GRADUATE STUDIES

in

AGRICULTURAL, FOOD AND NUTRITIONAL SCIENCE

PROGRAM HANDBOOK

Department of Agricultural, Food & Nutritional Science
410 Agriculture/Forestry Centre, University of Alberta
Edmonton, Alberta, Canada T6G 2P5
Telephone: 780-492-3239
Fax: 780-492-4265

http://www.afns.ualberta.ca/
Department of Agricultural, Food & Nutritional Science (AFNS)

Chair: Dr. Ruurd Zijlstra  
4-10 Ag/Forestry Centre  
492-2131

Assistant to the Chair: Dr. Francois Paradis  
Department Administrator  
4-10L Ag/Forestry Centre  
248-1307

Associate Chair, Graduate Programs: Dr. Stephen Strelkov  
4-16E Ag/Forestry Centre  
492-1969

Graduate Committee Members: Dr. Vera Mazurak (Vice-Associate Chair)  
4-002A Li Ka Shing Centre  
492-8048

Dr. Marleny Aranda-Saldana  
3-18A Ag/Forestry Centre  
492-8018

Dr. Ben Willing  
3-10G Ag/Forestry Centre  
492-9081

Dr. Jocelyn Ozga  
4-10D Ag/Forestry Centre  
492-26531

Graduate Program Administrator: Ms. Krasna Kos  
2-10 Ag/Forestry Centre  
492-5131

Laboratory Use: Dr. Urmila Basu, Laboratory  
4-32A Ag/Forestry Centre  
492-8712

(i)
Information for students:

1. Program information is available on the department website at http://www.afns.ualberta.ca/Graduate.aspx.

2. Graduate Student Computer Lab is located in Room 1-30 Ag/For Centre. Please see Max Amerongen, 1-16 Ag/For Centre, 915-2256.

3. Photocopy machine is available on the 3rd floor. To receive your photocopy number please contact Nash Goonewardene (avinash@ualberta.ca).

4. Keys to access the building on weekends, your office and lab area are available from the Main Office, 410 Ag/For Centre. There is a $10.00 refundable deposit required for each key.

5. Graduate Student Association (GSA), 1st Floor Triffo Hall. A handbook about GSA and student benefits is available from GSA. For more information visit the GSA Home Page at: http://www.gsa.ualberta.ca.

6. WHMIS (Workplace Hazardous Materials Information System) Handout. For information on general procedures and guidelines see Urmila Basu, 4-32A Ag/For Centre, 492-8712.

7. Payroll Enquiries. All payroll enquiries can be made through the Graduate Program Administrator, 2-10B Ag/For Centre, 492-5131.

8. Student Office Allocation. Office space is assigned by the Main Office during the first term of a student’s program. Please see the AFNS EA for office assignment.


10. Biostatistics Research Group, Statistics Centre. Open 2:00 – 4:00 p.m., Tuesday and Thursday, Room 415B CAB. Email: TCC@stat.ualberta.ca; Webpage: http://www.stat.ualberta.ca/~brg.

11. Notarization of Official Documents. A University of Alberta, Faculty of Law Professor Emeritus is available to notarize official documents at the Law Library (go to www.campusmap.ualberta.ca for library location. Please call 492-3371 for dates/times. Documents can also be notarized at Canada Place downtown or HUB Mall Law Office for $10/document.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>INTRODUCTION</strong></td>
<td>6</td>
</tr>
<tr>
<td>1.1 Degrees</td>
<td>6</td>
</tr>
<tr>
<td>1.2 Specializations</td>
<td>7</td>
</tr>
<tr>
<td>1.3 Definitions</td>
<td>7</td>
</tr>
<tr>
<td>2. <strong>PROBLEMS?</strong></td>
<td>7</td>
</tr>
<tr>
<td>3. <strong>GRADUATE PROGRAM COMMITTEE</strong></td>
<td>7</td>
</tr>
<tr>
<td>4. <strong>ADMISSIONS</strong></td>
<td>8</td>
</tr>
<tr>
<td>4.1 Requirements</td>
<td>8</td>
</tr>
<tr>
<td>4.2 Application Procedure</td>
<td>8</td>
</tr>
<tr>
<td>4.3 Guidelines for Acceptance of Students with Conditions</td>
<td>9</td>
</tr>
<tr>
<td>5. <strong>SUPERVISORS</strong></td>
<td>9</td>
</tr>
<tr>
<td>5.1 Qualifications</td>
<td>9</td>
</tr>
<tr>
<td>5.2 Responsibilities</td>
<td>9</td>
</tr>
<tr>
<td>6. <strong>SUPERVISORY COMMITTEES</strong></td>
<td>10</td>
</tr>
<tr>
<td>6.1 Responsibilities</td>
<td>10</td>
</tr>
<tr>
<td>6.2 Composition</td>
<td>10</td>
</tr>
<tr>
<td>6.3 Appointment</td>
<td>10</td>
</tr>
<tr>
<td>6.4 Replacements</td>
<td>11</td>
</tr>
<tr>
<td>6.5 Meetings</td>
<td>11</td>
</tr>
<tr>
<td>7. <strong>COURSE/SEMINAR REQUIREMENTS</strong></td>
<td>11</td>
</tr>
<tr>
<td>7.1 Mag Course-based</td>
<td>11</td>
</tr>
<tr>
<td>7.2 MSc Course-based</td>
<td>11</td>
</tr>
<tr>
<td>7.3 MSc Thesis-based</td>
<td>12</td>
</tr>
<tr>
<td>7.4 PhD</td>
<td>12</td>
</tr>
<tr>
<td>8. <strong>THESIS PREPARATION</strong></td>
<td>12</td>
</tr>
<tr>
<td>9. <strong>TIME LIMITS</strong></td>
<td>12</td>
</tr>
<tr>
<td>9.1 Residency</td>
<td>12</td>
</tr>
<tr>
<td>9.2 Maximum Time</td>
<td>13</td>
</tr>
<tr>
<td>10. <strong>PROMOTIONS</strong></td>
<td>13</td>
</tr>
<tr>
<td>10.1 Criteria</td>
<td>13</td>
</tr>
<tr>
<td>10.2 Procedure</td>
<td>13</td>
</tr>
<tr>
<td>11. <strong>EXAMINATIONS</strong></td>
<td>13</td>
</tr>
<tr>
<td>12. <strong>MAG/MSC COURSE-BASED ORAL EXAMINATION</strong></td>
<td>14</td>
</tr>
<tr>
<td>13. <strong>MSC THESIS-BASED ORAL EXAMINATION</strong></td>
<td>14</td>
</tr>
<tr>
<td>13.1 Examining Committee</td>
<td>14</td>
</tr>
<tr>
<td>13.2 Preparation</td>
<td>14</td>
</tr>
<tr>
<td>13.3 Seminar</td>
<td>14</td>
</tr>
<tr>
<td>13.4 Examination Format</td>
<td>14</td>
</tr>
<tr>
<td>13.5 Adjudication</td>
<td>15</td>
</tr>
<tr>
<td>14.1 Examining Committee</td>
<td>15</td>
</tr>
</tbody>
</table>

*(iii)*
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 PREPARATION</td>
<td>16</td>
</tr>
<tr>
<td>14.3 EXAMINATION FORMAT</td>
<td>16</td>
</tr>
<tr>
<td>14.4 ADJUDICATION</td>
<td>16</td>
</tr>
<tr>
<td>15. PHD FINAL ORAL EXAMINATION</td>
<td>17</td>
</tr>
<tr>
<td>15.1 EXAMINING COMMITTEE</td>
<td>17</td>
</tr>
<tr>
<td>15.2 EXTERNAL EXAMINER</td>
<td>17</td>
</tr>
<tr>
<td>15.3 PREPARATION</td>
<td>17</td>
</tr>
<tr>
<td>15.4 SEMINAR</td>
<td>18</td>
</tr>
<tr>
<td>15.5 EXAMINATION FORMAT</td>
<td>18</td>
</tr>
<tr>
<td>15.6 ADJUDICATION</td>
<td>18</td>
</tr>
<tr>
<td>16. TERMINATION OF PROGRAM</td>
<td>19</td>
</tr>
<tr>
<td>16.1 CRITERIA</td>
<td>19</td>
</tr>
<tr>
<td>16.2 PROCEDURES</td>
<td>19</td>
</tr>
<tr>
<td>17. APPEALS</td>
<td>19</td>
</tr>
<tr>
<td>17.1 ACADEMIC DECISIONS</td>
<td>19</td>
</tr>
<tr>
<td>17.2 GRADES</td>
<td>19</td>
</tr>
<tr>
<td>17.3 OTHER</td>
<td>19</td>
</tr>
<tr>
<td>18. PUBLICATION OF RESEARCH</td>
<td>20</td>
</tr>
<tr>
<td>19. LABORATORY COMPLEX</td>
<td>20</td>
</tr>
<tr>
<td>19.1 CENTRAL LABORATORIES</td>
<td>20</td>
</tr>
<tr>
<td>19.2 OFF-CAMPUS FACILITIES</td>
<td>20</td>
</tr>
<tr>
<td>19.3 ANIMAL FACILITIES</td>
<td>20</td>
</tr>
<tr>
<td>19.4 PLANT FACILITIES</td>
<td>21</td>
</tr>
<tr>
<td>20. ADMINISTRATIVE UNIT</td>
<td>21</td>
</tr>
<tr>
<td>20.1 ORGANIZATION</td>
<td>21</td>
</tr>
<tr>
<td>21. SERVICES PROVIDED BY THE DEPARTMENT</td>
<td>21</td>
</tr>
<tr>
<td>22. FINANCIAL SUPPORT</td>
<td>21</td>
</tr>
<tr>
<td>22.1 SCHOLARSHIPS AND AWARDS</td>
<td>21</td>
</tr>
<tr>
<td>22.2 FELLOWSHIPS</td>
<td>21</td>
</tr>
<tr>
<td>22.3 DEPARTMENTAL GUIDELINES</td>
<td>21</td>
</tr>
<tr>
<td>22.4 GRADUATE RESEARCH ASSISTANTSHIPS FUND (GRAF) OPERATING</td>
<td>22</td>
</tr>
<tr>
<td>22.5 GRADUATE TEACHING ASSISTANTSHIPS</td>
<td>22</td>
</tr>
<tr>
<td>22.6 GRADUATE STUDENT EMPLOYMENT</td>
<td>23</td>
</tr>
<tr>
<td>23. SCHOLARSHIPS AND AWARDS</td>
<td>23</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>24</td>
</tr>
<tr>
<td>APPENDIX I</td>
<td>24</td>
</tr>
<tr>
<td>1. GUIDELINES FOR SUPERVISORS</td>
<td>24</td>
</tr>
<tr>
<td>2. GUIDELINES FOR GRADUATE STUDENTS</td>
<td>24</td>
</tr>
<tr>
<td>APPENDIX II</td>
<td>25</td>
</tr>
<tr>
<td>GRADUATE STUDENT SUPERVISION</td>
<td>25</td>
</tr>
<tr>
<td>APPENDIX III</td>
<td>26</td>
</tr>
<tr>
<td>GRADUATE STUDENTS WITH RESEARCH CONTRACTS AND IN AFFILIATED INSTITUTIONS</td>
<td>26</td>
</tr>
<tr>
<td>APPENDIX IV</td>
<td>27</td>
</tr>
<tr>
<td>PRELIMINARY ACCEPTANCE OF PHD THESIS</td>
<td>27</td>
</tr>
<tr>
<td>APPENDIX V</td>
<td>28</td>
</tr>
</tbody>
</table>

(iv)
IMPORTANT QUESTIONS TO ASK AT THE START OF YOUR GRADUATE PROGRAM ............. 28
APPENDIX VI ........................................................................................................................................ 31
GUIDELINES FOR REPORTING STUDENT PROGRESS ................................................................. 31
APPENDIX VII ....................................................................................................................................... 32
CRITERIA GUIDELINES FOR ADMINISTRATION OF AWARDS ...................................................... 32
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 training in scientific methodology, including the design and analysis of experiments, and the interpretation and communication of results.

The purpose of this handbook is to standardize departmental procedures within the broader requirements of FGSR which are documented in the University Calendar and the Graduate Program Manual available from a member of the Graduate Committee.

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**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Chair, Department of Agricultural, Food &amp; Nutritional Science</td>
</tr>
<tr>
<td>Associate Chair</td>
<td>Graduate Programs, Department of Agricultural, Food &amp; Nutritional Science</td>
</tr>
<tr>
<td>Vice-Associate Chair</td>
<td>Graduate Programs, Department of Agricultural, Food &amp; Nutritional Science</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Agricultural, Food &amp; Nutritional Science</td>
</tr>
<tr>
<td>FGSR</td>
<td>Faculty of Graduate Studies and Research</td>
</tr>
<tr>
<td>Professor</td>
<td>Full, Associate and Assistant Professors</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Individual graduate student's advisor</td>
</tr>
<tr>
<td>Supervisory Committee</td>
<td>Committee appointed to oversee research progress of a student</td>
</tr>
</tbody>
</table>

2. **PROBLEMS?**

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, a member of the Graduate Program Committee, or the Department Chair. Please see page (i) for individuals to contact.

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 four 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 Associate Chair (Graduate Programs) and, the Graduate Program Administrator.
- **Coordinator:** Position held by the Associate Chair, Graduate Programs. Appointed by the Department Chair normally for a 2 year term. The Coordinator or Vice-Associate Chair approves admissions, manages student issues 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 a TOEFL score of 88 (Internet), 550 (paper) or IELTS score of 6.5 where applicable.

4.2 APPLICATION PROCEDURE

Enquiries: Students requesting information on application procedures for graduate studies in the Department are sent the web address (http://www.afns.ualberta.ca/Graduate/AdmissionProcess.aspx) and asked to complete and submit the online application.
Full Applications: Complete applications are assigned a reference number and e-mailed to the Faculty Members for review. If no interest is shown within four-six weeks, a letter of regret is sent to the student. Accepted applications are forwarded to FGSR with a provisional letter of acceptance sent to the student indicating the program start date and supervisor’s name. Upon approval by FGSR, an Official Admission letter is sent to the student with a copy to the Department.

4.3 Guidelines for Acceptance of Students with conditions

- Conditional students are students with a GPA between 3.0 – 3.2 on a 4 point system or students who 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 GPA 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 GPA 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 to 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. For issues with student progress see Appendix VI Guidelines for Reporting on Student 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 University of Alberta assistant/associate/professor, adjunct professor, 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.
- 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 two other full-time University of Alberta assistant/associate/professor, adjunct professor, 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 four members.
- 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.

6.5 **MEETINGS**

- Regular meetings must be held to monitor and record the candidate's progress in course work and research. A copy of the *Supervisory Committee Meeting Form* should be submitted to the Graduate Program Administrator (2-10B AgFor Centre). These meetings should include at least the following:
  - Initial meeting, within six months of registration. The purpose of the initial meeting includes a review of the selected research area and approval of courses for the program. At the initial meeting, the student's competency in the English language should be verified by the Supervisory Committee;
  - Annual meetings to determine if sufficient progress has been made.
- 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 course-based**

Program requirements for the MAg 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 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 8 hours of *Academic Integrity and Ethics Training* and Professional Development
- A copy of the final report is to be submitted to the Graduate Program Administrator. The copy will be coil bound 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 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 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 8 hours of *Academic Integrity and Ethics Training* and Professional Development
- A copy of the final report is to be submitted to the Graduate Program Administrator. The copy will be coil bound 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 plus 8 hours Academic Integrity and Ethics Training, Professional Development and Lab Skills 101;
- 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 2.7 to continue in the program;
- Students must normally register full-time for the duration of their graduate program at the University of Alberta.

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 plus 8 hours Academic Integrity and Ethics Training, Professional Development and Lab Skills 101;
- Complete AFNS 601 Seminar requirement (presentation of 2 seminars and 75%+ attendance);
- 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 graduate program at the University of Alberta.

8. **THESIS PREPARATION**

Students should review the "Preparing Your Thesis" available on the FGSR website (https://uofa.ualberta.ca/graduate-studies/current-students/academic-requirements/thesis-requirement-and-preparation) and AFNS Preface page and Published Works Guidelines 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 print only 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 the Graduate Program Administrator if their research will be conducted off campus.
9.2 **MAXIMUM TIME**

Special permission from FGSR (Faculty of Graduate Studies and Research) 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 a PhD. Extensions are viewed as exceptions. Requests for one or more extensions 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 on the process can be found at http://www.afns.ualberta.ca/Graduate/CurrentGraduates/TransferringtothePhDProgram.aspx. Transfer requests are reviewed twice per year with a deadline date of October 1 (to be reviewed at the October GPC meeting; category change effective January 1) and June 1 (to be reviewed at the April GPC meeting; category change effective September 1). Student must complete one full year of their graduate program before requesting a transfer (i.e. students who began their program in January 2014 must wait to April 2015 to apply to transfer; students starting September 2015 must wait until December 2016 to apply to transfer; students beginning their program in January 2016 can apply to transfer in April 2017, etc.). Students can submit their transfer requests at any time throughout the year however the committee will only review/approve the transfers on the dates indicated above. Students requesting the transfer will be required to give a 5 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 Chair is normally a non-examining member of the committee. For PhD examinations, the Chair must have prior experience as a Committee Chair.

Responsibilities of the Committee Chair are:

- Ensure that examinations are conducted in an impartial and consistent manner according to FGSR regulations.
- Report results of examinations 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 designed to test the candidate's knowledge of the thesis subject and of related fields" [FGSR Calendar 203.1.2]. The first hour of the examination 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 or 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 thesis 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:**
- appoints the Committee Chair, reserves the room, submits notification of the final exam to FGSR, creates a calendar invite to student and examining members, advertises seminar to AFNS Staff and Students, completes Thesis Approval/Program Completion form and creates an examination file for the chair of the exam. Examination file includes Thesis Approval/Program Completion form, one copy of transcript for each examiner, Notice of Examining Committee & Examination Date form, Ethics completion form, Exam Instructions.

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 Examination 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:
- 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;
- outline examination procedures;
- indicate 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.
- a second cycle of questioning should be 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.

14. PhD CANDIDACY EXAMINATION

PhD candidates must pass an oral comprehensive (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. [FGSR Calendar 203.3.1(5)]

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 http://www.afns.ualberta.ca/Graduate/InfoCurrentGraduates/~/media/afns/GraduateStudies/CurrentStudents/Documents/CandidacyReportTemplate2012.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):
- Adjourned
- Pass
- Conditional pass
- Fail and repeat the candidacy
- Fail with a recommendation to terminate the doctoral program or for a change of category to a master’s program

See FGSR Graduate Program Manual, Section 8.3 Conduct of Examinations for detailed information on exam protocol and outcome details (https://uofa.ualberta.ca/graduate-studies/about/graduate-program-manual/section-8-supervision-oral-examintations-and-program-completion/8-3-conduct-of-examinations).
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 which is based largely on their thesis. 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 arm’s-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 arm’s-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. The Department will normally cover 50% of expenses, up to $750.00, incurred by an External Examiner’s visit to the University of Alberta if the External Examiner provides a seminar and interacts with staff and students in the Department.

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 for courier six weeks before the defence;
- distributes a copy of the thesis to each Examining Committee member at least four 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 Supervisor in discussion with 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 Grad Program Administrator at least six weeks prior to the examination;
- arranges for interaction of the External Examiner with others in the University.

**Graduate Program Administrator:**
- appoints the Committee Chair, reserves the room, couriers thesis to External Examiner, makes hotel/air travel arrangements for the External Examiner, distributes notification of final exam to committee members, completes Thesis Completion and Signature page and includes in student’s file, supplies refreshments for the examination.

### 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 is based both on the content and on the student’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):
- Adjourned
- Pass
- Pass subject to revisions
- Fail

There is no provision for a final examination to be “passed subject to major revisions”.
See FGSR Graduate Program Manual, Section 8.3 Conduct of Examinations for detailed information on exam protocol and outcome details (https://uofa.ualberta.ca/graduate-studies/about/graduate-program-manual/section-8-supervision-oral-examinations-and-program-completion/8-3-conduct-of-examinations).

Committee Chair:
- verbally informs the Candidate of the results in the presence of the Examinining 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 (see Appendix 6: Guidelines for Reporting on Student Progress)

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 (see Appendix 6: Guidelines for Reporting on Student Progress).

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 the EA in Room4-10 Ag/Forestry Centre


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.

APO/Manager Research Stations: Barry Irving 780-492-6117
19.4 **PLANT FACILITIES**

Plot space at Ellerslie, St. Albert Research Station and the Edmonton Research Station can be arranged through Barry Irving (780-492-6117). Greenhouse space and use of growth room facilities at the Agriculture/Forestry Centre can be arranged through the Greenhouse Manager (780-492-3278).

20. **ADMINISTRATIVE UNIT**

20.1 **ORGANIZATION**

Agricultural, Food & Nutritional Science Office Staff include:

- *Francois Paradis* Administrative Professional Officer, Ag/For 4-10L
- *Holly Horvath* Executive Assistant, Ag/For 4-10

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 AWARDS**

Students are strongly encouraged to obtain financial support by applying for scholarships and awards. A listing of AFNS specific awards can be found at [http://www.afns.ualberta.ca/Graduate/AFNSSpecificAwards.aspx](http://www.afns.ualberta.ca/Graduate/AFNSSpecificAwards.aspx). 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 VII for Guidelines used by Graduate Program Committee for allocations of awards.

22.2 **FELLOWSHIPS**

Research fellowships 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 or scholarships so that a student will receive the minimum stipend listed in the following guidelines.

22.3 **DEPARTMENTAL GUIDELINES**

**Commitment:**

Current fellowship rates are partial support at a minimum of $19,000 CAD per year for MSc thesis-based students and $21,000 CAD per year for PhD students. Starting May 1, 2017 fellowships will increase to a minimum of $21,000 CAD per year for MSc thesis-based students and $23,000 CAD per year for PhD students. This assistantship may not cover the full cost of living in Edmonton and your graduate tuition and fees. Fellowships 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.

**Fellowship Calculation for Student Awards:**

The following is to be used as a guideline for calculating the minimum yearly fellowships of students receiving awards. Fellowships will not be reduced for students receiving awards up to the cost of their tuition (e.g. $5,500 Cdn; $8,800 International). For students receiving awards greater than the cost of their tuition, the minimum yearly fellowship would be calculated as follows:

\[ \text{Yearly fellowship} = (21,000 \text{ (AFNS minimum Rate for MSc)} + \text{Tuition} - \text{Award}) / 12 \text{ months} \]

**Leaves:**

Fellowships 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; see Graduate Student Association (GSA) Collective Agreement). Sick leave and parental leave are considered on an individual basis and follow the agreement between the GSA and University of Alberta Board of Governors.

**22.4 GRADUATE RESEARCH ASSISTANTSHIPS FUND (GRAF) Operating**

**GRAF Operating Tuition Award:** $112,000 (~62% of total GRAF Operating 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.

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

**GRAF Operating Emergency Assistance:** Application must be submitted by a Faculty member. (~38% of total GRAF Operating 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 GTA’s in accordance with the graduate assistantship regulations. Students are paid at 4 hours per week or 60 hours max per term for TA’ing. Those with prior experience will be paid at a slightly higher rate. Students receiving GTA’s will normally receive this in addition to their research stipend (see 22.3).
22.6 GRADUATE STUDENT EMPLOYMENT

Department policy allows graduate students receiving fellowship 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 fellowship – without prior approval of your supervisor – could result in a request to repay the fellowship amount received during employment at an outside job.

23. SCHOLARSHIPS AND AWARDS

Graduate students are encouraged to apply for scholarships and other awards. All major awards as well as the Walter H. Johns Graduate Fellowship and the Andrew Stewart Graduate Prizes earned while registered in FGSR will be listed in the student’s official transcript. Additional information is provided in the FGSR website (https://uofa.ualberta.ca/graduate-studies/awards-and-funding). Some of the awards most pertinent to Agricultural, Food & Nutritional Science specializations are listed on the department website by clicking on the AFNS Graduate Award Application at http://www.afns.ualberta.ca/Graduate/AFNSSpecificAwards.aspx. 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 (Appendix V);
ii. arrange supervisory committee meetings a minimum of once per year during the student’s 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);

xi. 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
Appendix V

IMPORTANT QUESTIONS TO ASK AT THE START OF YOUR GRADUATE PROGRAM

GRADUATE STUDIES

GENERAL

○ What is the supervisor’s goal/objective for a graduate program?
○ What do you hope to achieve in your graduate program?
○ What are your expectations of time I should spend at work per week?
○ What are your expectations regarding how long it will take me to complete the MSc/PhD? (in terms of “funding horizons” and average completion times for your graduate students)
○ What is the difference between the MSc and PhD? What are the career implications?
○ What responsibilities will I have that are un-related to my thesis topic?
  ▪ Training others, teaching assistantships, group research activities etc.
○ Will additional scholarships/bursaries, which I secure, be paid in addition to my stipend funding? (Any suggestions of where to apply?)
  ▪ Department Recommendation: Annual Stipend + tuition for current year – scholarship (e.g. $19,000 + $8,000 - $15,000 = $12,000 – supervisor’s commitment over 12 months; $1,000.00 per month before taxes)
○ In addition to my stipend or scholarship support, am I allowed to work as a teaching assistant or a job off-campus?
  ▪ If so, how many hours per week are acceptable? (Dept. maximum of 10 hrs/wk)
○ How do we set a clear plan of action for my research program to ensure it stays on track?
  ▪ When?
  ▪ How detailed?
  ▪ How much input will the supervisor provide in establishing this plan?
○ How and when do I begin to prepare for my candidacy examination? (PhD students only)

RESEARCH

○ How should my lab book be kept?
  ▪ How should I save my data for long term storage?
  ▪ Who owns the lab book?
○ Am I expected to attend national, international or provincial conferences?
  ▪ If so, how is this funded?
○ Who in the lab should I expect to get hands on training from?
○ Will I be expected to assist with other students’ research projects?
  ▪ What sort of compensation will I receive? e.g. monetary, acknowledgment, authorship, their assistance when I need it, etc.
○ What alternative projects/contingency plan is there in case my main research project fails to progress as planned?
○ What are the consequences if I do not progress in my research project?
○ What set of goals must I achieve to have my supervisor’s approval to defend? e.g. number of publications, time spent, etc. (Masters and PhD specific)
TEACHING

- Should I partake in teaching (TAing) courses on campus?
  - Do I (the student), want TAing be a small/medium/large part of my graduate education?
  - What training should I seek to develop my skills as an educator?
- Will you expect me to instruct others in the lab? If so, how will you and I know when I am ready to do this?

COURSE WORK

- Are there courses you recommend I take beyond the required departmental courses?
  - Student: What aspects do you perceive yourself to be lacking in that are necessary to complete your degree?
  - Advisor: What courses may be beneficial for the student to specifically prepare them for candidacy, and future endeavors of their research?

COMMUNICATION

STUDENT AND PRINCIPAL INVESTIGATOR

- How often should we meet to assess my progress in research or courses?
- What is the best way for us to communicate on a daily basis? e.g. email, phone, face-to-face.
- As new facets of my research emerge, what is the best way for me to present possibilities new directions in research/future project ideas to you?
- Will there be a regular “research group” meeting? What is my role in this?

STUDENT AND COMMITTEE

- What can I expect from the supervisory committee in terms of guidance in my research?
  - How often will we meet with them?
  - What access to committee members will I have outside of scheduled meetings?
  - What are they likely to expect from me at each meeting?
    - Presentations
    - Written work
    - Data reports
- What should I do to ensure the meetings are properly organized and productive?
- What access do I have to the supervisory committee members outside of meetings?

RIGHTS AND RESPONSIBILITIES WITHIN THE RESEARCH GROUP

- What is my role within the group?
- How are disputes/issues in the lab resolved?
- What does the organizational structure of the research group look like?
  - Who makes the decisions?
  - Who reports to who?

STUDENT AND OTHERS

- Is it appropriate for me to contact other academics (on my committee, in the department, or even at other universities) for advice on particular areas of my research that might be outside your specific expertise as supervisor?
  - Do I need permission from you (or the supervisory committee) prior to doing this?
- How is IP (Intellectual property) handled within the research group and who “owns” the lab books or data repositories?
  - Who is appropriate to talk to about my research? To whom can I disclose the details of my research project to?
VACATION
- How much vacation time do I receive each year? What determines when I may take time off?
  (Dept. recommends 3 wks/year; Department policy is 15 working days per year; GSA Agreement indicates “1 week of vacation leave for each 4-month GA appointment held”.)
- How much advanced notice would you like, and in what format?

TROUBLES
- If there is disagreement on important aspects of my program, what is the dispute resolution mechanism?
- Should personal issues begin to hinder my progress; can I feel comfortable discussing these issues with you before they become detrimental to my program?
GUIDELINES FOR REPORTING STUDENT PROGRESS

The Department of Agricultural, Food and Nutritional Science policy regarding committee meetings is for a supervisory committee meeting to be held a minimum of once per year. If problems arise more frequent supervisory committee meetings should be held. Committee meeting forms are considered official documentation and must clearly outline the issues. If the problems and the committee’s decision on how to deal with the problems are not clearly indicated, the AFNS Associate Chair, Graduate Programs, and FGSR will rule in favor of the student. Below are guidelines for reporting on issues with regards to a student’s progress in their graduate program:

- Progress and performance must be clearly indicated in the form
- If milestones have not been met at the first committee meeting the supervisor and supervisory committee must set timelines to complete the milestones.
- Specific goals and short term deadlines must be established and a future committee meeting set to evaluate the student’s progress.
- Goals must be reasonable and documentation using the AFNS Committee Meeting Report must be thorough.
- 1st Meeting – set goals, tasks and timelines
- 2nd Meeting – review progress and revise timelines if needed
- If no progress has been made between the 2nd and upcoming 3rd meetings, the supervisor must indicate to the student, BEFORE the 3rd meeting, that the purpose of the 3rd meeting is to review progress and will include a decision by the supervisory committee to either allow the student to continue in the program or recommend withdrawal.
- The Associate Chair, Graduate Programs or Vice-Associate Chair, Graduate Programs, must attend the 3rd meeting.
- If the supervisory committee recommends withdrawal at the 3rd meeting the supervisor must submit a letter to the Associate Chair, Graduate Programs, outlining the student’s progress from the start of the program and indicate what steps were taken to rectify the issues and the outcomes of each step.
- The Associate Chair, Graduate Programs, then submits a letter to FGSR recommending the student be required to withdraw from the program.
- FGSR will then review the decision, meet with the student, and make a final ruling.
- Recommendation to withdraw can be appealed by the student.
- If the recommendation is for the student to withdraw, funding support from the supervisor must continue until the appeal period has ended.
- In addition the Supervisor must inform the Graduate Program Coordinator that funding support for the student is ending and indicate the reasons for terminating the stipend.
Appendix VII

CRITERIA GUIDELINES FOR ADMINISTRATION OF AWARDS

For each category please assess the applicant’s abilities. Please try to use the entire scale. Remember you are scoring students in the context of this competition.

<table>
<thead>
<tr>
<th>1.0 Marginal</th>
<th>2.0 Good</th>
<th>3.0 Excellent</th>
<th>4.0 Outstanding</th>
</tr>
</thead>
</table>

1. Academic Record:

GPA in last 15 credits of course work:

2. Other Evidence of Scholarly Achievement (awards, community recognition)

Number of Major Awards ($13,000 or greater): 
Number of Minor Awards (less than $13,000): 

3. Statement of Proposed Research (feasibility, merit and significance; quality of proposal)

4. Research Achievements, Experience and Contributions to Research (number of publications, patents, reports, posters – indicate whether peer-reviewed and quality of venue if possible; relevant work experience – teaching, industrial experience, etc.)

5. Letters of Appraisal

Overall Score: (Score should be based on the total of the scores given in the above categories)