfant and others", you wouldn't put a comma after "Chalfant".
- When you have a list of several papers, they should be ordered chronologically, oldest to the most recent, not alphabetically. For example, "Oligopoly is an important factor in many agricultural markets (Azzam, 1990; Sexton, 1994; Goodhue, 2002)."

Equations:

- You should number equations only when you will refer to that equation later in the text. This is a common error. Thus, I can write

  $MR = P(1 + 1/r1).$

But I will number that equation only if I intend to refer to that result elsewhere in my text.

- Equations are part of your narrative and should be punctuated accordingly. Thus, if a sentence ends with an equation, you should have a period at the end of the equation. If the sentence doesn't end with the equation, then you should probably have a comma after the equation.
- Put the equation numbers either on the left or on the right margin.
- It should be just the number, e.g., "(I)", not "equation (1)".
- It is OK to embed unnumbered equations in your text.
- When you refer to an equation in your text, put the equation number in parentheses. For example, "Based on (1), we can conclude that ..."

Section headings

- Breaking your paper into distinct sections, each with its own heading is a good idea.
- Styles for section headings differ dramatically across journals. For example, *AJAE* left-justifies its section heads and capitalizes first letters. *AJAE* uses bold type for primary section heads and italics for subheads within a section. Some outlets number headings and sub-headings. A good rule is to adopt whatever format and style your target outlet uses.
- Do not overuse section and subsection headlines. You need at most two types, e.g., *AJAE's* convention of bold main heads and italicized subheads.
- In general, all section heads and subheads need to be separated by text. For example, don not have a section head entitled "Econometric Application" and then immediately follow with a subhead such as "Data".
- Don't end a page with a section head.
- Your final section head will usually be titled "Summary and Conclusions", "Conclusion", or "Conclusions". Julian notes an important distinction between "conclusion" and "conclusions". Don't use "conclusions" unless you are drawing conclusions in that section. If the last section just sums up the paper, use "Conclusion" or "Summary".

Page numbers:

- You should number all of your pages.

Tables and Figures:

- Ultimately your journal will make you put them at the end of the paper, but integrating them in the text probably helps readers while your paper is under review.
- Every figure and table should have a name, e.g., "figure 1" and a title.
- Every figure and table that appears in a paper should be mentioned at least once in the text.
- Do not present the same information in both a figure and a table.
- Each variable and axis should be clearly labeled.

Common errors in punctuation:

- The following is correct: 1990s. The following is incorrect: 1990's.
- The abbreviation "i.e." means "that is." Observe how it is written. The same applies for "e.g." "for example". Normally either abbreviation is set off by commas within a sentence, as in "Bad writing causes problems, e.g., reviewers might think we don't care about our work."
- Don't omit commas from item n-1 in a series of length n. The preferred punctuation is here: first, second, and third. Less desirable is first, second and third.

Common grammatical errors:

- Do not rely too heavily on spell-checking programs. Sometimes these programs replace your typing mistake with the wrong word.
  Do not rely too heavily on grammar-checking programs. Sometimes these programs miss common mistakes, such as subject-verb agreement. Sometimes the program will simply give up if the structure of a sentence is extremely incorrect, and not indicate that there is an error.
- The word "data" is plural, e.g., "data were", not "data was". More generally, always proofread your text to make sure that your subject and verb agree.The words "this" and "that" are usually not good words to use as a subject of a sentence. You need a noun to be the subject of any sentence. Thus, "this is one reason why we often write poorly" is not a good sentence, but "this problem is one reason why we often write poorly" is all right.
- It's is a contraction for it is. Its is the possessive form of it. In general, the use of contractions or other slang words, such as "OK", is not a good idea for scientific writing.
- Prepositions require objects. Thus, as Churchill noted "A preposition is a terrible word to end a sentence with."

GRADUATE STUDENT SUCCESS - THESIS PREPARATION

1

2.1 General Form and Style

Form and style will differ from department to department and from discipline to discipline. The main point to keep in mind is consistency of form and style throughout the thesis. The style selected must be maintained throughout the thesis. Accepted rules of grammar must be followed, and forms of spelling and punctuation must be used with consistency. That chosen may be Canadian, American, or British, as approved by the Advisory Committee. Suggestions for assistance in writing clear, correct and concise prose are The Canadian Style: A Guide to Writing and Editing and Clear, Correct, Creative: A Handbook for Writers of Academic Prose. At the option of the student in consultation with the Advisory Committee, (foot) notes or a keyed bibliography or both may be used for references. It is the responsibility of the student, the supervisor, and the Advisory Committee to ensure before the thesis is approved to go to the oral examination that typographical errors have been eliminated and punctuation corrected, and that the language of the thesis reflects the finest standards of correct, scholarly expression.

The recommended length of the main body of a Master's thesis is between 50 and 150 pages. The recommended length of the main body of a Ph.D. thesis is between 150 and 300 pages. The main body of a thesis should normally contain:

1) a statement of objectives
2) a critical review of the relevant literature
3) a theoretical framework
4) an analytical framework
5) results
6) discussion of results
7) conclusions

The nature, the relative size, and the placement of each one of these components will be determined by the problem under investigation and by the current practices in the discipline involved. The student in consultation with his or her supervisor should decide the components of the thesis. Students and members of Advisory Committees are reminded that the purpose of a thesis is to give students the opportunity to demonstrate their ability to carry out a research project and to produce significant results. Its purpose is not to produce definitive or exhaustive research on a subject. Supervisors should counsel graduate students early in their program on the judicious selection of a manageable and suitable thesis topic. Research topics should be chosen so that time to completion is controlled: Master's degrees done full time, no more than three (3) years, Ph.D. degrees no more than five (5) years.

Students planning to include previously published material, as chapters in the thesis should discuss the thesis format with their supervisor. Approval must be given by the Dean or Associate Dean.

3. **ARRANGEMENT OF CONTENTS**

(Following through this section is the order of all elements of the thesis -- note that form GSR 301 "Certificate of Thesis Work" is not bound with the thesis). With the exception of the title page, the headings on each page should appear as listed in order below.

3.1 Title Page

The title page should contain the following information: the title of the thesis, the name of the CGSR, the degree for which the thesis is submitted, the name of the department or college, the name of the institution, the full name of the author, and the copyright notation. No other information should appear. The supervisor's name should not appear on the title page.

3.2 Permission to Use (do not use Form GSR 302)

Students hold copyright to their thesis. Students will include, in the front of their thesis, a statement in paragraph form granting permission to use the thesis under specifically stated conditions and indicating the address of the position, department, or college to which requests for such permission should be sent (see sample permission to use statement, pg. 26).

3.3 Abstract

The abstract should identify clearly and succinctly the purpose of the research, the methods used the results obtained and the significance of the results or findings. The abstract must not exceed 350 words (one word = five letters or spaces). A figure or figures may be included in the abstract.

3.4 Permission to Reproduce

Students who have reproduced or used a "substantial part" of a work or other proprietary material in the thesis must obtain permission from the rights-holder. Students must be aware that obtaining this permission may take some time and may require a fee. Allowance must be made for this.

3.5 Acknowledgements

The content of this single page is left to the discretion of the author. It is suggested however that the page refer to guidance received by the author from his or her supervisor and Advisory Committee members. Reference should also be made to any financial assistance received to carry out the project. Any extraordinary assistance received by the student, for example in word processing, data collection, data analysis, and so on, should be properly acknowledged. The acknowledgements should not exceed 250 words.

3.6 Dedication

Inclusion of a dedication is permitted.

3.7 Table of Contents

The table of contents must list and provide page references for all elements of the thesis. For the text of the thesis, it will indicate chapters, sections, and important subdivisions of each section. The numbering and format of material in the table of contents must be identical to the way this material appears in the text of the thesis. The title of each chapter or section should be written in full capitals with no terminal punctuation. The title of a subdivision of a chapter or section should be in small letters, with the exception of the first letter of significant words. Dots between titles and page numbers are optional. Page numbers should be right justified (see sample table of contents, page 27).

3.8 List of Tables

The list of tables follows the Table of Contents. This list includes the number of each table, the title, and the page number. It should have the same format as the Table of Contents.

3.9 List of Figures

The list of figures follows the list of tables. This list includes the number of each figure, the title, and the page number. It should have the same format as the Table of Contents.

3.10 List of Abbreviations

This list includes all non-standard abbreviations used in the text of the thesis. It follows the list of figures.

3.11 Body of the Thesis

The method chosen to organize the body of the thesis should be discussed with your research supervisor. The number and title of each chapter or section must be given in the same form as it appears in the table of contents.

It is in the body of the thesis that the author presents and develops in an orderly fashion all relevant aspects of the research project for which the degree is to be granted. The research reported must be verified for accuracy. It should be presented in an effective manner using correct, scholarly language. Appropriately credited references to other works may form an integral part of this presentation and are likely to take several forms. The idea may be written in the student's own words with the original author referenced.

A direct quotation of less than three lines may be incorporated into the text using quotation marks. If the quotation is more than three lines, it should be arranged in the following format: indented one and one half (1.5) centimetres from the left margin and typed in a single space format without quotation marks. Any borrowed thoughts, expressions, or use of non-original material must be acknowledged and documented.

3.12 List of References or Bibliography

This list must contain every reference cited, mentioned, or used in the text of the thesis. The references in this list should be arranged either alphabetically or numerically, in order cited in text. References not cited must not be listed in the bibliography. Departments and disciplines usually prefer the way in which references are cited. Students should consult

with their supervisors or department heads to obtain information on the style manual approved by the department.

3.13 Appendices

The purpose of an appendix is to contain those research materials which are pertinent to the thesis, but which are not essential to an understanding of the work that the student has done. The types of material that may be contained in an appendix are:

- proof of equations
- raw data for analyses, figures, or tables
- details of methods used on a specialized topic not of crucial importance to the discussion
- a lengthy debate on a topic of secondary importance to the issues discussed
- computer programs
- illustrative material

Journal articles should not be included in the appendix. Appendices should be numbered consecutively using capital letters of the alphabet. Pages of the appendices are numbered consecutively respecting the overall pagination of the thesis. Tables should be numbered Al, A2, etc.

4. SPECIFIC ITEMS

4.1 Titling the Thesis

A thesis will be a valuable source for other scholars only if it can be located easily. To locate a thesis, modern retrieval systems use the words in the title and sometimes a few other descriptive words. It is essential that the title be meaningful and descriptive of the content of the work. If possible, students should use word substitutes for formulae, symbols, superscripts, subscripts, Greek letters, etc. The title as it appears on the thesis certification page, title page, and thesis cover must be identical. On the front cover of the thesis, each line in the title must not exceed 26 characters including spaces. When planning the title of their theses, students should bear in mind that most book binders charge extra for overly long titles (see sample bound cover of thesis, page 28).

When a thesis title is lengthy, a short title not exceeding forty characters including spaces is needed for the spine of the bound thesis. This should follow the wording of the original title as closely as possible. The object of the short title is to facilitate easier recognition of the thesis on the library shelf. The author's last name, initials, and year of convocation should also appear on the spine (see sample bound spine of thesis, page 29).

4.2 Copyright and Subsequent Use of the Thesis

The author of a thesis claims copyright on the title page by using the appropriate notation (see sample permission to use statement, page 26). As a condition for the award of the degree, the author is required to sign form GSR 302 (sample GSR 302, page 42) . This gives permission to the University Library to make the thesis available for inspection and to

permit copying of the thesis in any manner, in whole or in part, for scholarly purposes only. It is understood that any copying or publication of the thesis in any manner in whole or in part for financial gain requires the permission of the author.

To remind readers that the thesis is protected by copyright, students must insert the paragraph statement of "Permission to Use" immediately after the Title Page. Neither GSR 302 or GSR 301 are to be bound in the thesis for this purpose.

Students hold copyright to their thesis even when agreements have been reached with other parties regarding ownership of some parts of the research material. Careful attention must be paid to any previous agreements signed regarding ownership of research findings. Consultation with the Office of Research Services and the CGSR is recommended if there are any questions regarding patentable or commercializable material.

Students are reminded that they are required to respect standards of academic honesty and intellectual property in the case of all material used in the thesis. In order to do this, it is usually sufficient to use notes and bibliographical references. When use is made of a substantial part of a source work, it is necessary to obtain prior permission from the author. Definition of a "substantial part of a work" depends on several factors, principally the quantity and quality of the portion taken and the economic impact of the ability of the copyright owner to profit from the exploitation of the work. In some instances, copying even a short excerpt may be sufficient to constitute infringement. A policy statement on the Intellectual Property Rights of Graduate Students is currently in an advanced stage of preparation.
Remember at all times that plagiarism is a serious offence and could jeopardize an entire academic career. Plagiarism is the representation as one's own of any idea or ideas, expressions of an idea, or the work of another author.

Each equation in a chapter is to be numbered consecutively using a decimal system appearing flush with the right-hand margin. For example:

$$y = m x + b \qquad (5.1)$$

The numbers in parentheses are the chapter number and equation numbers respectively. Every new symbol used in the thesis text for the first time must be explained. When a large number of special symbols are used, it is permissible to collect them in a table or in a special appendix.

4.4 Notes

Following the advice of their supervisor, students may use any appropriate combination of footnotes at the bottom of pages in the text, endnotes at the end of each chapter, and direct reference to the bibliography. The method chosen must be used consistently throughout the thesis. The font used in notes should be the same in form and size as that used in the text.

Any change in the level of the argument, such as a change in the rigor, a change in terms of empirical content, or definitions of key words or concepts should be put in the form of a note. Any cross-referencing of the material contained either in the main body or in appendices should also be indicated with the help of a note.

The general place of a footnote is as follows. Beneath the text, leaving one double space, a

solid line extending approximately five (5) centimetres from the left-hand margin is drawn. The footnote number as shown in the text appears one single space below this line. The first line is indented. One half space below and one space to the right, the text of the footnote is typed using a single spaced format. Footnote numbering must be done consecutively and separately for each chapter.

Endnotes should appear at the end of each chapter. They should be single-spaced with double spaces left between notes. Endnote numbering must be done consecutively and separately for each chapter.

4.5 Referencing

The fundamental rule of good scholarship is that the basic research be complete, reliable, and correct, with all sources duly acknowledged. The format used for references must be consistent throughout the thesis. Students are expected to use the style manual or convention approved by their department in their choice of format for notes and bibliography.

4.6 Layout of a Chapter

The purposes of a reference are to acknowledge the contributions of other authors and to enable readers to locate sources easily. Each subsection in a chapter should be numbered and arranged in a manner to maximize the clarity for the reader. The following format is suggested:

1. Marbles
    1.1 Introduction to Marbles
    1.2 Marble Colours
        1.2.1 Blue Marbles
        1.2.2 Red Marbles

The numbering system used for different sections denotes the following: the first number refers to the chapter number, the second number refers to the primary section number, and the third number refers to the secondary section number. Thus, the number 2.4.1 denote chapter 2, primary section 4, and secondary section 1. All chapters should begin on a new page and should have a top margin of five (5) centimetres, with the page number centred at the bottom.

4.7 Layout of a Table

Each table has a table number and a title. The first number refers to the chapter number and the second refers to the table number in that chapter. The number and title of the table appear at the top of the table. Tables must conform to the margin requirements of the thesis format. They should be centred between the left- and right-hand margins, and, as appropriate, between top and bottom. Contents of the table must be preceded and followed by a single solid line. Similarly, solid lines must appear at other appropriate places horizontally inside the table. Tables should not be folded. The title of the table should be as short as possible but should indicate the major focus of the table. Ordinary rules of referencing and footnoting apply. The numbering of footnotes in the table is independent of that followed in the text. (See section 2.6 "Illustrative Material" for advice on the presentation of tables. See also sample table, page 30).

4.8 Layout of a Figure

Each figure must have a figure number and a title. The same numbering system for tables is used for figures. The number and title of the figure appear at the bottom of the figure in the figure legend. Both axes of the figure must be properly labelled. If a figure shows, more than one relationship, each relationship should be properly labelled with the appropriate axis. (See section 2.6 "Illustrative Material" for advice on the presentation of figures. See also sample figure, page 31). Figures must conform to the margin requirements of the thesis format. They should be centred between the left- and right-hand margins and, as appropriate, between top and bottom.

4.9 Preparation of the Approved Thesis

All revisions required in the thesis must be made and approved before final preparation of the volume begins. It is the student's responsibility to prepare and assemble all materials for the thesis in accordance with University and CGPS regulations and to ensure that the thesis volume is complete and in good order.