

GRADUATE STUDIES

in

AGRICULTURAL, FOOD AND NUTRITIONAL SCIENCE

PROGRAM HANDBOOK

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Information for students

1. Program information is available on the department website at <https://www.ualberta.ca/agriculture-life-environment-sciences/programs/graduate-programs/prospective-students/agricultural-food-and-nutritional-science/index.html>.
2. Graduate Student Computer Lab is located in Room 1-30 Ag/For Centre. Please contact IST for assistance: <https://www.ualberta.ca/information-services-and-technology/index.html>.
3. Photocopy machine is available on the 3rd floor. To receive your photocopy number please contact IST: <https://www.ualberta.ca/information-services-and-technology/index.html>.
4. Keys to access your office and lab area are available by visiting 410 Ag/For Centre. There is a \$10.00 refundable deposit required for each key. Building access outside of regular hours and on weekends can also be arranged at the same office with your One Card.
5. The Graduate Student Association (GSA) is located in Triffo Hall and at <http://www.gsa.ualberta.ca>.
6. WHMIS (Workplace Hazardous Materials Information System): For information on general procedures and guidelines see Urmila Basu, 4-32A Ag/For Centre, 492-8712.
7. Payroll Enquiries: ALES HR (aleshr@ualberta.ca) processes graduate student contracts (GRA, GRAF, GTA). For other payroll, employment, or human resources related issues, please contact the Staff Service Centre: <https://www.ualberta.ca/information-services-and-technology/index.html>
8. Student Office Allocation: Office space is assigned during the first term of a student's program. Please visit 410 Ag/For Centre for office assignment.
9. Biostatistics Research Group, Statistics Centre: Open 2:00 – 4:00 p.m., Tuesday and Thursday, Room 415B CAB. Email: TCC@stat.ualberta.ca; <https://www.ualberta.ca/research/research-support/quality-management-in-clinical-research/statistical-support-and-training.html>.
10. International students can speak with immigration specialists at University of Alberta International: <https://www.ualberta.ca/international/index.html>.

TABLE OF CONTENTS

DEPARTMENT OF AGRICULTURAL, FOOD & NUTRITIONAL SCIENCE (AFNS)	I
INFORMATION FOR STUDENTS	III
<i>TABLE OF CONTENTS</i>	<i>iv</i>
1. INTRODUCTION	1
1.1 DEGREES	1
1.2 SPECIALIZATIONS	2
1.3 DEFINITIONS	2
2. CONCERNS OR DIFFICULTIES?	2
3. GRADUATE PROGRAM COMMITTEE	2
4.1 REQUIREMENTS	3
4.2 APPLICATION PROCEDURE	4
4.3 GUIDELINES FOR ACCEPTANCE OF STUDENTS WITH CONDITIONS	4
5. SUPERVISORS	4
5.1 QUALIFICATIONS	4
5.2 RESPONSIBILITIES	5
6. SUPERVISORY COMMITTEES	5
6.1 RESPONSIBILITIES	5
6.2 COMPOSITION	5
6.3 APPOINTMENT	6
6.4 REPLACEMENTS	6
6.5 MEETINGS	6
7. COURSE/SEMINAR REQUIREMENTS	6
7.1 MAG	6
7.2 MSC COURSE-BASED	7
7.3 MSC THESIS-BASED	7
7.4 PhD	7
8. THESIS PREPARATION	8
9. TIME LIMITS	8
9.1 RESIDENCY	8
9.2 MAXIMUM TIME	8
10. PROMOTIONS	8
10.1 CRITERIA	8
10.2 PROCEDURE	8
11. EXAMINATIONS	9
12. MAG/ MSC COURSE-BASED ORAL EXAMINATION	9
13. MSC THESIS-BASED ORAL EXAMINATION	9
13.1 EXAMINING COMMITTEE	9
13.2 PREPARATION	9
13.4 EXAMINATION FORMAT	10
13.5 ADJUDICATION	10

14. PHD CANDIDACY EXAMINATION	12
14.1 EXAMINING COMMITTEE.....	12
14.2 PREPARATION.....	12
14.3 EXAMINATION FORMAT	12
14.4 ADJUDICATION.....	13
15. PHD FINAL ORAL EXAMINATION.....	13
15.1 EXAMINING COMMITTEE.....	13
15.2 EXTERNAL EXAMINER	13
15.3 PREPARATION.....	14
15.4 SEMINAR.....	14
15.5 EXAMINATION FORMAT	14
15.6 ADJUDICATION.....	15
16. TERMINATION OF PROGRAM.....	16
16.1 CRITERIA.....	16
16.2 PROCEDURES	16
17. APPEALS	16
17.1 ACADEMIC DECISIONS	16
17.2 GRADES	16
17.3 OTHER.....	16
18. PUBLICATION OF RESEARCH	16
19. LABORATORY COMPLEX.....	17
19.1 CENTRAL LABORATORIES	17
19.2 OFF-CAMPUS FACILITIES	17
19.3 ANIMAL FACILITIES	17
19.4 PLANT FACILITIES	17
20. ADMINISTRATIVE UNIT	18
20.1 ORGANIZATION.....	18
21. SERVICES PROVIDED BY THE DEPARTMENT.....	18
22. FINANCIAL SUPPORT.....	18
22.1 SCHOLARSHIPS AND FELLOWSHIPS	18
22.2 ASSISTANTSHIPS.....	18
22.3 DEPARTMENTAL GUIDELINES.....	18
22.4 GRADUATE RESEARCH ASSISTANTSHIPS FUND (GRAF)	19
22.5 GRADUATE TEACHING ASSISTANTSHIPS	19
22.6 GRADUATE STUDENT EMPLOYMENT	20
23. SCHOLARSHIPS AND FELLOWSHIPS	20
APPENDICES.....	20
APPENDIX I	20
1. GUIDELINES FOR SUPERVISORS	20
2. GUIDELINES FOR GRADUATE STUDENTS.....	21
APPENDIX II.....	22
GRADUATE STUDENT SUPERVISION	22
APPENDIX III.....	23
GRADUATE STUDENTS WITH RESEARCH CONTRACTS.....	23
AND IN AFFILIATED INSTITUTIONS	23
APPENDIX IV.....	24

PRELIMINARY ACCEPTANCE OF PHD THESIS 24

1. INTRODUCTION

The Department of Agricultural, Food & Nutritional Science (AFNS) provides undergraduate training through the Faculty of Agricultural, Life & Environmental Sciences and graduate training through the Faculty of Graduate Studies & Research (FGSR). The objectives of the graduate program in AFNS are to:

- 1) educate and train graduates who are skilled problem solvers and communicators, and who can generate, retrieve, evaluate and present information in the solution of problems for the advancement of knowledge in animal and plant agriculture and in food and nutritional sciences;
- 2) provide a training in scientific methodology, including the design and analysis of experiments, and the interpretation and communication of results.

This handbook is an information resource for graduate students and supervisors and standardizes departmental procedures within the broader requirements of FGSR, which are documented in the University Calendar.

1.1 DEGREES

The Department of Agricultural, Food & Nutritional Science offers the following degrees through the Faculty of Graduate Studies & Research.

MAg Course-based	The MAg degree is a 2 year course-based program designed for professionals who have been with government, industry, or private practice and who wish to return for upgrading and specialization. Students are required to complete 8 graduate level courses, AFNS 601 Seminar course, 8 hours of Ethics, Professional Development and a project.
MSc Course-based	The MSc course-based degree is a 2 year course-based program designed for professionals who have been with government, industry, or private practice and who wish to return for upgrading and specialization. Students are required to complete 8 graduate level courses, AFNS 601 Seminar course, 8 hours of Ethics, Professional Development and a project.
MSc Thesis-based	The MSc thesis-based degree is a 2 year thesis-based program designed for students wishing to specialize and develop skills in research and scientific communication. It prepares students either for further advanced training or for mid-management positions in government or industry. Students are required to complete 3 graduate level courses, AFNS 601 Seminar course, 8 hours of Ethics, Professional Development, and research, write and defend a thesis.
PhD	The PhD degree is a 4 year thesis-based program offering an opportunity for independent research at an advanced level in preparation for careers in research, university teaching, and administration. It often builds on research skills gained in the MSc program. Students are required to complete 3 graduate level courses, two terms of AFNS 601 Seminar course, 8 hours of Ethics, Professional Development, Candidacy Exam, and research, write and defend a thesis.

1.2 SPECIALIZATIONS

Students specialize in one of the following areas (the area of specialization is normally listed on the title page of the thesis):

- Animal Science
- Bioresource and Food Engineering
- Bioresource Technology
- Food Science and Technology
- Nutrition and Metabolism
- Plant Science
- Rangeland and Wildlife Resources

1.3 DEFINITIONS

Chair	Chair, Department of Agricultural, Food & Nutritional Science
Associate Chair	Graduate Programs, Department of Agricultural, Food & Nutritional Science
Vice-Associate Chair	Graduate Programs, Department of Agricultural, Food & Nutritional Science
Department	Department of Agricultural, Food & Nutritional Science
FGSR	Faculty of Graduate Studies and Research
Professor	Full, Associate and Assistant Professors
Supervisor	Individual graduate student's advisor
Supervisory Committee	Committee appointed to oversee research progress of a student

2. CONCERNS OR DIFFICULTIES?

Some graduate students may encounter difficulties or other issues over the course of their program. These students are encouraged to discuss their concerns with different individuals in AFNS, depending on the specific type of issue:

- Students who are concerned with their academic program and wish to obtain advice outside of their Supervisory Committee are encouraged to discuss their concerns in confidence with the Associate Chair, Vice-Associate Chair, or a member of the Graduate Program Committee.
- Students who have concerns about general student issues or suggestions as to how to improve the graduate student experience in AFNS are encouraged to speak with their GPC student representatives.
- Students who are experiencing difficulties that are not related to their academic program or supervisor *per se* are encouraged to speak with the Chair.

Please see page (i) for contact information for the various individuals. Students may also speak with the Graduate Program Administrator if they are unsure about to whom to direct their inquiries. The Graduate Program Administrator can also provide information, referrals, and options for other services across campus.

3. GRADUATE PROGRAM COMMITTEE

Terms of Reference:

Mandate: To foster high standards in the graduate program of the Department of Agricultural, Food and Nutritional Science.

Membership: The committee consists of five faculty members from the Department elected by Department Council on a three-year rotating basis; four graduate student representatives elected annually by the Department's graduate students; the Assistant to the Chair, the Graduate Program Administrator.

Coordinator: Position held by the Associate Chair, Graduate Programs. Appointed by the Department Chair from a continuing committee member for a 2-year term. The Coordinator (or Vice-Associate Chair) manages student applications and serves as the Department Chair's alternate on the Faculty of Graduate Studies Council.

Committee Chair: Position held by the Associate Chair, Graduate Programs.

- Responsibilities:
1. To make recommendations to the Department Chair on matters pertaining to individual graduate students.
 2. To recommend graduate program policies which:
 - Facilitate communication between graduate students and academic/non-academic staff;
 - Recruit superior applicants;
 - Ensure fair treatment of graduate students;
 - Publicize graduate student activities;
 - Facilitate graduate course/seminar requirements.
 3. To review recommendations of student transfer between the MAg, MSc and PhD programs.
 4. To review and select applications for awards and encourage suitable candidates to apply for scholarships and fellowships.

4. ADMISSIONS

4.1 REQUIREMENTS

The Department's minimum admission requirements to the PhD or MSc programs is based on the following grade point (or equivalent) achievements:

- with a BSc GPA ≥ 3.5 , admission to the MSc thesis-based or PhD degree program;
- with a MSc GPA ≥ 3.3 , admission to the PhD degree program;
- with a BSc GPA ≥ 3.3 to < 3.5 , admission to MSc thesis-based degree program;
- with a BSc completed < 5 years ago and a GPA ≥ 3.0 to < 3.3 , student will normally be admitted to the MSc thesis-based program *with conditions*. Students will be required to complete 3 and up to 5 senior undergraduate level courses (specified by supervisor) plus the ethics requirement in the first term of the qualifying period and obtain a GPA of ≥ 3.3 with no grade less than B in any one course. Courses completed in the qualifying period are not eligible for course credit towards a subsequent graduate program (as per FGSR Program Manual).

NOTE: Students must focus 100% on course work during the qualifying period. No lab/research work is allowed. Normally there is no supervisor or department funding support while the student is completing the qualifying period.

- with a BSc completed > 5 years ago and a GPA ≥ 3.0 to < 3.3 , based on life experience student will normally be admitted to the MSc thesis-based program *with conditions*. Student will be required to complete 3 graduate level courses (specified by supervisor) plus the ethics requirement in the first term of the qualifying period and obtain a GPA of ≥ 3.3 with no grade less than B in any one course. Graduate level courses completed in the qualifying period are eligible for course credit towards a subsequent graduate program (as per FGSR Program Manual).

NOTE: Students must focus 100% on course work during the qualifying period. No lab/research work is allowed. Normally there is no supervisor or department funding support while the student is completing the qualifying period.

Note: FGSR Admission requirements will apply to MAg/ MSc course-based students.

International students are required to submit evidence of English language proficiency through one of the options outlined on the FGSR website: <https://www.ualberta.ca/graduate-studies/prospective-students/international-admissions-protocol/english-language-proficiency/index.html>

4.2 APPLICATION PROCEDURE

Enquiries: Students requesting information on application procedures for graduate studies in the Department should visit the admission process website: <https://www.ualberta.ca/agriculture-life-environment-sciences/programs/graduate-programs/prospective-students/agricultural-food-and-nutritional-science/afns-admission-process/index.html>

Applications are assigned a reference number and the applicant will receive an email acknowledging receipt of the application. The prospective supervisor is asked to confirm supervision and provide feedback on the application. If no interest is shown within four to six weeks, a letter of regret is sent to the student.

Completed applications consist of the following information:

- Current application form;
- Curriculum vitae of applicant;
- Official transcripts and degree certificates of all post-secondary training (in original language and with certified English translation);
- Three letters of reference;
- English language assessments where required;
- Confirmation of a faculty member as prospective supervisor;
- Research statement (1 to 2 pages).

Accepted applications are forwarded to FGSR with a provisional letter of acceptance to the student indicating the program start date and supervisor's name. An official admission letter is sent to the student by FGSR once they make the final decision.

4.3 Guidelines for Acceptance of Students with conditions

- Conditional students present a GPA between 3.0 – 3.2 on a 4 point scale, or they are entering a new field of research;
- Conditional students with life experience are required to complete three graduate level courses normally in the first term of their program and obtain a grade point average of ≥ 3.3 with no grade less than B in any one course;
- Conditional students with no life experience (less than 5 years after completion of BSc degree) are required to complete three undergraduate level courses normally in the first term of their program and obtain a grade point average of ≥ 3.3 with no grade less than B in any one course;
- The Supervisory Committee must ensure the student only registers in and completes the conditional courses listed. No additional courses can be taken until conditional requirements are met;
- Supervisor/supervisory committee must be familiar with the courses (including content) recommended for the conditional period.

5. SUPERVISORS

Each graduate student must have a Supervisor and a Supervisory Committee who are responsible for overseeing the student's graduate program. The Supervisor is normally appointed at the time the Department recommends acceptance of the applicant to FGSR. Guidelines for Supervisors and Graduate Students are attached in Appendix I.

5.1 QUALIFICATIONS

- Supervisors must be full-time professors in the Department of Agricultural, Food & Nutritional Science;
- Qualified Adjunct Professors may be approved to supervise graduate students with a full-time professor in the Department who is also responsible for the administrative aspects of the program;
- Supervisors should normally hold the equivalent of a PhD degree and must be active researchers as evidenced by (a) their ability to support their students on research trust accounts, and (b) regular contributions to refereed scholarly publications;
- Supervisors must have a record (or show promise) of successfully supervising graduate students.

More detailed criteria established by FGSR are outlined in Appendix II.

5.2 RESPONSIBILITIES

- Assist the candidate in the development of academic and research programs;
- Arrange and chair meetings of the Supervisory Committee and record its assessment of academic and research progress in writing following each meeting with copies to the student, committee members, graduate coordinator and the student's file; a minimum of one supervisory committee meeting per year is required;
- Arrange the candidate's stipend at a level consistent with Department policy;
- Provide adequate facilities and funding to support the candidate's research project;
- Assist and direct the student in the preparation of the thesis.

6. SUPERVISORY COMMITTEES

The work and progress of each graduate student in the Department of Agricultural, Food & Nutritional Science is monitored by a Supervisory Committee.

6.1 RESPONSIBILITIES

- Offer academic support throughout the program;
- Develop a program of courses which will prepare the candidate for thesis work and career development;
- Provide critical comments on the research proposal;
- Review academic and research progress;
- Recommend academic promotion (on the basis of the Candidacy examination in the case of PhD candidates);
- For PhD programs, recommend whether the thesis is of acceptable standard to be distributed to the final examination committee;
- Ensure that all Departmental and FGSR procedures associated with examination of the candidate's thesis and defence are adhered to.

6.2 COMPOSITION

The Supervisory Committee for the **MAG and MSc course-based programs** is comprised minimally of the following:

- Supervisor

The Supervisory Committee for the **MSc thesis-based program** is comprised minimally of the following:

- Supervisor;
- At least one other full-time assistant/associate/professor at a university (University of Alberta or other), adjunct professor at the University of Alberta, retired professor, clinical appointee or FSO. May be from a department other than AFNS. Additional members from within or outside the University of Alberta may be added to provide appropriate expertise upon approval of the Associate Chair, Graduate Programs. However, the committee normally should not have more than three members. A postdoctoral fellow or research associate can be appointed to the committee. Approval must be sought from the department which will consider the rank and experience of the prospective members, their publications and other demonstrations of competence in the subject area or field of specialization, and their experience in graduate supervision.
- To appoint a committee member not listed above the supervisor must submit justification and CV for approval by the Associate Chair, Graduate Programs.

The Supervisory Committee for the **PhD program** is comprised minimally of the following:

- Supervisor;

- At least 2 additional supervisory committee members:
 - One must be a full-time University of Alberta assistant/associate/full professor, adjunct professor, retired professor, clinical appointee or FSO. May be from a department other than AFNS.
 - The second can be an assistant/associate/full professor from another university.
- Additional members from within or outside the University of Alberta may be added to provide appropriate expertise upon approval of the Associate Chair, Graduate Programs. However, the committee normally should not have more than four members. A postdoctoral fellow or research associate can be appointed to the committee. Approval must be sought from the department, which will consider the rank and experience of the prospective members, their publications and other demonstrations of competence in the subject area or field of specialization, and their experience in graduate supervision.
- To appoint a committee member not listed above the supervisor must submit justification and CV for approval by the Associate Chair, Graduate Programs.

6.3 APPOINTMENT

The Supervisory Committee is:

- Selected jointly by the Supervisor and the student;
- Recommended to the Associate Chair, Graduate Programs, within **the first term** of the candidate's initial registration;
- Approved by the Associate Chair, Graduate Programs.

6.4 REPLACEMENTS

- Members of the Supervisory Committee who are on study leave or any other leave for a time exceeding two months can be replaced on Candidacy and/or Thesis Examinations. This change is noted on the *Notice of Examining Committee & Examination Date* form which is required before each examination. Supervisors who will be absent for more than two months must arrange for interim supervision and notify the Department Chair.
- A change in research direction or academic program may require changes in the Supervisory Committee.

1.5 MEETINGS

- Regular meetings must be held to monitor and record the candidate's progress in course work and research.
 - Student progress in thesis-based programs is reported at least once annually using FGSR's standardized Progress Report form. The Progress Report is a tool that ensures students, supervisor(s) and the supervisor committee (if applicable) meet at least once per year to review and discuss a student's progress in their program and set milestones for the upcoming year. The Progress Report does not replace regular meetings and feedback from a Supervisor and Supervisory Committee, but rather provides a structured opportunity for the assessment of the student's academic progress and planning for the next year.
 - The form is initiated by FGSR based on the Appointment of Supervisor(s) & Supervisory Committee form, which is submitted by the department to FGSR at the start of the student's program.
 - Students will receive an email prompt when it's time to complete the report.
- Candidacy examination for PhD. This examination **normally must be held within 2 years of the start of a program (between months 13 and 24)**.
- Final oral examination.

7. COURSE/SEMINAR REQUIREMENTS

7.1 MAg

Program requirements for the MAg degree:

- The degree program consists of the equivalent of 24 units of course weight from graduate level courses recommended by the supervisor plus a project equivalent to at least three units of course weight. The student will be required to submit a report and present a seminar on the project, which will be evaluated by the student's supervisor plus one additional faculty member;
- Students must maintain a Grade Point Average (GPA) of 2.7 to continue in the program;
- Complete AFNS 601 seminar requirement (presentation of 1 seminar and 75%+ attendance);
- Complete the Ethics and Academic Citizenship Requirement by enrolling in INT D 710 in the first term of the program and completing CORE;
- Complete 8 hours of Professional Development activities and an Individual Development Plan;
- A copy of the final report is to be submitted to the supervisor, if requested, and kept for department records.

7.2 MSc course-based

Program requirements for the MSc course-based degree:

- The degree program consists of the equivalent of 24 units of course weight from graduate level courses recommended by the supervisor plus an AFNS 900 research project OR AFNS 598 OR WKEXP 986 for Food Safety and Quality or Meat Quality specializations. For AFNS 900 the student will be required to submit a report and present a seminar on this project which will be evaluated by the student's supervisor plus one additional faculty member;
- Students must maintain a Grade Point Average (GPA) of 2.7 to continue in the program;
- Complete AFNS 601 seminar requirement (presentation of 1 seminar and 75%+ attendance);
- Complete the Ethics and Academic Citizenship Requirement by enrolling in INT D 710 in the first term of the program and completing CORE;
- Complete 8 hours of Professional Development activities and an Individual Development Plan;
- A copy of the final report is to be submitted to the supervisor, if requested, and kept for department records.

7.3 MSc thesis-based

Program requirements for the MSc degree:

- Students are normally required to complete a minimum of nine units of course weight as recommended by the supervisor and the supervisory committee; Ethics and Academic Citizenship Requirement; Lab Skills 101, and 8 hours of Professional Development activities and an Individual Development Plan;
- Complete AFNS 601 seminar requirement (presentation of 1 seminar and 75%+ attendance);
- Present a thesis seminar and successfully pass the oral exam;
- Students must maintain a Grade Point Average (GPA) of 3.0 to continue in the program;
- Students must normally register full-time for the duration of their graduate program. Only three of the required nine credits of course work is permitted to be an individual study. Permission to take an additional individual study course requires approval by the AFNS Associate Chair, Graduate Programs.

7.4 PhD

Program requirements for the PhD degree:

- Students are normally required to complete a minimum of nine units of course weight as recommended by the supervisor and the supervisory committee; Ethics and Academic Citizenship Requirement; Lab Skills 101, and 8 hours of Professional Development activities and an Individual Development Plan;
- Complete AFNS 601 seminar requirement twice during the program (presentation of 1 seminar and 75%+ attendance each seminar);
- Complete the candidacy exam within two years of the start of the program;
- Present a thesis seminar and successfully pass the oral exam;
- Students must maintain a Grade Point Average (GPA) of 2.7 to continue in the program;
- Students must normally register full-time for the duration of their program. Only three of the required nine credits of course work is permitted to be an individual study. Permission to take an additional individual

study course requires approval by the AFNS Associate Chair, Graduate Programs

8. THESIS PREPARATION

Students should review "Preparing Your Thesis" available on the FGSR website (<https://uofa.ualberta.ca/graduate-studies/current-students/academic-requirements/thesis-requirement-and-preparation>) to ensure that current requirements are met. Students may write a *paper-format* or a *traditional-format* thesis. University policy is that thesis preparation is the financial responsibility of the student. **Photocopying of a thesis on department photocopiers is strictly prohibited. Students may only print one copy of their thesis on department computers.**

9. TIME LIMITS

9.1 RESIDENCY

FGSR normally requires all students to register full time for the duration of their graduate program at the University of Alberta. Students and their prospective supervisors should consult with the Graduate Program Administrator if their research will be conducted off campus.

9.2 MAXIMUM TIME

Special permission from FGSR is required for extensions of graduate programs beyond four years for the MSc thesis-based, six years for the MAg and MSc course-based, and six years for the PhD. Extensions are viewed as exceptions. Requests for one or more extension will be considered only under compelling circumstances. To qualify for an extension, students must present in writing to the department the causes for the delay and demonstrate substantial progress on the thesis or in the course-based program. Unanticipated events unrelated to the student's program, such as family emergency, personal crisis, and parental leave may be considered. An extension is normally granted for no more than one year. PhD students may have to repeat their candidacy examination if their program extends beyond six years. Students whose time limit has been reached are not permitted to register until the extension has been approved by the Associate Chair, Graduate Programs.

10. PROMOTIONS

10.1 CRITERIA

The supervisory committee may recommend that a student be reclassified from the MAg or MSc course-based to the MSc thesis-based program or, more commonly, from the MSc thesis-based to the PhD program. The MSc thesis-based research project must be restructured in a suitable manner to meet the more independent research goals of a PhD program. In the case of promotion to the PhD program the following conditions must be met:

- The GPA based on courses taken during the student's post-graduate program is normally 3.5 or greater;
- The student's supervisory committee must provide written notice to the Graduate Program Committee that a MSc thesis-based student has demonstrated the ability to pursue research at a level expected of a PhD student.

10.2 PROCEDURE

The student submits the request to the Graduate Program Committee. Information can be found at: <https://cloudfront.ualberta.ca/-/media/ales/programs/graduate/programs/afns/current-grads/documents/transferring-to-the-phd-program-revised-2018.pdf>

Transfer requests are reviewed twice per year with a deadline date of the first Monday in December (to be reviewed at the December GPC meeting; category change effective January 1), and the first Monday in May (to be reviewed at the May/June GPC meeting; category change effective September 1). Students must complete one full year of their graduate program before requesting a transfer (i.e. students who began their program in January 2018 must wait to April 2019 to apply to transfer; students starting September 2018 must wait until

December 2019 to apply to transfer; students beginning their program in January 2018 can apply to transfer in April 2019, etc.). Students can submit their transfer requests at any time throughout the year; however, the committee will only review the transfers on the dates indicated above. Students requesting the transfer will be required to give a 10 minute oral presentation of their research followed by a 5 minute question period from GPC members.

11. EXAMINATIONS

Supervisors are responsible for setting up the candidacy and final examinations. PhD final exams (set examination date, submit the final draft of their thesis for distribution to the external examiner and examining committee members) must be done 6 weeks in advance. MSc thesis-based exams (set the final examination date and submit the final draft of their thesis to examining committee members) must be done 4 weeks in advance. All oral examinations for MSc thesis-based and PhD programs will be chaired by a faculty member in AFNS. The exam chair is normally a non-examining member of the committee. For PhD examinations, the chair must have prior experience as a committee chair.

The exam chair is responsible for ensuring the exam is conducted in an impartial and consistent manner according to FGSR regulations, and reports the exam results to the candidate and FGSR.

12. MAg/ MSc course-based ORAL EXAMINATION

MAg and MSc course-based candidates are required to present a formal public seminar (outlining their project paper) and successfully complete an oral examination by the supervisor plus one additional faculty member.

13. MSc thesis-based ORAL EXAMINATION

MSc thesis-based candidates are required to pass an oral examination to test their knowledge of the thesis subject and related fields. The first hour of the exam is generally a public seminar (20-30 minute presentation plus questions from the public) followed by a closed session with the committee.

13.1 EXAMINING COMMITTEE

The examining committee is comprised of the supervisory committee plus one “arms-length” examiner (no collaboration with the student’s supervisor) from AFNS or another University of Alberta department.

13.2 PREPARATION

Candidate:

- ensures that program requirements have been fully met;
- ensures that the thesis is in a format acceptable to FGSR;
- submits a seminar abstract and title to the Graduate Program Administrator 1-2 weeks prior to the thesis defence;
- distributes the thesis to the examining committee at least three weeks prior to the defence date.

Supervisor:

- ensures that the Graduate Program Administrator receives information for completing the Notice of Examining Committee and Examination Date form at least **four weeks** before the proposed examination date;
- finalizes the time and date for the examination with the student and examining committee members.

Graduate Program Administrator:

- Secures an exam chair, reserves the room, submits notification of the final exam to FGSR, creates a calendar invite for the student and exam committee, advertises the seminar to AFNS staff and grad students, completes the Thesis Approval/Program Completion form and emails all relevant materials to the chair of the exam a week prior to the defence.

13.3 SEMINAR

A candidate presents a public seminar (~30 minutes in length) usually in the hour before the oral exam. The candidate is introduced by a colleague (or the supervisor). Questions are invited from the public before they leave. Examining committee members do not ask questions at this time.

13.4 EXAMINATION FORMAT

Following the seminar and in the absence of the public, the chair:

In the absence of the candidate:

- reviews the candidate's background;
- confirms that program requirements have been fully met;
- establishes order of questioning (normally beginning with the “arms-length” examiner, then members of the supervisory committee, ending with the supervisor).

In the presence of the candidate:

- indicates the purpose of the examination (to conduct an oral examination designed to test the candidate's knowledge of the thesis subject and of related fields);
- outlines examination procedures;
- establishes the order of questioning.

Examiners:

- examine the candidate. Normally examiners are given 15 to 20 min each for their questions, depending on the size of the committee;
- examine the candidate a second time if necessary, limited to 10 min each for examiners.

13.5 ADJUDICATION

In the absence of the Candidate, the Examining Committee evaluates the Candidate's performance in terms of thesis quality and the candidate's defence of the thesis. The decision of the examining committee is based both on the content and on the student's ability to defend it. The final examination may result in one of the following outcomes:

- Adjourned
- Pass
- Pass subject to revisions
- Fail

There is no provision for a final examination to be “passed subject to major revisions”.

If the Examining Committee fails to reach a decision, the department will refer the matter to the Dean, FGSR, who will determine an appropriate course of action.

- *Adjourned:* An adjourned examination is one that has been abandoned officially. A majority of examiners must agree to an outcome of Adjourned. The final examination should be adjourned in the following situations:
 - The revisions to the thesis are sufficiently substantial that it will require further research or experimentation or major reworking of sections, or if the committee is so dissatisfied with the general presentation of the thesis that it will require a reconvening of the examining committee.
 - The committee is dissatisfied with the student's oral presentation and defence of the thesis, even if the thesis itself is acceptable with or without minor revisions.
 - Compelling, extraordinary circumstances such as a sudden medical emergency taking place during the examination.
 - Discover of possible offences under the Code of Student Behaviour after the examination has started.

If the examination is adjourned, the committee should:

- Specify in writing to the student, with as much precision as possible, the nature of the deficiencies and, in the case of revisions to the thesis, the extent of the revisions required. Where the oral defence is unsatisfactory, it may be necessary to arrange some discussion periods with the student prior to reconvening the examination.

- Decide upon a date to reconvene. If the date of the reconvened oral examination depends upon the completion of a research task or a series of discussions, it should be made clear which committee members will decide on the appropriate date to reconvene. This new examination must be held within six months of the initial examination.
 - Make it clear to the student what will be required by way of approval before the examination is reconvened (e.g., approval of the committee chair or supervisor, approval of the entire committee, or of select members of the committee).
 - Specify the supervision and assistance the student may expect from the committee members in meeting the necessary revisions.
 - Advise the Dean, FGSR, in writing of the adjournment and the conditions.
 - When the date is set for the adjourned final examination, the department will notify the FGSR. Normally a Pro Dean attends the examination.
- *Pass:* All or all but one of the examiners must agree to an outcome of Pass. If the student passes the examination, the department should submit a completed Thesis Approval/Program Completion form to the FGSR. If one of the examiners fails the student, that examiner does not have to sign this form.
 - *Pass subject to revisions:* All or all but one of the examiners must agree to an outcome of Pass subject to revisions. The student has satisfactorily defended the thesis and the revisions to the thesis are sufficiently minor that it will not require a reconvening of the examining committee. Normally all examiners except the supervisor sign off on the Thesis Approval/Program Completion form.

If the examining committee agrees to a “Pass subject to revisions” for the student, the chair of the examining committee must provide in writing, within five working days of the examination, to the Dean, FGSR, the graduate coordinator and the student:

- the reasons for this outcome,
- the details of the required revisions,
- the approval mechanism for meeting the requirement for revisions (e.g. approval of the examining committee chair or supervisor, or approval of the entire examining committee, or select members of the committee), and
- the supervision and assistance the student can expect to receive from committee members.

The student must make the revisions within six months of the date of the final examination. Once the required revisions have been made and approved, the department shall submit a completed Thesis Approval/Program Completion form to the FGSR indicating “Pass subject to revisions”. If one of the examiners fails the student that examiner does not have to sign the form. If the required revisions have not been made and approved by the end of the six months deadline, the outcome of the examination is a Fail.

- *Fail:* All or all but one of the examiners must agree to an outcome of Fail. If the examination result is a Fail, no member of the examining committee signs the Thesis Approval/Program Completion form.

When the outcome is a Fail, the committee chair will provide the reasons for this decision to the department. The department will then provide this report, together with its recommendation for the student’s program, to the Dean, FGSR, and to the student.

An Associate Dean, FGSR, will normally arrange to meet with the student, the graduate coordinator, and others if needed, before acting upon any departmental recommendation that affects the student’s academic standing.

14. PhD CANDIDACY EXAMINATION

PhD candidates must pass an oral candidacy examination in order to progress in their PhD program. Ideally, the examination is taken after most of the course work has been completed and before the major part of the research program has started, normally within two years of entering the program. FGSR requires that the examination be held by the end of the 3rd year from the start of the program. All course work and ethics must be completed by the end of the 3rd year.

The Candidate must demonstrate:

- adequate knowledge of the discipline and subject matter relevant to the thesis; and
- the ability to pursue and complete original research at an advanced level.

During the candidacy examination only minor attention will be given to the work done on the thesis. Refer to the Calendar for further details.

14.1 EXAMINING COMMITTEE

The Examining Committee is composed of the Supervisory Committee plus two additional full-time professors, who must be “arms-length” (no involvement with the student’s project and no collaboration with the student’s supervisor in the last 6 years) from AFNS or another University of Alberta department, can be an Adjunct.

14.2 PREPARATION

Supervisor:

- finalizes time, date, and committee members;
- nominates the two arms-length members for the Examining Committee and, through the Graduate Program Administrator, requests department approval of the Examination Committee at least **four weeks** before the anticipated examination date.

Graduate Program Administrator:

- appoints the Committee Chair, reserves the room, distributes notification of exam (calendar invite) to the student and committee members.

14.3 EXAMINATION FORMAT

Committee Chair:

In the absence of the Candidate:

- Reviews the candidate's background;
- Confirms that program requirements have been fully met;
- Establishes an order of questioning (normally beginning with arms-length examiner, then members of AFNS, ending with the Supervisor).

In the presence of the Candidate:

- Reviews the purpose of the examination. The candidate must demonstrate adequate knowledge of his/her discipline and of the subject matter relevant to the thesis area;
- Outlines examination procedures;
- Indicates the order of questioning.

Candidate:

- Candidacy report – the student will prepare a Summary and Research Proposal on their research program, using the format of a Tri-Council Research Grant application. This proposal must be handed in to the examination committee and Graduate Program Secretary at least two weeks prior to the scheduled exam date. Information is available at <https://cloudfront.ualberta.ca/-/media/ales/programs/graduate/current-students/afnscandidacyexaminformation-2019.pdf>.
- Presents a short (**no longer than 10-15 minutes**) statement of research interests/aspirations.

Examiners:

- Examine the candidate (normally 20 min each) in one or two cycles;
- Ask additional questions in an open discussion period.

14.4 ADJUDICATION

Committee:

In the absence of the Candidate, evaluates the Candidate's performance and renders one of the following decision (acceptable with only one dissenting vote):

- *Pass* – performance was exemplary/acceptable;
- *Conditional Pass* - requirements are specified by the Examining Committee;
- *Fail* – Performance was inadequate. The following options are to be considered by the Examining Committee when the outcome of a student's candidacy exam is "fail":
 - *Repeat the Candidacy* – if the student's performance and work completed to date indicate that the student has the potential to perform at the doctoral level, the Examining Committee should consider the possibility of recommending that the student be given an opportunity to repeat the candidacy exam. If this recommendation is approved by FGSR, the student is to be notified in writing of his/her exam deficiencies by the Chair of the Examining Committee. The second candidacy exam is to be scheduled between three and six months from the date of the first candidacy. In the event that the student fails the second candidacy, the Examining Committee shall recommend Change of Category or Termination of Doctoral Program;
 - *Change of Category to a Master's Program* – if the student's performance and work completed to date indicates that the student has the potential to complete a Master's program, the Examining Committee should consider the possibility of recommending a Change of Category to a Master's Program;
 - *Termination of the Doctoral Program* – if the student's performance was inadequate and the work completed during the program is considered inadequate, the Examining Committee should recommend termination of the student's program.

Committee Chair:

- informs the Candidate of the results in the presence of the Examining Committee;
- submits a one page report of the examination results to the Associate Chair, Graduate Programs. A copy of the report will be submitted to the student and supervisor by the Graduate Program Administrator.

15. PhD FINAL ORAL EXAMINATION

PhD candidates take an oral defence based largely on their thesis to test their knowledge of the thesis subject and related fields. The material must be of sufficient merit to meet the standards of reputable scholarly publications. The first hour of the examination is usually a public seminar followed by a closed session with the Committee.

15.1 EXAMINING COMMITTEE

The Examining Committee is comprised of the supervisory committee plus the External Examiner plus an arms-length examiner. **Five** examiners must be in attendance at the examination. One member is external to the University (External Examiner) and one member must be arms-length (no involvement with student's project; no collaboration with the student's supervisor in the past 6 years) from AFNS or another University of Alberta department, can be an Adjunct.

15.2 EXTERNAL EXAMINER

The external examiner shall be a recognized authority in the special field of research of the candidate's dissertation, and will be an experienced supervisor of doctoral students. A person who has previously been associated in any way with the candidate or their supervisor cannot normally be approved as an external examiner. A CV (listing publications from the last 5 years, PhD students supervised and PhD committees

served on) must accompany the "Request to Invite External Examiner" form which should be **submitted to the Graduate Program Administrator at least three months prior to the examination.**

15.3 PREPARATION

Candidate:

- ensures that program requirements have been fully met;
- ensures that the thesis is in a format acceptable to FGSR;
- submits seminar abstract and title to the Graduate Program Administrator 1 week prior to the thesis defence;
- distributes the thesis to the Supervisory Committee for approval at least eight weeks before the defence. (The Supervisory Committee must indicate in writing to the Associate Chair, Graduate Programs, that the thesis is acceptable for examination before the Notice of Oral Examination will be submitted to FGSR);
- submit the External Examiner's copy of the thesis to the Graduate Program Administrator to forward to the external examiner six weeks before the defence;
- distribute a copy of the thesis to each Examining Committee member at least six weeks before the defence, and after the Supervisory Committee has indicated in writing to the Associate Chair, Graduate Programs, that the thesis is acceptable.

Supervisor:

- arranges for appointment of the External Examiner. The External Examiner is nominated by the Supervisory Committee. The supervisor submits the external examiner's CV (includes last 5 years of publications, employment/education history, list of PhD students supervised, list of PhD committees and exams served on) to the Graduate Program Administrator. The Graduate Program Administrator obtains approval from the Faculty of ALES Associate Dean, Research and Graduate Studies, sends out an invite letter and submits the External Examiner Invitation form to FGSR. Nominations should be submitted at least **three months** before the anticipated examination;
- obtains signatures from the Supervisory Committee on the form: "Thesis [PhD] Acceptable for Final Examination" six weeks prior to the defence date;
- finalizes time, date, committee members;
- requests approval of the Examining Committee to Graduate Program Administrator at least **six weeks** prior to the examination;
- arrange for interaction of the External Examiner with others in the University.

Graduate Program Administrator:

- appoints the Committee Chair, reserves the room, emails PDF and Word version of thesis to External Examiner, emails an examination file for the chair of the exam. Examination email includes Thesis Approval/Program Completion form, external examiner report, copy of transcript, Exam Instructions and information for AFNS Outstanding Research Award.

15.4 SEMINAR

Candidates present a seminar (~30 minutes long) to the public and Examining Committee usually the hour before the examination. The Candidate is introduced by a colleague (or the Supervisor). Questions are invited from the public before they leave. Examining Committee Members do not ask questions at this time.

15.5 EXAMINATION FORMAT

Following the seminar and in the absence of the Public,

Committee Chair:

In the absence of the Candidate:

- reviews candidate's background;
- confirms that program requirements have been fully met;
- establishes an order of questioning (normally begins with the External Examiner followed by members of other Departments, then members of AFNS, ending with the Supervisor).

In the presence of the Candidate:

- indicate the purpose of the examination – conduct an oral examination designed to test the

- candidate's knowledge of the thesis subject and of related fields;
- outlines examination procedures;
- indicates the order of questioning.

Examiners:

- examine the Candidate. Normally examiners are given 15 to 20 min each for their questions, depending on the size of the Examining Committee. Additional time can be given to the External Examiner for questioning, but it is recommended that the Committee Chair not allow questioning by the External Examiner to exceed 30 min.
- a second cycle of questioning should be limited to 10 min each for examiners, with the time for the External Examiner extended to 15 min if necessary.

15.6 ADJUDICATION

In the absence of the Candidate, the Examining Committee evaluates the Candidate's performance in terms of thesis quality and the Candidate's defence of the thesis. The decision of the examining committee will be based both on the content of the thesis and on the candidate's ability to defend it. Normally, if all but one member of the committee agrees on a decision, the decision shall be that of the majority, except when the one dissenting vote is that of the external examiner. If this happens, it must be reported to the Associate Dean, FGSR (via AFNS Associate Chair, Graduate Programs), who will determine an appropriate course of action. If two or more dissenting votes are recorded, the department will refer the matter to the Associate Dean, FGSR, who will determine an appropriate course of action. The decision is given as one of the following by majority decision (one dissenting vote only):

- *Pass* - The student has passed the examination if no revisions are required to the thesis. The thesis is signed by all members of the Examining Committee;
- *Pass subject to revisions* - The student has satisfactorily defended the thesis but the revisions to the thesis will not require a reconvening of the examining committee. The department shall complete a Thesis Approval/Program Completion form and submit it to the FGSR indicating "pass subject to revisions". It is expected that the student will make the changes in time to submit the thesis to the FGSR on or before the deadline for the next convocation. These changes should be checked and approved by the supervisor, who does not sign the thesis until the required changes are satisfactorily completed. Other committee members may also wish to withhold their signature until they can verify that their required revisions have been made to their satisfaction.
- *Adjourned* - If the revisions required are more substantial than editorial changes or minor reworking (i.e., if further research or experimentation or major reworking of sections are required, or if the committee is not satisfied with the general presentation of the thesis) the committee should not propose that the candidate be passed. The examination is to be adjourned. The examination should be adjourned also if the committee is dissatisfied with the candidate's oral presentation and defence of the thesis, even if the thesis itself would have been placed in Category 1 or 2, above. If the examination is adjourned no member of the Examining Committee signs the signature page. The committee should:
 - Specify in writing to the student, with as much precision as possible, the nature of the deficiencies and, in the case of revisions to the thesis, the extent of the revisions required. Where the oral defence is unsatisfactory, it may be necessary to arrange some discussion periods with the candidate prior to reconvening the examination.
 - Decide upon a date to reconvene. If the date of the reconvened oral examination depends upon the completion of a research task or a series of discussions, it should be made clear which Committee Members will decide on the appropriate date to reconvene. The final date set for reconvening shall be no later than six months from the date of the examination. A final decision of the Examining Committee must be made within six months of the initial examination.
 - Make it clear to the student what will be required by way of approval before the examination is reconvened (e.g., the Committee Chair's or Supervisor's approval, the approval of the entire committee or select members of the committee).
 - Specify the supervision and assistance the student may expect from the Committee Members in meeting the necessary revisions.
 - Advise FGSR in writing of the adjournment and the requirements to be met (in the points above).
- *Failed* - If circumstances so warrant, the committee may fail the student. The committee should inform the Dean, FGSR, in writing of the reasons for the rejection and make recommendations on the suitability of the candidate continuing in the program.

Evaluation is by majority decision (one dissenting vote only) and individual examiners may wish not to sign the thesis completion/signature form. Majority decisions with the External Examiner casting a dissenting vote are referred to FGSR. The Supervisor signs the thesis only after all revisions have been made.

Committee Chair:

- verbally informs the Candidate of the results in the presence of the Examining Committee and, if necessary, summarizes modifications required to make the thesis acceptable;
- obtains signatures from examining committee members;
- submits a written report of the examination results to the Associate Chair, Graduate Programs.

16. TERMINATION OF PROGRAM

16.1 CRITERIA

Students are required to withdraw when:

1. The Candidacy (PhD only) or Final Oral Examination is failed (without provision for re-examination). (Students may consider changing to an MSc program from a PhD);
2. Progress is deemed unsatisfactory by their Supervisory Committee because of poor performance in course work (a GPA of 2.7 must be maintained with no grade lower than C+ in any required course), research, or other academic endeavours; and
3. Circumstances arise which make it unlikely that the program will be successfully completed within a reasonable time period.

16.2 PROCEDURES

Recommendations to terminate a student's program are made by the Examining Committee (case 1 above) or the Supervisory Committee in writing to the Graduate Program Committee. In cases 2 and 3 (above), the student must receive prior notice in writing that progress has been unsatisfactory and be given a clear definition of remedial action with realistic deadlines.

17. APPEALS

17.1 ACADEMIC DECISIONS

Every effort should be made to resolve disputes informally. Appeals are directed first to the Associate Chair, Graduate Programs, within three days of the examination. If efforts to resolve the dispute within the Department fail, the student can appeal to FGSR within **30 days** of official notification of the decision (by FGSR). Rulings of FGSR (based on recommendations of the Examining or Supervisory Committee) can be appealed according to procedures specified in the FGSR Academic Appeal Regulations.

17.2 GRADES

Any dispute concerning grades should first be discussed with the instructor, then the Chair of the department who offers the course. If the student is not satisfied, he/she may go to the Associate Dean, Research and Graduate Studies, Faculty of ALES See Appeals and Grievance section of the University Calendar).

17.3 OTHER

Matters such as financial support, professional conduct, etc. are handled by the Graduate Program Committee and the Department Chair, in that order.

18. PUBLICATION OF RESEARCH

Research data collected by graduate students during their programs remain the property of the Department of Agricultural, Food & Nutritional Science and, in some cases, the funding agency. Copies of all data should be filed with the supervisor and thesis research should be prepared for publication within six months of the final oral examination. After this time, the supervisor assumes responsibility for communicating the research findings.

19. LABORATORY COMPLEX

19.1 CENTRAL LABORATORIES

There are research laboratories on all floors of the Agriculture/Forestry building. To obtain bench space or to get help with use of equipment, methodology or any other problems that arise when working in the labs, students should see one of the core support staff in the following core areas:

Lab Manager: Urmila Basu (4-32A)

Keys for access to the labs can be obtained from 4-10 Ag/Forestry Centre.

All students using the laboratories must be familiar with the AFNS Safety Resource (<http://www.afns.ualberta.ca/Safety.aspx>) including the General and Laboratory Safety Handbook, "Workplace Hazardous Materials Information System (WHMIS), and Work Alone protocols.

For information on Chemical and General Safety, contact: Urmila Basu (4-32A)

Prior to beginning work in the lab, new graduate students must participate in the Lab Skills 101 course. See the Graduate Program Administrator for details regarding when this is offered.

19.2 OFF-CAMPUS FACILITIES

Off-campus research facilities are located at the Edmonton Research Station, 5 kilometres south of the main campus. They include the Crops and Land Use Research Facilities; Agri-Food Discovery Place (AFDP); the Dairy, Poultry and the Sinclair Swine Research Centres; and the Laird McElroy Environment and Metabolism Centre. The Ministik Field Station, located 50 kilometres southeast Edmonton, provides a wildlife research facility with capability for handling deer, moose and wapiti. Beef cattle and bison research is carried out at the Roy Berg Kinsella Research Ranch located at Kinsella, 150 kilometres southeast of Edmonton. Facilities are available for both intensive and extensive research studies with cattle, bison, and range management. The Mattheis Research Ranch located near Duchess in southeast Alberta and the St. Albert Research Station, located 20 minutes north of Edmonton, support a wide range of crop research and rangeland ecology and management.

19.3 ANIMAL FACILITIES

Information on the Animal Research Ethics program, policy and procedures, training and other resources are available through the University of Alberta Research Ethics Office (www.reo.ualberta.ca). All animal use must be approved in advance by the Animal Care and Use Committee for Livestock (ACUC:L) to meet the guidelines of the Canadian Council on Animal Care (CCAC). Application is made by Principal Investigators using the Research Ethics and Management Online system (<https://remo.ualberta.ca>). Applications should be completed in consultation with the Unit Manager of the unit in which you work. CCAC standards and guidelines, information on alternatives to animal use, and resources are accessible on the CCAC website (www.ccac.ca). The Canadian Codes of Practice for the care and handling of farm animals are available at www.nfacc.ca.

Research Stations Manager: Jay Willis, 780-554-6183, jgwillis@ualberta.ca

19.4 PLANT FACILITIES

Plot space at Ellerslie and the Edmonton Research Station can be arranged through Jay Willis. Greenhouse

space and use of growth room facilities at the Agriculture/Forestry Centre can be arranged through the Greenhouse Manager, Andrea Botero (780-492-3278).

20. ADMINISTRATIVE UNIT

20.1 ORGANIZATION

Agricultural, Food & Nutritional Science Office Staff include an Executive Assistant and Office Coordinator, and an Academic Department Manager, both located in 4-10 Ag/For Centre.

21. SERVICES PROVIDED BY THE DEPARTMENT

- Shared office space will be provided for the duration of the student's program.
- Laboratory space and materials are organized by the student's Supervisor in conjunction with the laboratory supervisor and Unit Managers.
- Computer facilities are available in Room 1-30 Agriculture/Forestry Centre, for word processing, teaching, graphics, slide preparation, and computer modelling.
- Graduate student mail boxes are located in the main office (4th Floor)

22. FINANCIAL SUPPORT

22.1 SCHOLARSHIPS AND FELLOWSHIPS

Students are strongly encouraged to obtain financial support by applying for scholarships and fellowships. A listing of AFNS specific awards can be found at <https://www.ualberta.ca/agriculture-life-environment-sciences/programs/graduate-programs/prospective-students/agricultural-food-and-nutritional-science/afns-admission-process/funding-opportunities>. Additional details on the awards can be obtained from the Graduate Program Administrator. Applicants should normally have a 3.5 GPA or higher. Please see Appendix VI for Guidelines used by Graduate Program Committee for allocations of awards.

22.2 ASSISTANTSHIPS

Research assistantships are available from research funds administered by the student's supervisors. These funds may be used to support a student or to 'top up' major awards including scholarships, fellowships so that a student will receive the minimum stipend listed in the following guidelines.

22.3 DEPARTMENTAL GUIDELINES

Commitment:

Stipends for students requiring funding is recommended at a minimum of \$23,000/year for MSc thesis-based students and \$25,000 for PhD students. Stipends will normally be adjusted when other sources of funds, such as scholarships, are available to the student.

- Funding is available for the first year of the graduate program. Subsequent funding is contingent upon the student's acceptable performance in the graduate program and availability of funds up to a maximum of 2 years for the MSc and 4 years for the PhD program. Further funding may be available after this period subject to availability of funds.
- A Dental and Health Plan is available through GSA for full-time students.

Stipend Calculation for Student Awards:

The following is to be used as a guideline for calculating the minimum yearly stipend of students receiving awards. Stipends will **not** be adjusted for students receiving awards up to the cost of their tuition (e.g. **\$5,600 Cdn; \$9,400 International**). For students receiving awards greater than the cost of their tuition, the minimum yearly stipend would be calculated as follows:

$\$23,000$ (AFNS minimum Rate for MSc) + \$Tuition - \$Award = Yearly stipend/12 months = Monthly Stipend

Leaves:

Stipends are only available to students in the MSc thesis-based or PhD programs. Annual vacations of up to three weeks are permitted without suspension of payments (one week for every 4 months completed in the graduate program). Sick leave and parental leave are considered on an individual basis and follow the agreement between the Graduate Student Association (GSA) and University of Alberta Board of Governors.

22.4 GRADUATE RESEARCH ASSISTANTSHIPS FUND (GRAF)

GRAF Tuition Award: Please note, GRAF Tuition Awards are not available until further notice.

\$112,000 (~62% of total GRAF funds) will be used for tuition awards. Tuition awards will be allocated as follows:

- All students who obtain a minimum GPA of 3.5/4.0 or higher in UofA course work required for their AFNS graduate program (minimum of 3 graduate level courses) are eligible to be considered for a one-time tuition scholarship in the Fall term following completion of a minimum of 3 graduate level courses in their MSc or PhD program.
- Value of the award is equal to the tuition assessed in the Fall term as stated above.
- Students will receive this award *only once* in their program.
- MSc students who transfer to the PhD program are eligible to receive this award ONCE.
- Students who complete an MSc program and then begin a PhD program are eligible to receive the award twice - once in the MSc program AND once in the PhD program. Course work completed in the MSc program will be used to assess award eligibility for the MSc program and course work completed in the PhD program will be used to assess award eligibility for the PhD program.

Total award value available for distribution would be approximately \$112,000 (62% of \$180,000)

Note: It is expected that student stipends in place at the time of the award will be continued at their full value.

GRAF Emergency Assistance Award: Please note, GRAF Emergency Assistance Awards are not available until further notice.

Application must be submitted by a Faculty member. (~38% of total GRAF Funds)**Eligibility:** Faculty member requiring department assistance to fund their graduate student must include the following with each application:

- Reason for the request (funding to support the student's graduate program is no longer available due to rejection of research grant OR student's program is taking longer than anticipated to complete);
- Student is in good standing academically;
- Research progress of student and time line for completion of student's program;
- Justification of financial need (based on the finances of the supervisor);
- Financial support plan – review of efforts to obtain additional funds to support this graduate student's program (i.e. list submitted proposals, proposals under development, awards student has applied for).
- GRAF Emergency will be approved for a maximum of 8 months only.

22.5 GRADUATE TEACHING ASSISTANTSHIPS

The department will pay teaching assistantships in accordance with the graduate assistantship regulations. Students are paid at 4 hours per week or 60 hours max per term for a GTA. Those with prior experience will be paid at a slightly higher rate. Students receiving a GTA will normally receive this in addition to their research stipend (see 22.3).

22.6 GRADUATE STUDENT EMPLOYMENT

Department policy allows graduate students receiving Graduate Research Assistantship support from their supervisor to work a maximum of 10 hours per week at an outside job. Any employment that may affect the progress of your graduate program must be pre-approved by your supervisor.

Consequences of engaging in full time employment (greater than 10 hours per week) in addition to accepting a Graduate Research Assistantship – without prior approval of your supervisor – could result in a request to repay the stipend amount received during employment at an outside job.

23. SCHOLARSHIPS AND FELLOWSHIPS

Graduate students are encouraged to apply for scholarships, fellowships and other awards. All major awards earned during the student's program will be listed on the official transcript. Additional information is provided on the FGSR website (<https://uofa.ualberta.ca/graduate-studies/awards-and-funding>). Some of the awards most pertinent to the Agricultural, Food & Nutritional Science specializations are listed on the department website <https://www.ualberta.ca/agriculture-life-environment-sciences/programs/graduate-programs/prospective-students/agricultural-food-and-nutritional-science/afns-admission-process/funding-opportunities>. **Please check with the Graduate Program Administrator for accurate deadline dates.**

APPENDICES

APPENDIX I

GUIDELINES FOR SUPERVISORS AND GRADUATE STUDENTS

These guidelines for Supervisors and Graduate Students were approved by the FGSR Council and became effective September 1, 1989.

The Council also directed that these lists of Guidelines for Supervisors and Graduate Students be integrated with appropriate passages now in the manual of Graduate Program Administration: Policies, Procedures and Guidelines and, once integrated, be printed in Departmental graduate program handouts.

1. GUIDELINES FOR SUPERVISORS

The Supervisor, with the support of the home Department, should:

- i. review "IMPORTANT QUESTIONS TO ASK AT THE START OF YOUR GRADUATE PROGRAM" with your student when he/she arrives;
- ii. arrange supervisory committee meetings a minimum of once per year during the students graduate program;
- iii. provide an environment for the student that is conducive to research and in which the student can grow intellectually;
- iv. provide appropriate guidance to the student on the nature of research and the standard expected, and be accessible to give advice and constructive criticism; at the beginning of the supervisory relationship, the student should be made aware of the normal expectations held by the Supervisor and the Department;
- v. with the student establish a realistic timetable for completion of various phases of the program;
- vi. consider a graduate student as a "junior colleague in research";
- vii. ensure that there are sufficient material and supervisory resources for each graduate student under supervision;
- viii. work with the student to establish the Supervisory Committee as soon as possible after the start of the program and ensure that the Supervisory Committee maintains contact and meets formally at least once

- a year
- ix. when going on leave or an extended period of absence, ensure that the student is adequately supervised by the provision of an acting supervisor (who should be a member of the supervisory committee);
- x. ensure that the student is aware of his/her responsibilities (as listed below) and, when necessary, assist the student in meeting these;
- xi. set up committee meetings and examinations after consultation and with full knowledge of the student.

2. GUIDELINES FOR GRADUATE STUDENTS

Graduate students should:

- i. make themselves aware of the contents of the graduate portions of the University Calendar and take responsibility for their own programs in that the Calendar sets out the requirements for the various programs;
- ii. maintain open communication with their Supervisor and Associate Chair, Graduate Programs, concerning any problems either real or perceived;
- iii. inform the Supervisor regularly about progress, and provide the Supervisor with an annual report for distribution to the Supervisory Committee;
- iv. make research results accessible (beyond their appearance in a thesis) to an appropriate audience;
- v. be aware of deadlines for possible scholarship applications, and to seek advice and assistance from the Department in making applications, etc.

APPENDIX II

GRADUATE STUDENT SUPERVISION

CRITERIA FOR SUPERVISION

As minimum criteria Supervisors (and, normally, Members of Supervisory Committees) must:

- i. be active in the general area of the student's research;
- ii. have a tenured (or tenure track) faculty appointment (including soft tenure track faculty appointments such as University Research Fellows and Heritage Scholars) in a Department relevant to the field;
- iii. hold a degree equivalent to or higher than that for which the student is a candidate. (This would always be the case for newly appointed faculty, but certain recognized and well-established exceptions should be respected.)
- iv. demonstrate continuing scholarly or creative activity of an original nature.

SCHOLARLY OR CREATIVE ACTIVITY

Because of diverse interpretations of the term "scholarly or creative activity", the Faculty will always find it necessary to rely on sound and informed judgement of Chairs and Graduate Coordinators to ensure adherence to minimum Faculty criteria.

Additional criteria approved by the Dean, FGSR, may be added by individual Departments, and these should be included in Department Graduate Handbooks.

The determination of "scholarly or creative activity" assumes a continuing peer review process which, at least indirectly, is included annually at the appropriate Faculty Evaluation Committee. Thus, the following list summarizes criteria used by various Faculties to describe scholarly or creative activity:

- publication of research papers in refereed journals;
- publication of research papers in journals acceptable to the discipline;
- publication of books and/or monographs;
- publication of research findings in conference proceedings;
- publication and/or performance of new compositions or plays;
- exhibition of new artistic works;
- peer recognition of outstanding professional practice;
- invitations to speak at conferences or at other institutions;
- editorial or refereeing responsibilities for journals;
- invitations to serve as external examiner for the PhD;
- presentations at professional society meetings or workshops;
- invitations to review grant proposals or manuscripts;
- invitations to referee requests for promotions to full professor in recognized Institutions.

It is recommended that Department Chairs monitor and review the performance of Supervisors. With demonstration of continuing effective supervision, consideration should be given for reduced classroom teaching. For information on other categories eligible for supervision or supervisory committee members please see the University's [Recruitment Policy \(Appendix A\) Definition and Categories of Academic Staff and Colleagues](#).

APPENDIX III

GRADUATE STUDENTS WITH RESEARCH CONTRACTS AND IN AFFILIATED INSTITUTIONS

The following conditions should be followed when a graduate student is supported by a research contract or by an affiliated institution.

1. Academic and administrative aspects of the student's program such as admission, supervision, academic standing, examinations, and convocation shall follow existing University regulations.
2. The student is the sole possessor of the thesis copyright.
3. The Supervisor's signature is required when a student signs any contract entering into an agreement for research support.
4. A request to delay publication of thesis and material shall follow the FGSR Council policy passed in March 1976*

* See Graduate Program Manual, 10. Intellectual Property

APPENDIX IV

PRELIMINARY ACCEPTANCE OF PHD THESIS

Student's Name: _____

Preliminary acceptance of PhD thesis by **Supervisory Committee** prior to submission of thesis to the **External Examiner** and submission of **Notice and Approval of Doctoral Final Oral Examining Committee** to FGSR.

A. I hereby certify that I have read the thesis and I am:

_____ Prepared to recommend _____ Not prepared to recommend

That the thesis is of adequate substance to proceed to the final oral examination for a final decision.

Name of Supervisory Committee Member

Signature

Date

B. I hereby certify that I have read the thesis and I am:

_____ Prepared to recommend _____ Not prepared to recommend

That the thesis is of adequate substance to proceed to the final oral examination for a final decision.

Name of Supervisory Committee Member

Signature

Date

C. I hereby certify that I have read the thesis and I am:

_____ Prepared to recommend _____ Not prepared to recommend

That the thesis is of adequate substance to proceed to the final oral examination for a final decision.

Name of Supervisory Committee Member

Signature

Date

D. TO BE COMPLETED BY SUPERVISOR IF ONE OR MORE OF THE ABOVE SIGNATURES IS NOT AVAILABLE.

I hereby certify that I have the assurance of _____ committee members that the thesis has been read and is of adequate substance to proceed to the final oral examination.

Name of Supervisor

Signature

Date