PURDUE UNIVERSITY®

Food Science

2024 - 2025
Graduate Handbook

Food Science Graduate Program

2024 - 2025

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I. GENERAL INFORMATION

1. Overview

The Food Science Graduate Program leads to the degrees of Master of Science (M.S.), non- thesis Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) in four major research areas: Food Chemistry, Structure and Function; Foods for Health; Food Safety and Microbiology; Food Processing and Technology Development. In addition, interdisciplinary research is possible in some cases. The details are described in the Plan of Study section. The Food Science Graduate Program is administered by the Graduate Committee, with assistance from the Graduate Program Coordinator. Administrative procedures are described below. Appendices contain many of the forms needed. Also see the Policies and Procedures for Administering Graduate Student Programs from the Graduate School (Appendix 1), which contains information for both student and Major Professor. Student may also refer to the manual on Graduate Education at Purdue University published by the Graduate School (https://www.purdue.edu/gradschool/).

The guidelines and procedures listed in this handbook are applicable to all the current students – both incoming and those who joined in previous years.

2. Essential Steps for Graduation

In general, to fulfill the Graduate Program requirements:

1. Develop and carry out research objectives in a timely manner on campus
2. Meet at least annually with your Advisory Committee and submit an annual research report
3. Satisfy written English proficiency requirements (international student only)
4. Develop and obtain approval for a Plan of Study
5. Successfully complete coursework listed on the Plan of Study
6. Serve as a teaching assistant for one semester (Ph.D. students only)
7. Complete the Preliminary Exam (Ph.D. students only)
8. Write a thesis (not required for non-thesis M.S.)
9. Defend the thesis in Final Examination

For Suggested Timetables and Tables of Requirements for M.S. and Ph.D. students, see section III: Timetables and Checklists.

3. Role of the Graduate Program Coordinator

Graduate Program Coordinator:

The Graduate Program Coordinator is an integral part of the graduate program (M.S., Direct Ph.D. and Ph.D.) is responsible for the independent overall management and operation of the day-to-day objectives of the Graduate Program. The Graduate Program Coordinator interacts with prospective graduate students, current graduate students, faculty advisors and instructors, the Registrar, the academic advising community and other student services. Serves as the graduate admissions and registration official, counsels graduate students and faculty on academic matters. Has responsibility for making minor/moderate changes in systems and processes to solve problems or improve the effectiveness of the graduate program. Recruits high-quality students. Graduate students are the main focus of the Graduate Program Coordinator who provides guidance for students' needs or refers them to appropriate resources and ensures they meet the Graduate Program's guidelines and requirements.

4. Role of the Major Professor

A graduate student's Major Professor (sometimes referred to as "Major Advisor") is often the graduate student's counselor, advisor, mentor, examiner, and referee. The Major Professor also typically serves as the primary supervisor of all activities in which the graduate student receives a stipend or fee remission. The Major Professor holds significant authority in defining the research and scholarly activities of the graduate student, so it is important to establish a clear understanding of the goals and requirements of the Major Professor's program as early as possible in the graduate student's career within the department. No other academic situation places such power in the hands of the professor nor requires a more thoughtful assumption of responsibility for the well-being of the student.

The supervisor needs to be especially aware of the graduate student's health and mental wellness, of the dangers inherent in extended periods of high stress, and of the reasonable claim family, friends, and society have on the time and energy of the graduate student. (Quote from Statement of Principle: Work Loads of Students with Graduate Staff Appointments, Office of the Vice President and Dean of the Graduate School; see Appendix 2).

Both the Major Professor and the student should meet soon, within a week or two, after the student joins the program to discuss their mutual obligations.

If a graduate student is concerned about any aspect of their experience with their Major Professor, the student may take appropriate action as defined in "Student Appeal and Grievance Procedures".

5. Advisory Committees

A graduate student's Advisory Committee is comprised of a team of Faculty or other approved members that provide recommendations on coursework, research activities, and other services that fulfill the University's and Department's requirements of a successful interdisciplinary graduate degree centered in food science. All graduate students must have an Advisory Committee.

Advisory Committee Composition: A graduate student's Major Professor will serve on the Advisory Committee as the committee chair. The graduate student will consult with the Major Professor on additional committee members and then invite prospective committee members to join. Specific regulations on committee members include:

- The committee must consist of at least **three** graduate faculty members for M.S., and **four** graduate faculty members for Ph.D. students. All members must be Faculty Certified by the Graduate School *(all tenured faculty on Purdue University campus are Faculty Certified)*
- Two or more departments should be represented on the committee with a recommended number of two members from the Food Science Graduate Program.
- According to the Graduate School regulations, more than 51% of this committee must be regular certified faculty *on campus*.
- Off-campus individuals may serve on the Advisory Committee if they possess suitable qualifications as an advisor (discuss with Graduate Coordinator). If such an individual is not already pre-certified by the Graduate School, you will need to file a special Faculty Certification form (see the Graduate Program Coordinator) along with current vitae of this person for acceptance by the Head of the Graduate Program and the Dean of Agriculture, who will make a decision on their approval.

Note that the Advisory Committee and Examining Committee may be comprised of the same members within our Graduate Program. This is different from the Graduate School regulation.

6. Guidelines from Graduate School and Purdue University

Purdue University's Graduate School provides guidelines on thesis writing and issues related to the publication of materials from the thesis (https://www.purdue.edu/gradschool/). Purdue University also has a policy on intellectual property (https://www.purdue.edu/policies/academic-research-affairs/ia1.html). This relates to inventions, copyrightable works, and other creative products from your research activities at Purdue University.

7. Policy on Nondiscrimination, Amorous Relationships, and Anti-harassment

Nondiscrimination

Purdue University is committed to maintaining a community, which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life.

Purdue University views, evaluates, and treats all persons in any University related activity or circumstance in which they may be involved, solely as individuals on the basis of their own personal abilities, qualifications, and other relevant characteristics.

Purdue University prohibits discrimination against any member of the University community on

the basis of race, religion, color, sex, age, national origin or ancestry, genetic information, marital status, parental status, sexual orientation, gender identity and expression, disability, or status as a veteran. The University will conduct its programs, services and activities consistent with applicable federal, state and local laws, regulations and orders and in conformance with the procedures and limitations as set forth in Purdue's Equal Opportunity, Equal Access and Affirmative Action policy which provides specific contractual rights and remedies. Additionally, the University promotes the full realization of equal employment opportunity for women, minorities, persons with disabilities and veterans through its affirmative action program.

Amorous Relationships

Purdue University's Policy regarding romantic or sexual relationships between 1) supervisors and subordinates and 2) students and faculty members, graduate teaching assistants, or any other employee who has educational responsibility over the student went into effect on January 1, 2009.

The policy is posted at
http://www.purdue.edu/policies/ethics/iiia1.html

Anti-harassment

It is the policy of Purdue University to maintain the campus as a place of work and study for faculty, staff, and students, free from all forms of harassment. In providing an educational and work climate that is positive and harassment-free, faculty, staff, and students should be aware that harassment in the workplace or the educational environment is unacceptable conduct and will not be tolerated. Graduate students should not be asked by faculty or staff members to perform work (paid or unpaid) not connected to their graduate staff appointments. Evaluation of graduate staff members should be based only on their academic and research performance.

Graduate student staff members with concerns about their workplace environment may contact the Office of Institutional Equity, the Graduate School, or Human Resource Services.

Refer to *Executive Memorandum No. C-33* for the University policy on anti-harassment and "Procedures for Resolving Complaints of Discrimination and Harassment" (Revised October 19, 2007) issued by the Vice President for Human Relations.

8. Policy on Cheating and Plagiarism

Cheating or Academic Dishonesty

Honesty and high ethics are important to professionals in any field. Therefore, the Food ScienceGraduate Program expects that all students will have respect for each other and the faculty and treat everyone in an honest and ethical manner. Cheating will not be tolerated in any course. Cheating will result in failure of the item in question and possibly failure of the entire course. All cases of cheating will be reported immediately to the Office of the Dean of Students where further disciplinary action is possible, including suspension and expulsion from PurdueUniversity as outlined in the Academic Regulations handbook.

Plagiarism

Plagiarism is the direct use of **another person's ideas, words, phrases, sentences, etc.** as if they were one's own. Plagiarism is a serious violation of writing involving both legal and ethical questions. The legal questions involve copyright laws because most books and journals are copyrighted and the published works are the property of the copyright holder (U.S. Assignment of Copyright Act, 1909). Publishers prevent the unauthorized use of written information by holding the legal rights to it. Infringement of these rights is subject to legal action in the civil courts of the United States of America.

Ethical questions are extremely important in both scientific writing and publishing because the originality of ideas and concepts is highly treasured in any scientific field. Therefore, proper credit must be given to ideas, words, phrases, sentences, and so forth that were formulated by someone else. Failure to give proper credit or reference sources constitutes a serious violation of scientific professional ethics. Whether intentional or unintentional, plagiarism can result in the ruin of people's careers.

Every person must accept responsibility for using the highest professional ethics when composing any written work. This includes writing class homework assignments, term papers, laboratory reports, preliminary examination proposals, theses, dissertations, manuscripts, and so forth. Everything written by a person must be in her/his own words. If help is needed with writing proper English grammar, the person should seek help from course instructors, teaching assistants, major professors, colleagues, or English professionals. It is better to write improper English grammar than to steal words from someone else's work.

It is the policy at Purdue University that students who plagiarize coursework (homework assignments, term papers, laboratory reports, or other written work) will be given a failing grade for the work in question. Serious evidence of plagiarism will be reported to the Office of the Dean of Students or Research Integrity Offices and can result in disciplinary action as outlined in the Academic Regulations handbook. **Graduate students who plagiarize in writing preliminary proposals, theses, dissertations, manuscripts, or any other work are subject to the same regulations and disciplinary actions including dismissal from the Food Science Graduate Program.**

Integrity in Research

Integrity in research is an essential part of Purdue University's intellectual and social structure, and adherence to its spirit and principles must be maintained. These principles include a commitment to truth, objectivity, fairness, honesty, and free inquiry.

Cheating, plagiarism, or knowingly furnishing false information to the University are examples of dishonesty. The commitment of the acts of cheating, lying, and deceit in any of their diverse forms (such as the use of ghost-written papers, the use of substitutes for taking examinations, the use of illegal cribs, plagiarism, and copying during an examination) is dishonest and must not be tolerated. Moreover, knowingly to aid and abet, directly or indirectly other parties in committing dishonest acts is in itself dishonest (Part 5, Section II-B-2-a of University Regulations). Plagiarism consists in using another's words or ideas without clear and explicit acknowledgment. Self-plagiarism consists in using one's own previous work in a new context without clear and explicit

acknowledgment of previous use.

Serious violations of integrity in research are rare. However, those that do occur strike at the very heart of scholarship and the concept of the University. The integrity of the research process must depend largely on self-regulation; it is the responsibility of all who engage in the search for knowledge. Procedures to be followed in any situation related to research misconduct are presented in *Executive Memorandum No. C-22, Policy on Integrity in Research.*

Useful websites:

http://www.purdue.edu/univregs/pages/stu_conduct/stu_regulations.html
http://owl.english.purdue.edu/owl/resource/589/01/
http://turnitin.com/static/index.html
http://www.ithenticate.com

9. Student Appeal or Grievance Procedures

A. Student appeal procedures should be initiated at the departmental level, ideally directly with the person(s) involved. This contact will clarify the situation and will lead to any corrective action, if necessary. Appeals from students should be made within 30 days of the time of the grievance occurrence.

B. If the situation remains unresolved, the student should put the appeal in writing and approach the Department Head, who, if necessary, will refer the appeal to the department faculty or to a subcommittee designated by them. Depending on the nature of the problem, student representatives may serve on this committee.

C. If the situation remains unresolved, the student should appeal to the Dean's office whose appointed representative adjudicates complaints and/or grievances either directly or through a committee, which represents the school.

D. For grievances not arising within a department, the student should talk with the Department Head, who will refer him/her to the appropriate office for resolution or for a referral.

9. Offices to Assist Graduate Students

Dean of Students: Schleman Hall (SCHL) Room 207 (494-1747)
https://www.purdue.edu/odos/index.html

International Students & Scholars: Young Hall (YONG) Rm 525 (494-5770)

https://www.purdue.edu/IPPU/ISS/Student/StudentcontactInfo.html

Bursar's Office: Hovde Hall (HOVD) Room 5 (494-7570)

askbursar@purdue.edu

https://www.purdue.edu/bursar/

Registrar's Office: Hovde Hall (HOVD) Room 45 (494-6165)
registrar@purdue.edu
https://www.purdue.edu/registrar/currentStudents/index.html

Transcripts: Hovde Hall (HOVD) Room 45 (494-6165)
https://www.purdue.edu/registrar/currentStudents/students/transcripts.html

Graduate School: Young Hall (YONG) Room 170
gradinfo@purdue.edu
https://www.purdue.edu/gradschool/

10. Assistantships

Research or teaching assistants holding appointments ranging from 25 to 75 percent time are exempt from paying tuition, but not student fees. As an additional benefit, spouses and dependent children of staff members having an appointment of at least 25 percent are treated as residents for purposes of tuition assessment.

Employment as Graduate Research Assistant

The fractional time of employment is indicated on the appointment. The duties of the appointment, as determined by your Major Professor, are listed on your contract/offer letter.

The maximum time of enrollment is set by the Food Science Graduate Program as five years for the M.S. degree and eight years for Ph.D. However, the department and the Major Professor may restrict supporting funds for assistantships to a shorter period. Assistantship funds after the maximum timeframe allowed must be discussed with the Major Professor. Any extension of the graduate study beyond the stipulated time set forth (5 years for MS and 8 years for Ph.D.) requires approval from the Food Science Graduate Program. Without such approval, the student may be terminated from the program.

Employment as Teaching Assistant

These positions are equivalent in every respect to those of research assistants, except for the duties performed.

Graduate Students on Assistantships

Acceptance of a research/teaching assistantship excludes other employment within or outside of Purdue University without the written consent of the Food Science Graduate Committee.

Scholarships and Travel Awards

These are available from organizations such as the Institute of Food Technologists (IFT), the American Association of Cereal Chemists (AACC), American Chemical Society (ACS), the American Society for Microbiology (ASM) and the American Oil Chemists Society (AOCS). The Department strongly encourages you to apply for these awards. Check with your Advisory

Committee for detailed information.

Tuition and Fee Remissions

A. Graduate Student Staff Remission

Graduate student staff appointed as Graduate Teaching Assistants, Graduate Research Assistants, or Graduate Administrative/Professional Staff receive a tuition and fee remission each semester and summer session that they are employed. The fee remission relieves the graduate student of the obligation to pay full tuition and fees and requires the student to pay only a reduced fee each semester and one-half the semester rate during the summer. [Tuition and fee rates for students enrolled in the College of Engineering, Department of Agricultural and Biological Engineering, Doctor of Audiology, Master of Business Administration, Master of Science (Human Resources), and Master of Science in Industrial Administration (excluding Executive or Community M.S. Programs) include a higher general service fee.] The difference between the general service fee assessed for full-time students and the differential fee for these programs is also the responsibility of the student (i.e., this differential fee is not remittable).

B. Eligibility

A student is eligible for the graduate staff fee remission if the appointment is in effect during the first six weeks of a semester or July 1 of the summer session. To receive the fee remission, the employing department should submit the *Request for Graduate Appointment Fee Remission*: located at https://www.purdue.edu/bursar/faqs/forms.php in advance of each session before the student registers for class.

If a graduate staff appointment terminates within the first six weeks after the start of a semester or prior to July 1 during the summer session and coursework is continued, all fees will be assessed for the semester or summer session.

Students enrolled in the summer session are eligible for summer fee remission if they held a teaching assistantship in the prior spring semester and also will be appointed to a teaching assistantship in the following fall semester. Graduate programs should notify the Bursar's Office (in writing) of graduate students who comply with the Graduate School memorandum from T.P. Adler on "Summer Tuition and fee Waivers for Teaching Assistants" https://www.purdue.edu/bursar/faqs/forms.php.

A student who held a teaching assistantship in the spring semester, but will not hold one in the fall semester because he or she will complete degree requirements during the summer may be granted a Graduate Tuition Scholarship for the summer session. Refer to Graduate School memorandum from T. P. Adler on "Summer Tuition and Fee Waivers for Teaching Assistants https://www.purdue.edu/bursar/faqs/forms.php.

Graduate Student Employment Manual
http://www.purdue.edu/gradschool/documents/gpo/graduate-student-employment-manual.pdf

http://catalog.purdue.edu/content.php?catoid=8&navoid=8326

Graduate School web site for all Manuals:

http://www.purdue.edu/gradschool/faculty/publications.html

11. Travel to Scientific Meetings

Financial aid for travel to scientific meetings to report research findings is a privilege and is considered a reward for meritorious service. The purpose of attending such a meeting is to further your education. The number of trips, if any, and the amount of support for each trip will be at the discretion of the Major Professor and Department Head and will depend on the availability of funds.

In the case of limited travel to specific seminars or research conferences in your field of specialization, permission will depend on your ability to contribute to the meeting, as decided by the Major Professor and subject to the availability of funds.

12. Libraries

Libraries are located in numerous buildings on campus.

Humanities, Social Science and Education Library (HSSE) STEW 135 (494-2831)
Library of Engineering and Science (LOES) WALC 340 (494-0831)
Mathematical Sciences - MATH 311 (494-2855)
Parrish Library of Management and Economics KRAN 2nd Floor 403 (494-2920)
Hicks Undergraduate Library HIKS Ground Floor 504 (494-6733)

Veterinary Medical Library LYNN 1133 (494-2853)

Library web site: http://www.lib.purdue.edu

13. Food Science Organizations

Get involved with the Food Science Graduate Student Association (FSGSA) and its meetings. This is a great way to meet the other graduate students in our program.

The Food Science Club is open to both undergraduate and graduate students interested in Food Science. The club holds meetings once or twice a month featuring guest speakers from the campus or the food industry. It provides employment information; promotes social activities among members, faculty and the food industry; promotes leadership, teamwork and communication skills; and provides community services.

Students are encouraged to become members of the Food Science professional organization, Institute of Food Technologists (IFT) as well as the Phi Tau Sigma Honorary Society, Hoosier Chapter. Students especially may be interested in becoming active in the Student Association of IFT. Membership forms for the national and Indiana Section of IFT are available from the first floor Food Science Club bulletin board, or Main Office brochure holder, or on-line (www.ift.org). Announcements of Indiana Section IFT monthly meetings are posted on the bulletin board outside the main office area on the second floor. Nominations for membership to Phi Tau Sigma will be made by current members based on student's outstanding contributions to food science activities.

14. Student Health

PUSH (Purdue University Student Health)

Continuing, full-time students who have paid the student fee are eligible for routine office visits at no charge from the week of Boiler Gold Rush through graduation. All other eligible students and spouses or domestic partners are eligible to be seen, but will be charged for office visits. All other medical services do have charges associated with them. This includes, but is not limited to, services such as physical exams, office procedures, medication administration, laboratory tests, x-rays, and physical therapy. Please ask if you have questions about the cost of services. PUSH is in network for most United Healthcare and Anthem Blue Cross Blue Shield plans. We will also bill any insurance you present. It is always best to call your insurance company prior to your visit to verify your coverage and benefits. The Purdue University Student Health Center can be reached at 494-1700 or by email at shc@purdue.edu.

Website: https://www.purdue.edu/push/Medical/index.html

Health Insurance (Individual and Family)

Student Insurance Office Phone: (765) 496-3998
Fax: (765) 496-2524
Email: student-insurance@purdue.edu

15. Miscellaneous Department Policies Important to Graduate Students

Faculty and Staff Policies and Procedures are on The Food Science Web page. Look this up for details. See Department Head Administrative Assistant, if unable to locate.

Computers and Printers

The use of printers for other than direct and immediate employment-related activities creates access restrictions and user problems. To eliminate them, the following guidelines should be observed:

1. Prime office hours, 8:00 a.m. – 5:00 p.m., should involve only direct employment-related PC and printer use.
2. Please schedule the printing of large jobs or documents during times when the printers are not in high demand. Suggested times are before and after normal working hours.
3. Printers should not be used in place of the copiers. Multiple copies of documents (e.g.Thesis) should be made on the photocopier (not during the day time hours when the copier is busy) or sent to Printing Services.

Copy Machines

The copy machine in Room 2212 is available to graduate students for their research needs (e.g. copying journal articles and research reports). You will be given a code number by your Major Professor to use for copy work related to your research. This number is not to be used for copying coursework materials. Instructors may obtain a separate code for course material copies. Please

yield as appropriate, in use of the copy machine, to faculty and secretaries with urgent copying needs.

Copies also can be made in the libraries on campus. A copy card for research purposes can be obtained from librarians using the research project account number provided by your supervisor. A copy card for personal use can be obtained by paying cash.

Seminar Refreshments

Graduate students are solely accountable for the purchase, preparation, and cleanup of refreshments for their graduate seminars and preliminary or final examinations. Ask fellow graduate students to help you since the main office and secretaries are not responsible for these activities.

Secretarial Help

Administrative Assistants or A/P staff employees are assigned responsibilities for faculty members and professional staff. Secretarial assistance for work related to student research (e.g. typing of manuscripts) or teaching should be routed through the Major Professor, although it is typically expected that a student will do this on their own. Development of a student's thesis (including tables, graphs, etc.) is the sole burden of the student UNLESS the administrative assistants or A/P staff agree to assist after working hours and are paid by the student for their time.

II. REQUIREMENTS OF THE GRADUATE PROGRAM AND GRADUATE SCHOOL

1. Written English Proficiency

Graduate Students are expected to demonstrate adequate capabilities in written and spoken English for successful operation of research in the Purdue Food Science Department and to prepare written communications of their research endeavors. The graduate student's advisory committee is responsible for ensuring the English capabilities of the graduate student. The graduate student's advisory committee has the authority to require additional coursework to support the development of English writing and speaking skills. If these remedial actions are required by the student's advisory committee, the graduate student must comply with stated requirements by the next semester unless an extension is granted by the advisory committee. Failure to comply may result in expulsion from the graduate program.

2. Duties of the Graduate Student

Expected Workload with Major Professor

The expectation for graduate students is to engage full-time in their research and coursework. Students should be self-motivated to work hard and achieve graduation within approximately **two** years for an M.S. and **three** years (beyond M.S.) for a Ph.D. Occasionally, the Major Professor may ask a student to work on tasks such as assisting with research projects other than their own. Such tasks are an intrinsic part of the learning process and an opportunity to grow professionally. It is the sole responsibility of the graduate student to earn good grades in all courses, establish frequent communication with the Major Professor and members of the Advisory Committee, conduct and complete research in a timely fashion, and follow carefully the sequence of events found in the checklists (Section III - Time Tables and Checklists). More detail on the Research Expectations in the Food Science Graduate Program can be found in Appendix 3.

Coursework Performance Requirements

If the cumulative grade point average (GPA) should fall below 3.0 in a semester on A = 4.0 scale, the student is placed on academic notice and a letter from the Graduate Chair is sent to the Major Professor and student. They both must respond to the committee's concerns and indicate the action taken to raise their GPA.

This must be accomplished in time as follows:

If cumulative GPA is <3.0 at the end of	You have until the end of the term noted below to increase GPA above 3.0
Fall	Next Summer

Spring	Next Fall
Summer	Next Spring

Also, if the semester GPA falls below 3.0 at the conclusion of any two consecutive sessions (Fall, Spring, Summer) or the cumulative GPA also remains below 3.0 for any two consecutive sessions (Fall , Spring, Summer), the student may be terminated from the graduate program immediately.

In the meantime, the availability of funding for the student is dependent on adequate progress and at the discretion of the Major Professor.

No more than six credits of "C" or D/F grades are permitted on the plan of study. Within one year, a course can be retaken only once to raise the grade.

Graduate students are required to take research credits (FS 69800 for M.S. Students and FS 69900 for Ph.D. Students) at least every semester in which research is performed in the laboratory. Satisfactory progress should be made in research credits . Upon receipt of an unsatisfactory grade, the Graduate Chair will notify the student and the Major Professor that the student will be terminated from the graduate program if a second unsatisfactory grade is received. Once two unsatisfactory grades in research grades are assigned in any two semesters during enrollment as M.S. or Ph.D. student, then the Major Professor has the right to dismiss the student from their research program, and the Department Head has the right to dismiss the student from the graduate program.

Research Expectations

The research project is a major component of a graduate degree. Research work must be an original contribution, and of sufficient importance to merit publication in refereed journals. In cooperation with the Major Professor, develop your research objectives and an experimental plan. The Advisory Committee will provide input to the research plan.

Check with your Major Professor on expectations regarding the following:

1. Research literature - obtaining and utilizing published literature on the research topic.
2. Research experimentation - methods for executing experimental objectives, and reliability of the analyses; learning to work and think independently, trouble-shoot, and identify alternative procedures.
3. Research data interpretation, records, reports, and presentations - maintaining a laboratory notebook and interpreting research data; discussing and presenting research results at meetings with Major Professor, Advisory Committee, and laboratory group; reporting the research project as a thesis.

Upon completing the final examination, you are required to provide a copy of the thesis to the Major Professor, along with your research notebooks and electronic data.

3. Course Requirements and Recommendations

Students will register for classes and research credits through the myPurdue scheduling assistant

and complete the Documentation of Expectations for Research Credits form each semester. Contact the Graduate Program Coordinator for the PIN number before registering for each semester. Specific registration instructions can be found in the student's myPurdue account. Further guidance on Registration Credits to be taken each semester can be found in Appendix 4.

Credits Needed for Graduation

At least **30** credits for M.S. and another **60**, for a maximum total of **90**, credits for Ph.D. including coursework and research are required for graduation.

According to Graduate School regulations:

1. Master's Degree

At least one-half of the total credit hours used to satisfy degree requirements must be earned while registered at Purdue University. Course credits obtained via distance learning technologies from a campus shall be considered to have been obtained on that campus.

2. Doctoral Degree

a. At least one-third of the total credit hours used to satisfy degree requirements must be earned while registered for doctoral study at Purdue University.

b. A Master's degree from any accredited university is considered to contribute to 30 credit hours toward satisfying this residency requirement.

Expected Undergraduate Preparation

All graduate students are expected to have a minimum background in science and mathematics disciplines to be able to succeed in foundational Food Science coursework and other academic activities within the department. The following table serves as a guide for the expected minimum background. Students are typically not accepted into the Food Science Department's graduate program without this minimum background. However, in select cases students may be in the graduate program but lack the minimum coursework; it is the responsibility of the graduate student to overcome the deficiency by self-study or remedial coursework in order to maintain adequate progress.

Courses	Semester Credit Hours					
	A, B[b]		C		D	
	M.S.	Ph.D.	M.S.	Ph.D.	M.S.	Ph.D.
Organic Chemistry	8	8	6	6	4	4
Calculus	3	6	3	6	3	6
Physics	8	8	4	4	4	8
General Microbiology	4	4	4	4	4	4
Computer Science	3	3	3	3	3	3
Quantitative Analysis	3	3	3	3	3	3

[b] Research Areas:

A. Food Chemistry, Structure and Function
B. Foods for Health
C. Food Safety and Microbiology
D. Food Processing and Technology Development

Required and Additional Courses in Research Areas

The number of courses and the nature of coursework to be completed will depend on your educational background, research topic, and professional objectives. The following serves as a guide in formulating the Plan of Study (Section II, Part 3):

Graduate Program Minimum Coursework Requirements

1. **Basic Food Science Course Series** to be taken early in M.S. or Ph.D. program.
    a. Food Chemistry (1 cr.) FS 55001 – Fall
    b. Food Analysis (1 cr.) FS 55101 – Fall
    c. Nutritional Sciences (1 cr.) FS 55201 – Fall
    d. Food Microbiology (1 cr.) FS 55301 –Fall
    e. Food Processing (1 cr.) FS 55402 – Fall
2. **Case Study Course** (1 cr.) FS 55501 – Spring
3. **Statistics** (3 cr. for M.S.; 3 additional cr. for Ph.D. including those who have bypassed M.S.)
4. **Seminar Presentation** (1 cr. for M.S.; 1 additional cr. for Ph.D.) FS 68400, section 1 – Fall and Spring

5. **Seminar Attendance** (1 cr. per semester for all graduate students) FS 68400, section 2 – Fall and Spring
6. **Responsible Conduct in Research** (1 cr.) GRAD 61200
7. **Supervised Teaching Assistant in Food Science** (1 cr.) FS 69700 (Required for Ph.D. only). Fall and Spring
8. **Research Area Coursework Requirements** (**4 cr**. for M.S.; **7 cr**. for Ph.D.). Fall and Spring
9. **Research Credits (3+ cr.** Per semester) FS 69800 (M.S.) or FS 69900 (Ph.D.) Fall, Spring, Summer

Descriptions of Courses Listed in Minimum Coursework Requirements

1&2. Basic Food Science Course Series (FS 55001-55402). The faculty believe that all students who complete a graduate degree in Food Science, regardless of their background, should know and understand certain basic topics important to Food Science. To meet these needs, a Basic Food Science Course Series and a Case Study course, to be taken early in the Graduate Program, are required of all M.S. and Ph.D. students. It also is believed that in preparation for productive careers, graduate students will gain from the experience of working in teams and working on problems that require application of knowledge gained. Each of the five Basic Food Science courses is intended to expose students to selected basic concepts related to the topic of that course, and then allow them to apply that knowledge. The courses rely in part on independent learning by the student. With some direction from the instructors, students should make use of available resources and seek out needed information. All courses move at an accelerated rate. Students have to spend the time necessary to meet the course objectives. Those with less background in an area must spend more time and use more resources to understand the subject matter and cover the objectives. With the instructor's help, students should integrate information and apply knowledge gained through vehicles such as a problem, project, or report assigned in the class. Students must learn to recognize the nature of the problem and suggest possible solutions. Some experience in problem-solving and working in teams will be gained in these courses. The intent of the Case Study course is for students to do team work to solve a problem, drawing on what they learned in the Basic Food Science Course Series (both in terms of specific information, concepts, and principles, and in terms of how to locate and use

resources), and from their specific areas of expertise.

Test Out Option: Testing out option is available for the Five Basic Food Science courses (FS 55001 through 55402). Register for the courses first. Instructors or proctors will conduct the test-out examinations before classes begin. Passing grade is B or higher for each course. If you pass, you must drop the course from registration immediately. Indicate this action in the comment section of your Plan of Study. **Students may only attempt the test out once prior to taking the mini-series course(s)**.

3. Statistics Requirement. M.S. students are required to take 3 credit hours of statistics, STAT 51100 or STAT 51200 or equivalent. The intent is for them to take whatever graduate-level course is appropriate based on what they have taken previously. Ph.D. students, including those who bypass M.S., must take an additional statistics course of 3 credit hours, STAT 51400 or equivalent. For those students who already have fulfilled these requirements prior to entering the Ph.D. program, additional statistics courses may be decided upon by their Advisory Committee, based on career objectives and research projects.

4. Seminar Presentation. (**FS 68400, section 1**) or an equivalent one credit seminar course offered each semester with presentations by staff, invited outside speakers, and M.S. and Ph.D. students. The plan of study must have a minimum of one credit of seminar for the M.S. degree and one more credit of seminar for the Ph.D. degree including those who have bypassed M.S.

5. Seminar Attendance (**FS 68400, section 2**). All graduate students are strongly encouraged to attend all seminars offered by the department, including those offered by graduate students or invited speakers. Attendance at seminars is respectful to the presenter and also increases attendees' knowledge in topics relevant to Food Science. All graduate students not enrolling in FS 68400 as a presenter must enroll in FS 68400 with the P/NP option every semester. Graduate students taking FS 68400 with the P/NP option must attend at least 50% of the FS 68400 Graduate Student seminars to receive a 'P'. Graduate students may be exempted from the requirement to enroll in FS 68400 as an attendee (P/NP option) if: (a) they are in their final semester as a graduate student and enrolled as 'degree-only' (CAND 992) or 'exam-only' (CAND 993) or (b) a thesis advisor or supervisor sends a request* to waive the requirement that is approved by the FS 68400 instructor. The following are examples of conditions for (b) that are likely to be approved:

- Required course for the graduate program has lecture or laboratory meetings scheduled at the same time as the seminars (request sent from primary advisor)
- Graduate student is a teaching assistant for a course that meets during the same time as the seminar, including class time or preparation time (request sent from instructor of course)
- Regular laboratory activity must be performed at the same time as the seminars because of unavoidable sampling or analysis schedule (request sent from primary advisor)

**Each request to waive FS 68400 P/NP requirements must clearly describe why the conflict cannot be avoided and verify that the conflict prevents attendance to 50% of the scheduled*

seminars. The advisor or supervisor should send the email to the FS 68400 instructor, copying the student and the graduate program coordinator.

7. Supervised Teaching Assistant in Food Science (**FS 69700**). All ***Ph.D. students*** are required to serve one semester as a teaching assistant (see additional guidelines). The semester and course is assigned by a member of the graduate committee. Taken P/NP

8. Research Area Coursework Requirement. Additional coursework beyond the Graduate Program minimum requirements listed above is dependent upon your educational background, research topic, and professional objectives, with the approval of your Major Professor, Advisory Committee, **and the Graduate Committee**. It is the responsibility of the Advisory Committee *to* ***ensure that the Plan of Study includes at least 4 credit hours for the M.S. degree, and 7 credit hours*** **for the Ph.D. degree** ***of Food Science-related coursework at the highest level available (preferably at the 600 level).*** Suggestions for appropriate courses are listed in the table "Recommended Research Area-Related Graduate Courses by Area of Specialization Options" (next page). At the option of the student's Advisory Committee and if approved by the Graduate Committee and the Department Head, other courses may fulfill the requirements. Check the on-line course catalog for other latest available courses.

9. Students must enroll in ***at least 3 credits*** in graduate student research every Fall and Spring semester (FS 69800 for M.S. students or FS 69900 for Ph.D. students). If students are on an assistantship, they must also be enrolled for research credits in the Summer session. Enrollment in research credits is not required when a student is taking an internship or when a student is attending Purdue University for only part of the semester as degree only or exam only (CAND 99100 or 99200). Students should enroll in an appropriate number of research credits to reflect the average time spent on research activities that are not part of research obligations attached to an assistantship or other paid activity. All students must consult with their Major Professor on the number of research credits taken each semester and on the creation of "Documentation of Expectations for Research Credits", which is described in Section 2, part 4.

See the Mapping Guides (Part V) for the courses in relation to the five learning outcomes of the Graduate Program.

Recommended Research Area-Related Graduate Courses by Area of Specialization Options *(beyond minimum coursework, see #8 above)*

Food Chemistry, Structure and Function

3 CR	ANSC 62000	Proteins & Amino Acids in Nutrition (Fall Odd Years)
3 CR	BCHM 56100	Biochemistry (Fall)
3 CR	BCHM 56200	Biochemistry (Spring)
3 CR	BCHM 60501	Macromolecules (Fall)
2 CR	BCHM 62000	Protein Mass Spectrometry and Proteomics (Spring)
3 CR	BIOL 51202	Methods and Measures in Biophysical Chemistry
1-3 CR	FS 59100	Aquatics Products (Fall Odd Years)*
3 CR	FS/NUTR 63000	Carbohydrates (Fall Odd Years)
1-3 CR	FS 69000	Conformation of Polysaccharides (Spring Even Years)*
2 CR	FS 69000	Polysaccharide Analysis (Fall Even Years)*
3 CR	FS 69000	Food Physical Chemistry (Fall Even Years)*
1-3 CR	FS 69000	Sensory Evaluation Techniques (Summer Odd Years)*
	HORT 54100	Postharvest Technology of Fruit & Vegetables (Spring)
	NUTR 53400	Human Sensory Systems and Food Evaluation (Spring)

Foods for Health

3 CR	ANSC 62000	Proteins & Amino Acids in Nutrition (Fall Odd Years)
1 CR	FS 55200	Nutritional Sciences (Fall)
2 CR	FS 59100	Functional Food for Health (Fall Even Years)*
1-3 CR	FS 59000	Phytochemicals, Biochemistry & Physiology (Spring Even Years)*
1-3 CR	FS 59000	Phytochemicals*
4 CR	NUTR 60500/ANSC 62500	Nutritional Biochemistry & Physiology I
2 CR	NUTR 60600/ANSC 62600	Nutritional Biochemistry & Physiology II
2 CR	NUTR 60700/ANSC 62700	Nutritional Biochemistry & Physiology III
	NUTR 53400	Human Sensory Systems and Sensory Evaluation
2 CR	NUTR 64000	Human Feeding
	NUTR 61600	Special Topics in Ingestive Behavior
1-4 CR	NUTR 59000	Journey through the Digestive Tract
1-3 CR	PSY 69200	Models of Feeding Behavior

Food Safety and Microbiology

3 CR	BCHM 56100	Biochemistry I (Fall)
3 CR	BCHM 56200	Biochemistry II (Spring)
3 CR	BIOL 52900	Bacterial Physiology
3 CR	BIOL 53300	Medical Microbiology
3 CR	BIOL 53700	Immunobiology

3 CR	BIOL 54100	Molecular Genetics of Bacteria
3 CR	BIOL 54900	Microbial Ecology
1 CR	FS 55300	Food Microbiology
2 CR	FS 56400	Commercial Food and Beverage Fermentations
3 CR	FS 56500	Microbial Foodborne Pathogens
2 CR	FS 56600	Microbial Techniques for Foodborne Pathogens
3 CR	FS 58100	Microbial Genomics and Metabolism
1-3 CR	FS 59100	Food Sanitation (Fall)*
1 CR	FS 66000	Intestinal Microbiology and Immunology (Fall)

Food Processing and Technology Development

3 CR	ABE 55700	Transport Operations in Food and Biological Systems II
3 CR	ABE 55800	Process Design for Food and Biological System
3 CR	ABE 58000	Process Engineering of Renewable Resources
3 CR	ABE 56000/BME 52100	Biosensors: Applications and Fundamentals (Spring)
3 CR	ABE 62700	Colloidal Phenomena in Bioprocessing Linear and Non-linear Viscoelasticity of Biological and Food Materials
3 CR	CHE 54000	Transport Phenomena
	CHE 62000	Transport Phenomena I
	FS/HORT 50600	Grape Wine Production (Fall)
1 CR	FS 53500	Aseptic Processing Technology
1 CR	FS 54100	Postharvest Technology of Fruits and Vegetables
1 CR	FS 59000	Emerging Food Technologies
	FS 69100	Advanced Food and Biological Material Characterization Techniques

General

1 CR	FS 53000	Food Ingredient Technology (Fall)
1 CR	FS 53100	Science of Experimental Cuisine (Fall)
1-5 CR	FS 59000*	Special Problems (Fall/Spring)
1-3 CR	FS 59100*	Special Topics (Fall/Spring)
2 CR	FS 62000	Scientific Writing (Spring)
1.0 CR	FS 68400	Food Science Seminar (Fall/Spring)
1-3 CR	FS 69000*	Special Topics in Food Science (Fall/Spring)

***Temporary Course – Consult instructor for course availability**

Other Interdisciplinary Program Course Requirements

Some graduate students might work with a Major Professor who is a member of the Interdepartmental Nutrition Program (INP) if they wish to conduct interdisciplinary research. Also, a Ph.D. student in the Purdue University Interdisciplinary Life Science Program (PULSe) has access to choosing a Food Science department faculty member as their major professor.

Interdepartmental Nutrition (INP)

This Program strengthens graduate education in nutritional sciences and fosters increased interdepartmental and interdisciplinary nutrition research. It is structured to offer excellent educational opportunities through an integrated approach involving faculty from the following departments: Nutrition Science; Animal Sciences; Food Science; Veterinary Clinical Sciences; Veterinary Pathobiology; Forestry and Natural Resources; Hospitality and Tourism Management; Health and Kinesiology; and Psychological Sciences. Emphasis will be on area capabilities in comparative nutrition. This interdisciplinary program would provide access to the diversity of faculty expertise already present in existing departments. Students enrolled in INP are required to complete the Basic Food Science course series (6 cr.) and the Case Study course (1 cr.).

PULSe

This program offers an innovative curriculum involving diverse research opportunities across multiple disciplines available on campus. For example, students in the Microbiology Training Group receive a broad background in biochemistry, cellular biology, cellular microbiology, ecology, environmental biology, microbial biology, microbial physiology, molecular biology, and molecular genetics. This training provides students with the expertise for positions in fields ranging from basic research on microbial systems and ecosystems, through environmental management of contaminated habitats and infectious disease prevention, to applications of microbial activities, to food processing, and biotechnology. Thus, a PULSe student in the Food Science department is strongly encouraged to include at least six credit hours of food science- related coursework (see Section 5) at the highest level available (preferably 600 level) in their plan of study.

Non-Thesis M.S. Degree

1. Minimum coursework required is 42 credit hours, to include:
    a. Basic Food Science Course Series (5 cr.)
    b. Case Study Course (FS 55501, 1cr.)
    c. Seminar (FS 68400, 1cr.)
    d. Statistics (3 cr.)
    e. Special Topics (FS 69000, 1-3 cr. (a short research project with a written report) [May be repeated for a total of 6 credits]
    f. Courses in Research Area(s) (15 cr.)
    g. Electives (10 cr. minimum)

2. Students in the program must choose one of the four research areas; Food Chemistry, Structure and Function; Foods for Health; Food Safety and Microbiology; Food Processing and Technology Development, or a General Program, for which the 15 cr. hour requirement is met by a combination of courses listed under the research areas.

3. This degree option is open to any student who meets the admission requirements for the graduate program in Food Science. However, if a student wishes to change from the M.S. thesis option to the non-thesis option, it must be approved by the Graduate Committee.

4. Students in the program will not receive a research or teaching assistantship in the Department of Food Science.

5. The degree will be called non-thesis Master of Science.

6. Upon completion of coursework, request the Graduate Coordinator to fill out Form 7 and obtain approval signatures in a final exam with your three Advisory Committee members. It has to be forwarded to the Graduate Coordinator to the Graduate School immediately before the degree is awarded.

See Section 5 for Food Science-Related Additional Courses

3. Plan of Study (POS)

A Plan of Study (POS) is a filed agreement between the student and advisory committee on the coursework that will be completed prior to graduation with the desired degree. Plans of Study are filed with the graduate coordinator and submitted to the Graduate School of Purdue University. It is important that the POS is submitted early in the career of the graduate student in the Food Science Department.
If the plan of study is not submitted before the end of the first semester for an M.S. student and before the end of the second semester for a Ph.D. student, he/she cannot register for courses in the following semester unless the student receives a waiver from the Chair of the Graduate Committee.

During your first semester in the graduate program, pick up the Plan of Study (POS) folder from the Graduate Program Coordinator and login at https://wl.mypurdue.purdue.edu.

Fill out the core courses you plan to take in the following semesters using the minimum coursework template given in this handbook. Include the major professor's name. **Save** the plan of study at this preliminary stage. Henceforth, you become enrolled in the Graduate School system. **The SAVED plan of study should be initiated within the first two weeks of enrollment in the graduate program.**

A formal plan of study has to list the advisory committee members and all the courses and credit hours to be taken in order to complete the graduate program successfully. It should be submitted electronically by the **end of the first semester for Master's students** and by the end of the **second semester for Doctoral students.**

Steps to follow:

1. During the first semester, in consultation with Major Professor, select faculty members to serve on your Advisory Committee. See "Advisory Committees" in Section 1 for specific details on the composition of an Advisory Committee.

2. Upgrade the **saved** plan of study from *preliminary* to *current* stage by adding the advisory committee members and courses for fulfilling the degree requirements. The course names must be identical to those on the transcript of courses taken.
Special Instructions for Adding Courses to POS:

- Any courses taken P/NP, including FS 69700 and 68400 section 2 (attendance, only), should only be listed in the comments section. See Appendix for the forms for the M.S. and Ph.D. Plans of Study.
- If any of the Basic Food Science courses (FS 55001-55402) are not taken because the 'test-

out' exams were successfully passed, indicate this in the comment/remarks or note section of the Plan of Study.

- Remember to add graduate-level coursework (50000+) to your plan of study. **A minimum of 4 credits hours for M.S. students and 7 credit hours for Ph.D. students must be advanced-level Food Science courses in your research/signature area.**
- The major professor should indicate the number of transfer credits (0-30) from M.S. courses are to be used toward the Ph.D. degree in the "Total Master's Credits Allowed on this Ph.D. Plan" within the graduate course tallies section.

3. Obtain approval of a printed copy of the upgraded **saved** POS by the Advisory Committee in a group meeting or in person individually and forward it to the Graduate Program Coordinator.

4. The Graduate Committee will review the POS to ensure that the choices of coursework and Advisory Committee members are consistent with the student seeking a degree in the Graduate Program and Graduate School policies.

8. After the Graduate Program Coordinator informs you the Graduate Committee's approval, **submit** the upgraded POS to the Graduate School.

9. Your POS is then electronically routed, through the proper channel (Advisory Committee members, Graduate Committee, Chair of the Graduate Program, and Department Head) for approval of the Graduate School. Check its status at any time by returning to the Submitted Plan of Study link. If there is delay within Advisory Committee, please remind them gently.

Helpful hints:

1. Your POS in the saved mode can be viewed by the Graduate Program Coordinator so that your questions can be answered.

2. All requests for changes in an approved Plan of Study are made by completing the Graduate School electronic form. This form must be routed through the Advisory Committee, the Graduate Program Coordinator, the Graduate Committee, and the Head of the Graduate Program, to the Graduate School.

3. Food Science regulations require that no 10000- or 20000-level courses and no more than a total of six credit hours of 30000- and 40000-level courses may be listed on the Plan. **However, they will earn no credit for a Graduate degree.** Pass/No Pass courses taken will be listed on the Plan for information purposes only. The courses in this section are not considered by the Graduate School as satisfying degree requirements.

1. Note that before **submitting** a POS, you must (a) satisfy Written English Proficiency and (b) submit the final transcript for the last awarded degree to the Graduate School and the Graduate Program Coordinator. Once the POS has been approved by the Graduate School, check it every semester to monitor your academic progress. In the English language requirement section, please write how you fulfilled the listed requirements for a M.S. or Ph.D. student by GRE, TOEFL, ENGL exam or otherwise.
2.

If you have specific questions about completing POS, you may contact the Graduate School

directly (gradinfo@purdue.edu).

Helpful links:

1. Graduate School Policy and Procedures Manual (refer to section VII):
http://catalog.purdue.edu/content.php?catoid=7&navoid=2929

2. Online Course Catalog:
https://catalog.purdue.edu/

3. Online Interdepartmental Food Science Graduate Program Student Handbook
https://ag.purdue.edu/foodsci/Pages/grad_overview.aspx

Concentration Codes and Major Research Areas

The Interdepartmental Graduate Program in Food Science at Purdue University's Field of Study Code is FDSC.

In the semester declaring candidacy, the home department's Field of Study Code (e.g., FDSC for Food Science) will reflect the student's area of specialization. Students are responsible for registration of coursework and/or research throughout the academic year, i.e., during Fall, Spring and Summer sessions. Check with the Graduate Program Coordinator for further details.

The following Concentration Codes have been approved by the Graduate School for entry on the Plan of Study form:

Name	Code
Food Chemistry (Food Chemistry, Structure and Function)	FDCH
Foods for Health	FDHL
Food Microbiology (Food Safety & Microbiology)	FDMC
Food Processing (Food Processing & Technology Development)	FDPR
PULSe ONLY	
Microbes & Their Environment	MCRE
Microbial Pathogenesis	MCRP
Molecular Signaling & Cancer Biology	MOSC

Description of Major Research Areas on the Plan of Study

A. **Food Chemistry, Structure and Function**

Identifies and creates new aspects of composition, structure, and other functional properties of whole foods and food constituents using chemistry, biochemistry, and material sciences to improve the quality, nutrition, affordability, stability, and sustainability of food and food-related products.

B. **Foods for Health**

Applies food and biological science principles to the study of whole foods, macro- and micro-nutrients, and bioactive components as a means to improve consumer health and identifies mechanisms by which these effects arise (such as the molecular interactions of food components in biological systems and the role of the gut microbiome).

C. **Food Safety and Microbiology**

Studies pathogenic, beneficial (probiotic and fermentative), and spoilage microbes and their interaction with food and the host, and develops novel inactivation and detection methods for pathogens.

D. **Food Processing and Technology Development**
Integrates engineering, chemistry, nanotechnology, environmental sciences, and microbiology through food processing operations to produce safe, nutritious, sustainable, and value-added products.

Courses Placed on the Plan of Study (POS) and Templates

See the Course Requirements and Recommendations section for more information on required coursework for M.S. and Ph.D. students.
In addition, please note that including FS 59000/69000 (Independent Study) in the POS requires that the student submit a contract form for independent study (given in the Appendix), which must be approved by the Graduate Committee. Before the graduate committee approves the FS 59000/69000 contract, the plan of study must be justified by the student defending the additional coursework.

M.S. PLAN OF STUDY MINIMUM COURSEWORK TEMPLATE

Course	Credits	Title
FS 55001	1	Food Chemistry
FS 55101	1	Food Analysis
FS 55201	1	Nutritional Sciences
FS 55301	1	Food Microbiology
FS 55402	1	Food Processing
FS 55501	1	Case Study
STAT 51100	3	Statistical Methods
FS 68400	1	Food Science Seminar
GRAD 61200	1	Responsible Conduct in Research
XXXX #####*	3	Graduate-level course (50000+)*
XXXX #####*	1+	Graduate-level course (50000+)*
FS 69800**	3+	Research Credits**

Ph.D. PLAN OF STUDY MINIMUM COURSEWORK TEMPLATE

Course	Credits	Title
FS 55001	1	Food Chemistry
FS 55101	1	Food Analysis
FS 55201	1	Nutritional Sciences
FS 55301	1	Food Microbiology

FS 55402	1	Food Processing
FS 55501	1	Case Study
STAT 51100 or 51200	3	Statistical Methods
STAT 51400	3	Design of Experiments
FS 68400	1	Food Science Seminar (1st)
FS 68400	1	Food Science Seminar (2nd)
GRAD 61200	1	Responsible Conduct in Research
FS 69700	1	Teaching Assistant (Comments Section)
XXXX #####*	3	Graduate-level course (50000+)*
XXXX #####*	3	Graduate-level course (50000+)*
XXXX #####*	1+	Graduate-level course (50000+)*
FS 69900**	3+	Research Credits**

* Research Area Coursework. All M.S. students must have at least 4 credit hours, while Ph.D. students must have at least 7 credit hours. Course level is preferably 60000+, although 50000+ may be acceptable. A student's Advisory Committee Ultimately has authority to approve or deny a POS.
**All students must take research credits at least Fall and Spring semesters. Students on assistantships during Summer session are required to take research credits during the Summer session.

4. Agreements on Deliverables for Research Credits

All students must take research credits (FS 69800 for M.S. Students, FS 69900 for Ph.D. Students) at least every Fall and Spring semester in which they are enrolled as a student (unless enrolled for a partial semester as degree-only or exam-only, CAND 99100 or 99200). This course requires that a form is completed between the instructor (Major Professor) and the graduate student, which is called the Documentation of Expectations for Research Credits (DERC). An unfilled DERC form is available in Appendix 4, although your Major Professor may already have a draft version for you to complete. The DERC is drafted each semester that research credits are taken and requires the following information:

- Name of graduate student
- Purdue ID #
- Course description (FS 69800 or FS 69900)
- Number of credits taken (each credit hour is equivalent to ~3 hours of research work per week, on average)
- Name of instructor (Major Professor)
- Description of expectations for research – to be drafted by Major Professor after discussion with graduate student

Once the DERC is completed and is agreeable to both parties, it must be signed and dated by both the Major Professor and Graduate Student. A copy of the document should be sent to the Graduate Program Coordinator (signing and sending of the DERC can be done electronically). This document should be completed prior to the second week of the semester, preferably before the first week of classes. After completion, the Major Professor must verify that the DERC was completed and signed by entering the information for *Agreements on Deliverables for Research Credits* in *myPurdue*.

5. Annual Progress Reports

Your progress in the Graduate Program must be reviewed each year by your Advisory Committee An Annual Progress Report form should be completed as part of this review (See Appendix 4).

Meet with the Advisory Committee in the Spring semester to discuss and analyze research progress. Before meeting with the Advisory Committee, the student should enter the following information into the Annual Progress Report form and distribute to the Committee members: Progress Summary, Publications, Conference Presentations, Awards and other scholarship activities. Sensitive and/or confidential material need not be disclosed in the Progress Summary, but there must be adequate scientific material presented to demonstrate satisfactory research progress to the Advisory and Graduate Committees. The Major Professor in consultation with the Advisory Committee must complete the evaluation on page 2. At the conclusion of the meeting, after completing the evaluation, this form must be signed by the Advisory Committee and the student. If some or all of the committee members are not available to meet, the student can individually obtain Advisory Committee signatures.

The Graduate Committee requires that the Annual Progress Report be submitted to the Graduate Coordinator **before June 30 of each year**. Research assistantship funding is contingent, in part, on completing these yearly reporting and meeting requirements. Graduate students will **not** be able to register for next semester classes if the report is not completed and submitted.

6. Permissable Leave from the Graduate Program

Students in the graduate program are expected to complete their research, submit a thesis, and receive a degree before taking outside employment. If for any reason they have to be away before finishing their thesis, they should follow proper procedure and obtain appropriate permission from the Department Head. If you plan to withdraw from the program, immediately contact the Major Professor, Department Head, Graduate Chair and Graduate Coordinator with a resignation letter.

Students may obtain permission for leave from the graduate program under specific circumstances. The following gives guidance on policies related to Internships and Extended Leaves of Absence for unspecified personal reasons. You may discuss your particular situation and requirements with the Graduate Program Coordinator and your Major Professor.

Internships

Additional information on Internships for graduate students, including permission to interview for internships and guidance for specific situations related to internships can be found in Appendix 7.

1. Internship is a privilege, not a right. Internship is preferred but not required for graduation. Internship approval is at the discretion of the Major Professor. **Be aware that most Major Professors will not consider their M.S. students for internship. Your priority is to finish research within the designated time as stated in your offer letter/contract.**

2. Duration should not exceed three months. However, at the discretion of the Major Professor and Advisory Committee, a slightly longer internship (up to six months maximum) may be considered. Funding situation and research commitments are some major deciding factors.

3. Summer is the preferred semester for internships since it interferes minimally with coursework. An alternate time may be selected at the mutual convenience of the Major Professor and student.

4. Although the internship is a valuable experience, please remember that the time-to-degree extends by the duration of the internship.

Hence, it requires some planning to protect both the student and the Major Professor. To deal with these issues, the following policy will affect graduate students leaving for internships and all other reasons, prior to completion of their degree. The policy also affects Major Professors and the Advisory Committees of graduate students.

5. Students and Major Professors must follow the requirements stated in the Graduate Handbook, including completion of the required form for leave of absence (See Guidance in Appendix 7).

6. Students must arrange for an Advisory Committee meeting shortly before leaving to present/discuss the following (as appropriate), and a summary report of the meeting must be written by the student, signed by the Major Professor, and submitted to the Chair of the Graduate Committee and the Department Head (i.e., this must be an actual meeting of the Advisory Committee) that includes specific details on:

a) Research progress toward completion
b) Status of manuscript preparation and plans for completion of manuscripts
c) Status of thesis preparation and plans for completion of thesis
d) Projected timeline for completion of degree

7. During the internship period, the student will be removed from Purdue payroll and will not receive a research assistantship from Major Professor. See the business office for additional information.

Extended Leaves of Absence for other reasons (not internship):

Students must (a) submit an exit letter signed by their Major Professor; (b) meet with the Department Head and/or the Graduate Chair if they are planning to leave the program without completing their final examination or depositing their thesis; and (c) meet with the Department Head if their assistantship funding is discontinued. Note the final examination should be set up within two semesters from the time of departure. If later than this, the student must apply for and receive a waiver from the Graduate Committee Chair and the Department Head to receive a Food Science degree.

During the absence from campus, according to the Graduate School, the student has to be registered for a minimum of 3 research credit hours (if in Research in Absentia status) so as to retain his/her student status in the Graduate Program. One credit hour can only be used for an International student going on an Internship, in compliance with ISS rules. The only other time one credit hour can be used is when a student does not meet the exam/degree only timelines set up by the Graduate School.

Both the student and Major Professor should fill out the Leave of Absence form via Success

Factors for approval of the Department Head.

Note: The duration of absence will depend on (i) how far you have progressed in the program, (ii) if you will have funding upon return, and (iii) if approved by the Head of Graduate Program.

7. Bypassing the M.S. Degree

A M.S. student showing exceptional promise may be allowed to bypass the M.S. degree and enter a Ph.D. program. For eligibility, you must have been enrolled in the M.S. program for at least two consecutive semesters, have an approved plan of study on file and have written a paper that has been submitted to a scientific, peer-reviewed journal, or a progress report in manuscript or thesis form, resulting from research conducted during the M.S. program. The Major Professor and Advisory Committee shall request permission from the Graduate Committee for you to bypass the M.S. degree within the first three semesters or else there are no time savings, for entry into the Ph.D. program. The request should include a letter of support from the Advisory Committee (see Appendix 5) and a hard copy of the research publication or equivalent. The Graduate Committee shall recommend suitable action to the Head of the Graduate Program who, in case of approval, will forward the application to the Graduate School. The student and their Major Professor will be notified in writing of the decision.

If approved by the Graduate School, entry into the Ph.D. program becomes effective from the following semester. The student should submit a revised Plan of Study within that semester compatible with their upgraded status (i.e., doctoral program).

8. Direct Ph.D. Program

This optional pathway exists to admit applicants with a Bachelors' of Science degree directly into the Ph.D. program. High GPA and GRE scores, undergraduate research experience, and an aptitude for Ph.D. degree as a goal are necessary criteria. Admission into the Direct Ph.D. Program will be made on a case by case basis, subject to the availability of financial support through graduation by the Major Professor. The Annual Progress Report (see Appendix 4) at the end of the first year will be carefully evaluated by the Advisory Committee to determine if the student is fit to continue in the Ph.D. program. If their recommendation is positive, the Graduate Committee will allow the student to continue in the Ph.D. program.

9. Ph.D. Student Teaching Requirement

1. Every Ph.D. student is required to serve as a **Teaching Assistant for a Food Science *assigned* course**. Students who TA any other course will still have to fulfill the Food Science assigned course requirement.

2. This requirement enables students to obtain experience as a **Teaching Assistant for a *Food Science* course for one semester**. During this period, the department will provide ¼ time teaching assistantship and the Major Professor will pay ¼ time research assistantship (unless your fellowship precludes this arrangement).

3. General duties include laboratory teaching, grading exams and term papers, and preparing

for laboratory experiments and may also involve some classroom teaching. Teaching Assistant Guidelines are further discussed in Appendix 5. However, Teaching assistants are required to follow the course instructor's guidelines for specific tasks to be completed for the course.

4. During their first semester of study, Ph.D. students should fill out the details for TA assignment (see Appendix 5) and submit it to the Graduate Coordinator. After consideration of the student's major area of research, and consultation with the Major Professor and the course instructor, the Graduate Committee will make the teaching assignment for the Fall and Spring semesters of the academic year and announce it in early Summer.

5. During the **semester** serving as a Teaching Assistant, the student **must register** for **FS 69700.** The student is required to attend a week-long T.A. Orientation session the week before Fall classes start. See the Graduate Program Coordinator for details.

6. If English is **NOT** the student's first language, the student must take the Oral English Proficiency Test (OEPT). If a student does not meet the required score for certification, ≥ 50, the preferred option for students who score 40 or 45 is for the student to be enrolled in ENGL 62000, "Classroom Communication for International Teaching Assistants". A student scoring a 45 may be placed in an instructional position provided they are concurrently enrolled in ENGL 62000 along with the teaching assignment. This is true for M.S. and Ph.D. students. This requirement may also be fulfilled by passing either the OEPT screening test, ENGL 62000, score a ≥ 8 on the IELTS exam (effective Fall 2011), or score a ≥ 27 on the speaking portion of the TOEFL iBT. Contact the Graduate Program Coordinator in the first semester of study to register for the OEPT. For additional information visit www.purdue.edu/oepp. Complete the OEPP Status Form (see Appendix 5) and return it to the Graduate Program Coordinator.

7. In preparation for serving as a teaching assistant, it is required for you to attend an orientation program for incoming teaching assistants at Purdue.

8. At the end of the teaching semester, complete a Teaching Assistant Experience Evaluation Form (see Appendix 5) and submit it to the Graduate Program Coordinator. This form is an opportunity to share your experiences during the course operations with the graduate committee and graduate program coordinator, although students are welcome to notify the graduate program coordinator of any concerns related to the course at any time during the semester.

9. The Graduate Chair will assign "Pass" (P) or "Not Pass" (NP) grade to FS 69700 at the end of the semester. This grade is based upon input from the course instructor, who completes the T.A. Evaluation form (Part V), and from the students of the course in which the Teaching Assistant served (Evaluation form found in Appendix 5). If the result is a "Not Pass" (NP), the Graduate Committee may require that you fulfill the teaching obligations in some other manner.

10. Preliminary and Final Examinations

Examining Committees

As stated in Section 1, Examining Committees are typically synonymous with the Advisory Committee in our department. Membership for Examining Committees follows the same restrictions and requirements as Advisory Committees. The general procedure for officially assigning Examination Committees is to complete Form 8, available on MyPurdue (see Graduate Program Coordinator for assistance). Form 8 also records time and location for your examination, so this must be prepared in advance.

According to the Graduate School, all the examining committee members **must be present** for each of the examinations, in person, or via audio/video conference, and electronically sign electronic examination result forms. Neither the Major Professor nor the Department Head is authorized to sign the examination-related forms on behalf of any of the committee members officially approved in the Plan of Study. If an off–campus (non-Purdue) examiner cannot be physically present for the examination, their participation via audio/video conference call may be allowed by the Graduate Chair. The Major Professor must obtain prior approval in writing from the Graduate Chair in the "Proxy Procedure" form (see Appendix 10). At the end of such an examination, committee members will complete the electronic final examination form and electronic examination rubric. An alternate solution is to change the composition of the examination committee ahead of time; replace the non-available person by a faculty member on campus who can be present for the examination. You can seek the help of the Department Head and Graduate Chair in this regard.

Ph.D. Preliminary Examination - Required Components and Procedures

Meet with the Graduate Program Coordinator before starting this process.

The Preliminary Examination consists of the preparation and oral defense of an original written research proposal, related to Food Science and/or of importance to the food industry. Any research you conducted on the topic during the time of your Graduate Program is not to be included in the proposal, but can be used as preliminary data to support the proposed experiments.

The preliminary examination is taken by a student after the Ph.D. Plan of Study has been approved and most of the coursework has been completed. The Graduate Committee recommends that the examination be performed after the first year as a Ph.D. student but no later than the end of the second year. The three major steps of The Preliminary Examination, which are described below, must be completed *at least two semesters before expected graduation* (there must be two semesters devoted to research and writing between the preliminary and final exam).

Your **Examining Committee** will be comprised of four University-approved members. These members are typically but not necessarily the Advisory Committee members. It is the student's responsibility to communicate with the prospective committee members and to obtain written evidence (email acceptable) of their commitment to serve on the committee. This should include a summary of the timeline for pre-proposal submission, proposal submission, and a tentative window of dates for the seminar and oral examination (see descriptions below). Additional guidelines on Examining Committees are found above.

Preproposal

After initiating the process by discussions with the graduate coordinator and Major Professor, the next step in the process of the preliminary examination is submission of a preproposal to your examining committee. The following steps should be taken to complete the preproposal.

[A] The student should schedule a meeting of their Examining Committee, who will provide feedback on the student's ideas for a proposal topic. The topic can be in the student's research area, but must be different from the actual Ph.D. research.

[B] After approval of the Examining Committee, a preproposal should be developed within 2 weeks. The preproposal should be a *maximum of 2 pages* and contain the following components: Title, Introduction/Background, Rationale, Significance, Hypothesis and/or Objectives, Experimental plan, and References. Document formatting requirements are 1" margins, font size 12, and single spacing of lines. *Failure to following formatting guidelines will results in automatic rejection by the Graduate Committee.* The Major Professor may provide guidance to the student on proper formatting but may not contribute to the development of content.

[C] Along with written permission from the Major Professor, the preproposal should be submitted to the Graduate Program Coordinator for distribution to the Examining Committee for evaluation. Its members are given one week to evaluate and respond to the Graduate Program Coordinator. This response will include a decision as to whether the student may proceed with development of the proposal. If the decision is not to proceed, the student will be asked to revise the pre-proposal and resubmit (repeating [B] and [C]).

Proposal

The student should prepare a full proposal (1" margin, font size 12, single space) in the NIH, NSF or USDA style (see Appendix 6) within six weeks after approval of the preproposal. The Major Professor is permitted to provide guidance to the student on development of the budget and on proper formatting but may not contribute to the content. Along with written permission from the Major Professor, the final proposal should be submitted to the Graduate Program Coordinator for distribution to the Examining Committee, which has two weeks to evaluate the proposal document. The student will then defend the proposal in a departmental seminar followed by an oral examination by the Examining Committee (described in next subsection).

Seminar and Oral Examination

Regulations and recommendations for Seminars and Oral Examinations as part of the Preliminary Examination process fall within the Regulations for Seminars and Oral Examinations (see below).

Criteria to Pass the Preliminary Examination

All Examining Committee members have voting status on the results of the Oral Examination. If there is no more than one dissenting vote, the examination is passed, and the student becomes a

Ph.D. candidate.

[A] When the student initiates the process (previous page), i.e., during the first attempt, if disapproved by at least two members, the Advisory Committee will give a second and final chance to modify and resubmit (a) preproposal, (b) proposal, as appropriate, in order to pass and proceed to Oral Examination.

[B] If the student fails the Oral Examination on the first attempt, the Advisory Committee may recommend repeating the process starting with the preproposal or proposal step using a new topic or by revising the original topic. This second attempt can begin only in the next semester and it gives only one chance to pass either step.

[C] If the student fails the Oral Exam in the second attempt, the Advisory Committee will make the decision to (a) allow submitting thesis on research completed towards M.S. degree or (b) recommend removal from the Graduate Program.

M.S. and Ph.D. Final Examination

The Final Examination is a defense of the thesis research (see also the section below on Thesis Requirements) and is conducted by the Advisory Committee, with the Major Professor acting as the Chairperson. In the case of a Ph.D. student, at least two semesters must be devoted to research between the Preliminary and Final Examinations.

Within the first month of the semester when graduation is expected, obtain from the Graduate Program Coordinator a copy of the semester deadlines set by the Graduate School and a folder of final examination/exit documents. Timely and orderly completion of the thesis is necessary to meet these deadlines and to provide reasonable assurance that the members of the Advisory Committee will have adequate opportunity for a thorough and critical evaluation of the complete thesis prior to the Final Examination.

Things to remember during the graduating semester

1. The student must be registered as a CANDIDATE with the correct CRN number in order to graduate.

2. **Registration as Exam (CAND 99300) or Degree (CAND 99200) only:** Requires zero credit research hour. Thesis must be defended and deposited midterm, i.e., within the first 8 weeks of the semester. If the deadline is not met, the Graduate School will register the student automatically for one research credit hour. If the student is on an assistantship at this time, the Graduate Coordinator has to change this registration to a minimum of three research credit hours. The student is responsible for paying the fee difference towards the extra research credits.

3. **Registration as Candidate (CAND 99100):** The student registers for the semester they defend the final examination.

   In either scenario, the student holds a graduate staff appointment through the date of graduation when the commencement is held and therefore may be on payroll with an assistantship. The student will need to comply with the Graduate School

examination/graduation deadline calendar.

4. **Pay policy:** According to the Graduate School, it is generally not appropriate for departments to employ graduate students on an hourly basis. Occasionally, however, where the employment is of an *ad hoc* nature, it may be appropriate to appoint a student using an hourly paid student classification. Such employees are not entitled to any of the benefits specific to a graduate staff appointment. Bursar's web site for fee information: http://www.purdue.edu/bursar. According to the College of Agriculture at Purdue University (as of Nov, 2023), an hourly paid position can be considered if one of the following conditions is met:
    a. The position is open to any level, undergraduate or graduate student, and is a general non-research related position
    b. The position is for grading only. No classroom instruction, office hours, etc.
    c. The position averages less than 10 hours per week for the duration of the appointment and is not research related, OR the appointment duration is less than ten weeks and is not research related.

    An exception to this policy is allowed when a graduate student on an existing fellowship (including those administered as assistantships) have their income supplemented with an hourly paid position, provided they are already receiving tuition waivers or fee remits and benefits through the fellowship.
    Professional Master's Degree students may also be paid hourly for Teaching, Administrative, or Research duties, but only if it is approved by a majority vote in the Graduate Committee based upon strong evidence that the student is the best qualified for the position.

5. **Tuition fee structure:** If a graduate student is registered for exam/degree only and meets the thesis deadline, the Bursar's office will bill the student at the reduced exam/degree only fee. If the student is terminated or leaves within the first six weeks of a semester (or before July 1 of the summer session), or the deadline is not met, this student will owe the full resident or non-resident as appropriate per credit hour higher rate for the semester.

6. **Helpful suggestion:** A graduate student staying on campus during the graduation semester will experience a pleasant time preparing and defending the thesis. Otherwise, unexpected problems may pop up from the Graduate School, Registrar's office or Bursar's office. Any financial liabilities have to be borne by the student. If departure from the program prior to completing the thesis is imminent, please meet with the Graduate Coordinator, Business Office and the Department Head who will be able to appraise the situation.

Graduate School rules that govern the sequence of events culminating in awarding the graduate degree are summarized below and are given in Section VII of "Policy and Procedures for Administering Graduate Student Programs". The deadlines specified are consistent with those given in the Thesis Requirements section. Note that you should check with your Major Professor on expectations for the preparation of the thesis and its distribution to Advisory Committee members.

The Graduate Program Coordinator must be informed of the Final Examination at least three weeks prior to the date of the examination so that Form 8 is approved before the examination takes place. Approval of Form 8 by the graduate school automatically releases Form 7 or 11 (whichever is appropriate) to the Major Professor; Form 7 or 11 are to be completed after the examination takes place. *If an external advisory member who cannot attend the Final Exam has*

formally designated the Graduate Chair as a Proxy, they can be listed on Form 8.

The final copy of the completed thesis must be available to your Major Professor at least **six weeks** before the Final Examination. The thesis must be in a form suitable for format approval, and distribution to the members of your Advisory Committee at least **two weeks** prior to the requested date for the Final Examination.

Immediately preceding the Final Examination, you will present a seminar covering the thesis research. This process must follow the Regulations on Seminars and Oral Examinations (below). In particular scenarios, the Major Professor may ask to keep the seminar closed due to proprietary information (e.g., research with pending patent applications) that should not be disclosed to the public. Such a request needs to be approved by the Graduate Committee and should be a rare occurrence.

A candidate passes the Final Examination if approved by at least **three** votes and not more than one dissenting vote for M.S. as well as Ph.D. degree (see Appendix 1). All Advisory Committee members listed on Form 8 must sign final Exam Form 11 or 7, whichever is appropriate.

Regulations on Seminars and Oral Examinations

These regulations pertain to all Preliminary Examinations (Ph.D. Students) and Final Examinations (M.S. and Ph.D. Students).

Seminars and oral examinations must be electronically scheduled with the Graduate School (Form 8) at least **three weeks** prior to the intended seminar. The student should speak with the Graduate Program Coordinator to ensure that this is done. Before submitting Form 8, the graduate student should ensure that all Examining Committee members are available for a 3-hour period on the day of the Seminar/Examination and reserve a room for that date/time. See the Graduate Program Coordinator to schedule a room and audio/visual equipment for the seminar and examination. A room should be reserved for 3 hours with adequate space for the Examining Committee and other potential attendees for the seminar. Separate rooms may be reserved for the seminar and examination portion (see restrictions on length for seminar and examinations in this subsection).

The graduate student will provide a one-page abstract to the Graduate Program Coordinator for the announcement of the seminar at least **one week** before the scheduled seminar. This announcement will be posted by the Graduate Program Coordinator at least 6 days prior to the seminar.

Seminars given for the Preliminary Examination should be open to the public and advertised to the Department of Food Science. Content of the seminar should cover essential components of the proposal so that all attendees are aware of the project goals, major proposed operations, and the proposed outcomes of the project. Seminar length should be 25-40 minutes in length for Preliminary Examinations or M.S. defenses and 35-55 minutes in length for Ph.D. defenses, although length may be specifically defined by any members of the Examining Committee (if there is disagreement, then the Major Professor should resolve this with the Examining Committee).

At the oral examination, held within 20 minutes following the seminar, the Examining Committee will ask questions of the graduate student that gave the seminar. No persons other than the

Examining Committee members and the student undergoing the examination are permitted in the room during this examination period. This oral examination period should last no more than 2 hours in total length. Questions asked by the Examining Committee may include anything pertinent to the submitted written content and the seminar content, including concepts related to the methods or background.

The Examining Committee will complete an electronic evaluation and rubric upon completion of the oral examination.

11. Research in Absentia

A doctoral student who has completed the preliminary examination and wishes to leave the University and continue doctoral candidacy should request to register for research in absentia. (Master's students are not eligible to register for research in absentia.)

(a) Initiating a Request

A doctoral student may, with the approval of the major professor and head of the graduate program, petition for permission to register for research in absentia. To do so, submit electronically the *Request for Ph.D. Degree Candidate Research in Absentia (G.S. Form 12) which* must be received by the Graduate School at least one month prior to the beginning of the initial session for which absentia registration is sought.

(b) Restrictions

A student who holds a Purdue University graduate appointment, including a fellowship, is not eligible to register for research in absentia. If the graduate appointment is related to a research project off campus, the student may be eligible to request a change of duty station. (SeeSections IV-D and V-E of the University Policies & Procedures for Administering Graduate Student Programs).

(c) Qualifications

To be eligible for absentia status, students must:
a. have completed their coursework and preliminary examination;
b. have made significant progress on the thesis research topic; and
c. have established, in coordination with their major professor, a plan or accomplishing research at the absentia location.

See the Graduate Program Coordinator for more information on Research in Absentia out of the Policies and Procedures for Administering Graduate Student Programs. Also refer to this Manual - V. Registration of Graduate Students, Section V, page 8.

12. Procedural Requirements to Complete a Thesis

1. Register as a candidate the session the degree is expected. **Our department does not have a thesis formatting person. Therefore, you are required to attend the Graduate School thesis**

workshop in the semester you register as a candidate in order to prevent unexpected problems when depositing thesis.

2. For information on thesis preparation, please visit the Thesis & Dissertation Office web site https://www.purdue.edu/gradschool/research/thesis/index.html. (See information on departmental policies regarding printing and copying theses, in section 14 of Part I of this Handbook).

3. At least **one month** before the Final Examination, the Major Professor will review a complete draft of the thesis for format requirements, as specified in the manual. Your Major Professor is responsible for assuring that the thesis meets the stylistic requirements of the department. The Electronic Thesis Acceptance (ETAF formerly Graduate School **Form 9**) includes a section for the signature of your Major Professor to indicate that the format has been reviewed.

4. Give copies of the thesis to members of the Advisory Committee at least **two weeks** prior to the examination.

5. At least **three weeks** before the examination, you will submit the Request for Appointment of Examining Committee (**Form 8**) to the Graduate School. (Note: Final oral examinations must be completed **one week** before the last day of classes of the semester in which the degree is to be awarded.) The Graduate School will send, an approved copy of the form to the department graduate office, along with the following:
   a) Report of the Final Examination form (**Form 7** for M.S., **Form 11** for Ph.D.)
   b) The Electronic Thesis Acceptance Form (ETAF) must be signed by the Advisory Committee members only after verifying that the student has incorporated all the suggested corrections in the thesis.
   c) Prior to submission the Major Professor must initiate the iThenticate check procedure to certify that the thesis is free of plagiarism and all materials appearing in the thesis/dissertation have been properly quoted and attributed. The student and their major professors must sign a statement on the Graduate School Form 32 that the thesis was diagnostically reviewed by *iThenticate* on the date indicated and any identified items have been satisfactorily resolved.
   d) The thesis is electronically submitted to Hammer Research Repository (HammerRR).
   e) Exit questionnaire in the Survey for M.S. and Ph.D. students from the Graduate School must be completed before the final submission of the thesis. If this is not done, the student cannot graduate. The student must also complete the FS department exit survey before leaving the University.

All Master and Ph.D. students have to submit their thesis online to HammeRR.

<u>Consolidated list of useful websites:</u>

Course Catalog:
https://selfservice.mypurdue.purdue.edu/prod/bwckschd.p_disp_dyn_sched?

Interdepartmental Food Science Graduate Program Student Handbook
https://ag.purdue.edu/foodsci/Pages/grad_overview.aspx

Employment Manual:

https://www.purdue.edu/gradschool/documents/gpo/graduate-student-employment-manual.pdf

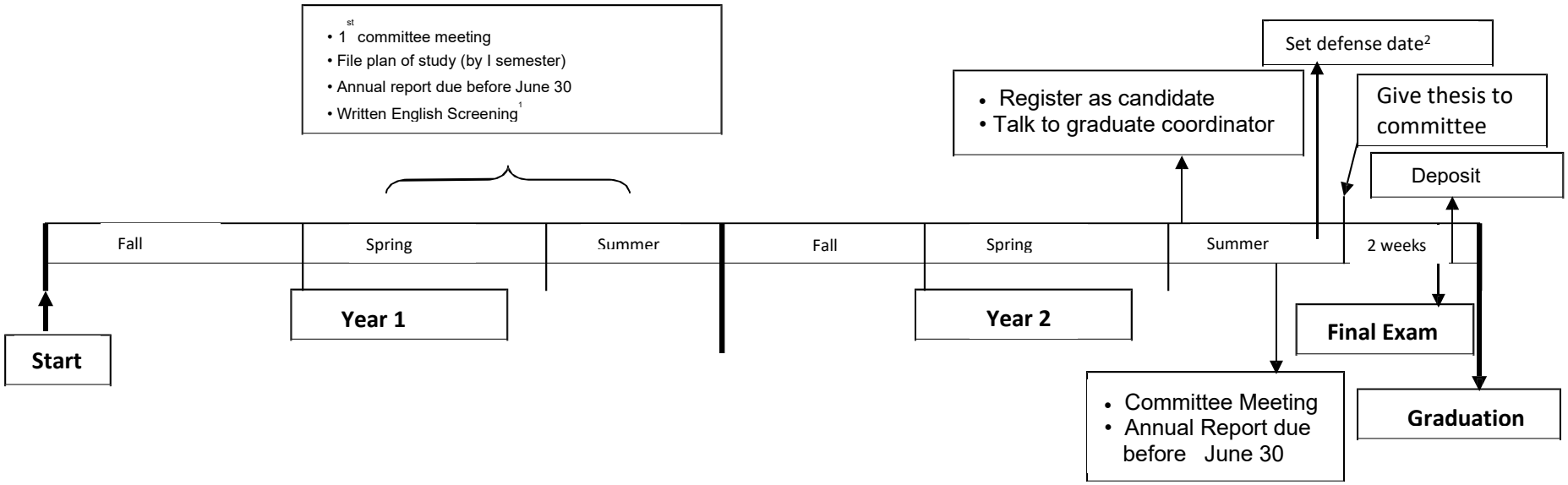
Policies and Procedures Manual:
http://catalog.purdue.edu/content.php?catoid=7&navoid=2886&hl=%22employment+manual%22&returnto=search

Graduate School website for all Manuals:

http://www.purdue.edu/univregs/studentconduct/regulations.html
http://owl.english.purdue.edu/owl/resource/589/01/
https://www.ithenticate.com/

III. TIMETABLES AND CHECKLISTS

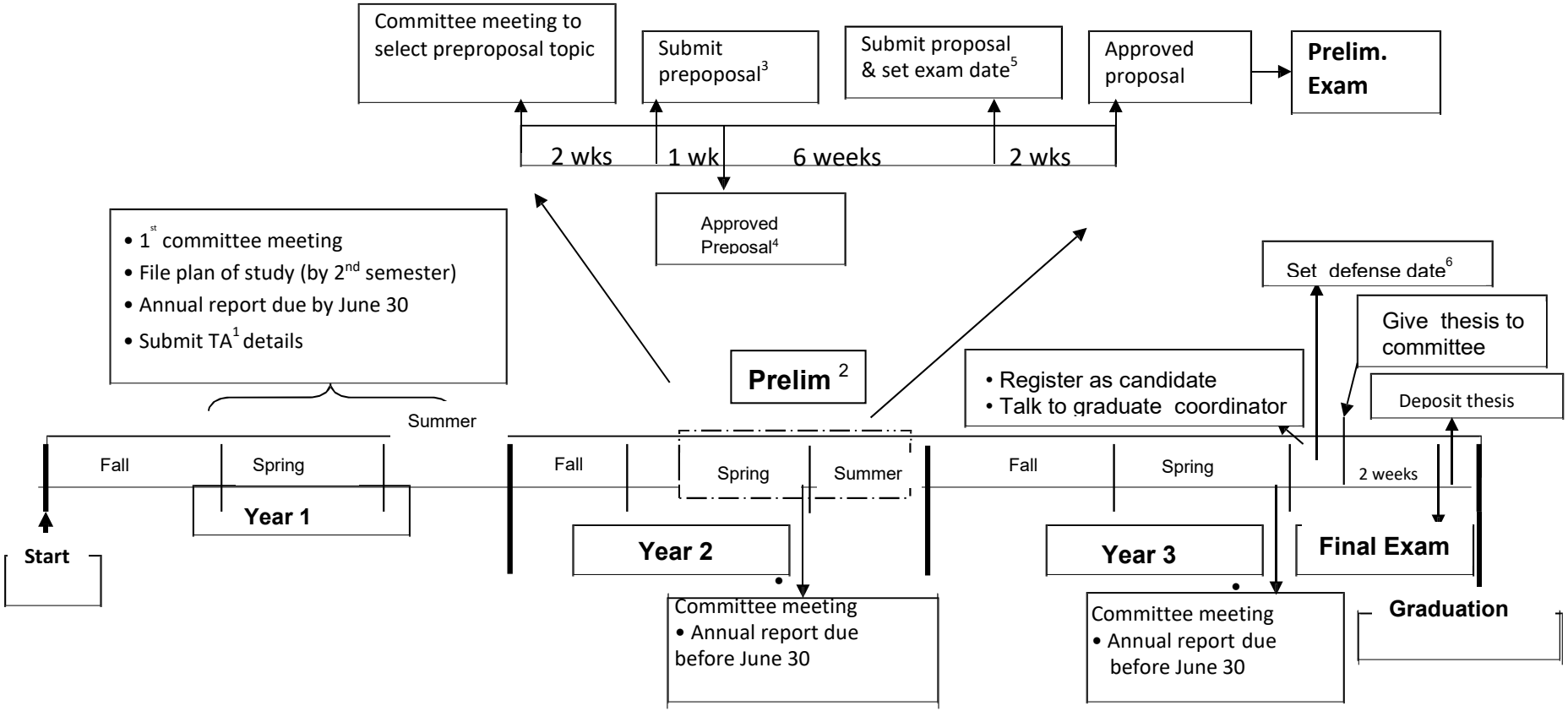
Suggested Timetable for the M.S. Program



- Register for classes each semester. Form to be signed by Major Professor. Pick up PIN number from the Graduate Program Coordinator.
- Pay fees a week before school starts to avoid cancellation of registration and late fee $200 extra!
- Obtain exit/final exam file from graduate coordinator in the first week of the last semester in year 2

At least three weeks before the final exam. Submit Form 8 online via MyPurdue account.

Suggested Timetable for the Ph.D. Program



- Register for classes each semester. Form to be signed by Major Professor. Pick up PIN number from the Graduate Program Coordinator
- Pay fees a week before school starts to avoid cancellation of registration and late fee $200 extra!
- Obtain Exit /final exam file from graduate coordinator in the first week of the last semester you are to graduate in year 3.

[1] Assignment is made during Summer prior to the academic year. International student has to take the required Oral English proficiency exam before the second semester in year 1 and then the screening test in written English.

[2] Preliminary exam must be completed at least two semesters before intended graduation. Summer counts as a semester.

[3] To Graduate Coordinator who will do paperwork and give it to committee members.

[4] Prepare the proposal within six weeks.

[5] To Graduate Coordinator who will send out proposal to committee members. Exam date must be set three weeks before the presentation.

[6] At least three weeks before the final exam. Submit Form 8 online via MyPurdue account.

Checklist for M.S. Students

TASK	ACTION	CONTACT	CHECK WHEN COM-PLETED
1. Documentation of Expectations for Research	Turn one in for every semester (fall, spring, summer). Upon arrival or	Graduate Program Coordinator, for forms and course	
2. Purdue Assistantship payment	Complete the DERC form with your Major Professor	See Business Assistant	
3. Research Credit Registration	myPurdue	Return completed DREC form to Graduate Coordinator	
4. Fees	Pay a week before classes start	Bursar's Office, Hovde Hall	
5. Prepaid Fees	If a sponsor prepays your fees and an account is set-up at Purdue, you must still check in on My Purdue.		
6. Purdue picture I.D.	Fee receipt and two pieces of I.D. needed		Purdue Memorial Union
7. Current address and phone number	Complete the form in your folder. Must keep current address on file.	Graduate Program Coordinator	
8. Admissions conditions	Satisfy in the first semester		
9. Yearly Research Progress Report	Submit report yearly before June 30. Forms are in Graduate Handbook and in share/files/graduate student/annual report	Take to Graduate Program Coordinator	
10. Yearly meeting with Advisory Committee	Submit yearly by June 30. Forms are in Graduate Handbook. All committee members must sign	Graduate Program Coordinator	
11. Submit Plan of Study (Masters)	Before the end of your 1st semester. See Handbook for details and Graduate Program Coordinator	Go to myPurdue to submit EPOS; See Graduate Program Coordinator	
12. Thesis Format	Must have thesis format approval 4 weeks before requesting final exam	Major Professor	

Checklist for M.S. Students - continued

TASK	ACTION	CONTACT	CHECK WHEN COM-PLETED
13. Final Exam: Check Grad. Handbook	Need at least 30 total credit hours, this includes coursework & research credits		
14. Check deadlines for final defense and graduation at the Graduate school Thesis web site.	Beginning of the semester you plan to graduate set up an appointment with Graduate Program Coordinator to go over things and pick up final exam folder	See Graduate Program Coordinator for a copy of deadlines from the Grad. School	
15. Have Major Professor check thesis and discuss date of exam	At least 4 weeks before exam to ensure you are eligible to proceed for final exam	Major Professor	
16. Schedule seminar date with Advisory Committee	At least 4 weeks before exam. Find a suitable time based upon the schedules of Advisory Committee Members. Reserve a room for 3 or 4 hours. Morgan Conference Room	Advisory Committee Members (scheduling) and Main Office Administrative Staff (room reservation)	
17. Submit request for final exam (Form 8) with date, time & room no. & title	3 weeks before exam	Graduate Program Coordinator	
18. Distribute Thesis to Advisory Committee members	2 weeks before exam	Committee	
19. Submit electronic abstract **(350 words)** in Word document via e-mail attach to Graduate Coordinator	Give to Graduate Coordinator 1 week and a day before posting. Has to be posted 1 week before exam	Graduate Program Coordinator	
20. Present seminar and defend thesis			
21. Advisory Committee submits electronic signature on GS Form 7	Graduate School emails request for electronic signature	Graduate Program Coordinator	
22. Advisory Committee submits electronic signature on GS Form 7	Electronic signature Must be submitted as soon as exam is completed	Graduate Program Coordinator	
23. Complete Grad School Thesis Acceptance Forms (ETAF) electronic forms	ETAF is found in student's myPurdue	Graduate Program Coordinator	
24. Deposit Thesis Electronically to HammeRR	Check the Graduate School Thesis web site for graduation deadline calendar	Graduate School Thesis web site	

Checklist for M.S. Students - continued

TASK	ACTION	CONTACT	CHECK WHEN COM-PLETED
25. Thesis Deposit is electronically submitted to HammeRR.	Deposit link provided upon approval of ETAF form.	Thesis Deposit Office; Young Room 170, Telephone: 42600 for an appointment early in the final semester	
26. Department Head Signature - electronic	Will sign electronically only when all other parties have signed	Department Head or Head of the Interdepartmental program	
27. Pay thesis deposit fees	**Pay fees to deposit thesis electronically; graduate school exit survey form must be turned in.**	Thesis Office	
28. Thesis Receipt	Thesis receipt will be emailed to student and Graduate Program Coordinator	Graduate Program Coordinator	
29. Complete Exit Interview w/graduate chair and give exit survey to graduate program coordinator	Obtain Exit Interview form from Graduate Program Coordinator at the beginning of semester in final exam folder	Schedule appointment with Dept. Head at the beginning of your final session	
30. Exit/Completion letter from Major Professor 4 – 6 weeks before funding stops	Return form to Graduate Program Coordinator at the beginning of your last semester	Major Professor & Graduate Program Coordinator	
31. Return forwarding address, phone number, and e-mail on form in the exit/final packet	Provide details for future correspondence.	Purdue Graduate Program Coordinator	
32. M.S. Bypass to Ph.D.	Must be in the MS program for at least two consecutive semesters and have written at least 1 publication (see page 23 of Graduate Handbook)	Major Professor & Advisory Committee; Then request permission of the Grad. Committee to bypass the M.S. degree	

Checklist for Ph.D. Students

TASK	ACTION	CONTACT	CHECK UPON COM-PLETION
1. Oral Proficiency (International students TAs)	Review graduate handbook; 2nd semester	Graduate Program Coordinator	
2. Documentation of Expectations for Research Credits Form (DERC)-Sample in Appendices	Turn one in for each semester (fall, spring, summer).	Graduate Program Coordinator for forms and course offerings. Major professor, for advice and approval on Research Registration Form	
3. Purdue Assistantship payment	Complete the DERC form with your Major Professor		
4. Registration entry in computer via myPurdue	Submit completed form to Graduate Program Coordinator	Return completed DERC form to Graduate Program Coordinator	
5. Fees	Pay a week before classes start	Bursar's Office, Hovde Hall	
6. Prepaid Fees	If a sponsor prepays your fees and an account is set-up at Purdue, you must still check myPurdue or Bursar's office to avoid cancellation.		
7. Purdue picture I.D.	Fees receipt and two pieces of I.D. needed	HOVD Room 14	
8. Current address and phone number	Complete the form in your folder. Must keep current address on file.	Submit to Graduate Program Coordinator	
9. Admissions conditions	Satisfy in the first semester	Graduate School	
10. Yearly Research Annual Progress Report	Submit report annually no later than June 30. Forms are in Graduate Handbook.	Take to Graduate Program Coordinator	
11. Annual meeting with Advisory Committee	Meet with advisory committee annually to complete annual progress report form. All committee members' signatures required.	Submit to Graduate Program Coordinator	
12. Submit Plan of Study (Ph.D.)	Before the end of second semester. Check Handbook for details.	Log into myPurdue to submit EPOS; See Graduate Program Coordinator; See Major Professor	
13. TA details	Submit form during first semester of Graduate study.	Graduate Program Coordinator	

Checklist for Ph.D. Students - continued

TASK	ACTION	CONTACT	CHECK WHEN COM-PLETED
14. Complete TA Orientation	Take T.A. Orientation before you T.A.	Check Graduate Handbook for details; for questions, see Graduate Program Coordinator	
15. FS 69700	FS 69700 is your teaching experience. Register for this class the semester you T.A.		
16. Ph.D. Preliminary Exam (includes 18-26, below)	First, set up a meeting with the Graduate Program Coordinator. Pick up Preliminary folder to review procedures. After second or third semester (must be completed two sessions before graduation)	Graduate Program & Coordinator *Schedule prelim with Advisory Committee	
17. Write Preproposal	Check Handbook: Preproposal	Graduate Program Coordinator	
18. Write Proposal within 6 weeks from approved Preproposal	Check Handbook: Proposal	Graduate Program Coordinator	
19. Request date of Prelim Exam	3 weeks before exam	Graduate Program Coordinator	
20. Submit request for exam (Form 8) with date, time & room number & title	3 weeks before exam	Graduate Program Coordinator	
21. Reserve Audio Visual Equipment and rooms for Exam	As soon as you have scheduled your exam	Main office receptionist	
22. Submit electronic abstract in Word document via e-mail **with 350 words or less**	Submit to Graduate Program Coordinator one week before preliminary exam.	Graduate Program Coordinator	
23. Present seminar and defend proposal	See handbook: Seminar and Oral Examination	See Graduate Program Coordinator and Major Professor for details.	
24. Form 11 completed electronically by Advisory Committee	Submit signatures electronically	Graduate Program Coordinator	
25. Complete Exam Form 11	Must be approved on preliminary exam date	Graduate Program Coordinator	
26. Final Exam: Register for candidate	Start of final session (during the first month) meet with the Graduate Program Coordinator for Final Exam folder.	See Graduate Program Coordinator	

Checklist for Ph.D. Students - continued

TASK	ACTION	CONTACT	CHECK WHEN COM-PLETED
27. Major Professor checks thesis format and discuss date of exam	Four weeks before exam Major Professor reviews thesis. Provide Graduate Program Coordinator exam date information.	Graduate Program Coordinator	
28. Schedule seminar with Advisory Committee	Find a time that is suitable for all Advisory Committee Members. Schedule a room for 3-4 hours three weeks before exam, preferably the Morgan Conference room (NLSN 2187)	Advisory Committee Members (scheduling) and Main office administrative staff (room reservation)	
29. Fill out Form 8 Via MyPurdue link	Three weeks before exam	Graduate Program Coordinator	
30. Distribute thesis to Advisory Committee members	Two weeks before exam	Graduate Program Coordinator	
31. Submit electronic abstract in Word document via e-mail **350 words**	Email abstract to Graduate Program Coordinator	Graduate Program Coordinator	
32. Present seminar and defend thesis			
33. Form 7 completed electronically by Advisory Committee	Submit signatures electronically	Graduate Program Coordinator	
34. Complete ETAF Form (electronic thesis acceptance form 9).	Submit signatures on ETAF form electronically	Graduate Program Coordinator or Graduate School Thesis website	
35. Department Head Signature	Submit signature electronically		
36. Thesis Deposit is electronically deposited to HammeRR.	Linked emailed to student upon ETAF form approval	Thesis Deposit Office; Young Hall Room 170, Telephone: 42600.	

Checklist for Ph.D. Students - continued

TASK	ACTION	CONTACT	CHECK WHEN COM-PLETED
37. Thesis Receipt & Graduate School Exit Survey	Thesis office will email thesis receipt to student and graduate program coordinator & Graduate School electronic exit survey must be completed prior to graduation.	Thesis office and graduate program coordinator	
38. Complete Exit Interview	Complete departure form & submit to Food Science main office administrative assistant	Schedule appointment with Dept. Head at the beginning of your final session	
39. Exit/termination letter from Major Professor 4- 6 weeks before funding stops	Return form to Graduate Program Coordinator and Business Office	Major Professor & Graduate Program Coordinator	
40. Forwarding address, phone number, and e-mail.	Complete departure form	Graduate Program Coordinator	

Students who will be gone for a considerable length of time should leave a forwarding address with the Graduate Program Coordinator for emergency reasons and phone number.

IV. APPENDICES

Appendix 1

Administering Graduate Degree Programs

https://catalog.purdue.edu/content.php?catoid=14&navoid=16498

Graduate degree programs are subject to policies and procedures established by the Graduate Council and the dean of the Graduate School. It is the policy of the Graduate School to delegate to the departments and their staff the maximum responsibility for the maintenance of academic standards. The Graduate School staff does not normally counsel individual graduate students relative to their programs and progress. In all matters concerning a student's academic program, the Graduate School will take no action (except in unusual cases) without prior approval or recommendation of the student's major professor, advisory committee, or the head of his or her graduate program. Any necessary communication with the Graduate School should be made through the student's department. Although Graduate School deadlines are specified throughout this section of the manual, departments may set earlier deadlines.

A. Departmental Advising and Supervision

https://catalog.purdue.edu/content.php?catoid=14&navoid=16498#departmental-advising-and-supervision

B. Plan of Study

https://catalog.purdue.edu/content.php?catoid=14&navoid=16498#b.-plan-of-study

C. Thesis and Dissertation Policies

https://catalog.purdue.edu/content.php?catoid=14&navoid=16498#theses

D. Establishing Examining Committees

https://catalog.purdue.edu/content.php?catoid=14&navoid=16498#establishing-examining-committees

E. Conducting Examinations

https://catalog.purdue.edu/content.php?catoid=14&navoid=16498#conducting-examinations

F. Reporting the Results of Examinations

https://catalog.purdue.edu/content.php?catoid=14&navoid=16498#reporting-the-results-of-examinations

G. Multiple Degrees

https://catalog.purdue.edu/content.php?catoid=14&navoid=16498#multiple-degrees

Appendix 2

Work Loads of Students with Graduate Staff Appointments

https://catalog.purdue.edu/content.php?catoid=14&navoid=16513#work-loads-of-students-with-graduate-staff-appointments

Appendix 3

Research Expectations in the Food Science Graduate Program

The hypothesis, objectives and experimental plan for your thesis work must be developed in cooperation with your Major Professor. Your Advisory Committee will provide input into the research plan. The research work must be a scientifically sound, original contribution, and of sufficient importance to merit publication in refereed journals. Additional expectations include the following:

1. Mastery of literature related to your research work and development of critical thinking skills.

2. Ability to conceive, articulate and test experimental objectives and analyze, summarize and communicate research findings.

3. Maintenance of a laboratory notebook of research data, daily record of activities and interpretations. (Discuss with your Major Professor his/her expectations/guidelines for the laboratory notebook.)

4. Obtaining permission to use instruments and other items from the laboratory of the Principal Investigator to whom it belongs. Removing instruments or other items from other laboratories without permission is unprofessional and not acceptable.

B. Guidelines on Research Notebooks and Publications

1. All research materials belong to the laboratory. When leaving your department after graduation, you may take a copy of your research notebooks only after obtaining permission from your Major Professor.

2. The student, major professor and other contributors to research conducted during graduate training are entitled to authorship in publications. The Major Professor will decide the list of authors and their sequence. The Major Professor is usually the corresponding author. T first author on a paper depends on the convention in the area and the laboratory; however, this author is normally the person who has made significant contributions to the research such as conducting the experiments to obtain the data, analyzing and interpreting the results, and writing the first draft of the paper. Generally, providing funding, being a laboratory group leader or manager, providing equipment or laboratory space, doing technical work that is routine or on a fee for service basis, and editing drafts of manuscripts are not sufficient to become an author. Refer to Instructions for Authors for the journal to which the manuscript will be submitted for further guidelines on authorship and manuscript preparation. The completed manuscript for publication (at least a first draft) should be submitted to your Major Professor before you leave the department.

3. You may use material from a journal article, such as figure, graph or table, along with the reference for that article, in a seminar. You cannot use copyrighted material (print or web based) in a manuscript or thesis unless written permission is obtained from the party holding

   the copyright (usually the publisher). If there are any questions about what material is

copyrighted, seek professional advice.

4. Plagiarism is the direct use of another person's ideas, words, phrases, sentences, etc. as if they were one's own. Plagiarism is a serious violation of ethical conduct with legal implications. Proper credit must be given to ideas, works, phrases, sentences, and so forth that were formulated by someone else. This applies to writing preliminary proposals, theses, dissertations, manuscripts, and other work. (See the Graduate Handbook for more details on this topic.)

5. Research agreements between a company and Purdue University will contain a statement about confidential information and disclosure thereof. Almost always, the statement will include a definition of confidential information (i.e., what is considered to be confidential), stated obligations of both the company and the university, and a specific time frame over which any restrictions apply. There also will be a stated procedure for obtaining permission to disclose ANY information resulting from, or related to, the project (i.e., for determining how and when any information may be disclosed). The disclosure may be in the form of publicity/news releases, manuscripts, seminars, reports, or oral or poster presentations at meetings. Project agreements, contracts, and secrecy/confidentiality agreements apply to all university personnel, including students and any others assigned or employed to work on the project. The Major Professor is the person who will request written permission from the company to use or disclose information and/or findings related to the project. No release of information and/or research findings from company-sponsored research in any form shall be made without authorization from the Major Professor.

6. Students should be aware of Purdue University's policy on intellectual property (Appendix 6). This relates to inventions, copyrightable works, and other creative products from your work and activities at Purdue University.

7. Thesis should be written under the guidance of the Major Professor with regard to content and presentation of results. Original references for related work should be cited appropriately following the format in a journal relevant to the area of research.

C. Grounds for Dismissal

The following will be considered grounds for immediate dismissal from the Interdepartmental Food Science Graduate Program: plagiarism, falsifying data, deleting/destroying someone else's data, and being under the influence of alcohol or controlled substances on University premises.

D. Ethical Obligations of Authors

(Reprinted in part with permission from "Ethical Guidelines to the Publication of Chemical Research," Chem. Rev. 2001, 101, pp. 13A-15A. Copyright 1985, 1989, 1995, 2001 American Chemical Society)

1. An author's central obligation is to present an accurate account of the research performed as well as an objective discussion of its significance.

2. An author should recognize that journal space is a precious resource created at considerable cost. An author therefore has an obligation to use it wisely and economically.

3. A primary research report should contain sufficient detail and reference to public sources of information to permit the author's peers to repeat the work. When requested, the authors should make a reasonable effort to provide samples of unusual materials unavailable elsewhere, such as clones, microorganism strains, antibodies, etc., to other researchers, with appropriate material transfer agreements to restrict the field of use of the materials so as to protect the legitimate interests of the authors.

4. An author should cite those publications that have been influential in determining the nature of the reported work and that will guide the reader quickly to the earlier work that is essential for understanding the present investigation. Except in a review, citation of work that will not be referred to in the reported research should be minimized. An author is obligated to perform a literature search to find, and then cite, the original publications that describe closely related work. For critical materials used in the work, proper citation to sources should also be made when these were supplied by a non-author.

5. Any unusual hazards inherent in the chemicals, equipment, or procedures used in an investigation should be clearly identified in a manuscript reporting the work.

6. Fragmentation of research reports should be avoided. A scientist who has done extensive work on a system or group of related systems should organize publication so that each report gives a well-rounded account of a particular aspect of the general study. Fragmentation consumes journal space excessively and unduly complicates literature searches. The convenience of readers is served if reports on related studies are published in the same journal, or in a small number of journals.

7. In submitting a manuscript for publication, an author should inform the editor of related manuscripts that the author has under editorial consideration or in press. Copies of these manuscripts should be supplied to the editor, and the relationships of such manuscripts to the one submitted should be indicated.

8. It is improper for an author to submit manuscripts describing essentially the same research to more than one journal of primary publication, unless it is a resubmission of a manuscript rejected for or withdrawn from publication. It is generally permissible to submit a manuscript for a full paper expanding on a previously published brief preliminary account (a "communication" or "letter") of the same work. However, at the time of submission, the editor should be made aware of the earlier communication, and the preliminary communication should be cited in the manuscript.

9. An author should identify the source of all information quoted or offered, except that which is common knowledge. Information obtained privately, as in conversation, correspondence, or discussion with third parties, should not be used or reported in the author's work without explicit permission from the investigator with whom the information originated. Information obtained in the course of confidential services, such as refereeing manuscripts or grant applications, should be treated similarly.

10. An experimental or theoretical study may sometimes justify criticism, even severe criticism, of the work of another scientist. When appropriate, such criticism may be offered in published papers. However, in no case is personal criticism considered to be appropriate.

11. The co-authors of a paper should be all those persons who have made significant scientific contributions to the work reported and who share responsibility and accountability for the results. Other contributions should be indicated in a footnote or an “Acknowledgments” section. An administrative relationship to the investigation does not of itself qualify a person for co-authorship (but occasionally it may be appropriate to acknowledge major administrative assistance). Deceased persons who meet the criterion for inclusion as co-authors should be so included, with a footnote reporting date of death. No fictitious name should be listed as an author or co-author. The author who submits a manuscript for publication accepts the responsibility of having included as co-authors all persons appropriate and none inappropriate. The submitting author should have sent each living co-author a draft copy of the manuscript and have obtained the co-author’s assent to co-authorship of it.

12. The authors should reveal to the editor any potential conflict of interest, e.g., a consulting or financial interest in a company that might be affected by publication of the results contained in a manuscript. The authors should ensure that no contractual relations or proprietary considerations exist that would affect the publication of information in a submitted manuscript.

Appendix 4

Documentation of Expectations for Research Credits

PURDUE AGRICULTURE | GRADUATE PROGRAMS

Department of Food Science

Documentation of Expectations for Graduate Research Credits

PUID _____ **Student** _____

Term/Year _____

RESEARCH CREDIT INFORMATION					
Add Drop Modify	CRN	SUBJECT	COURSE NO.	CREDIT HOURS	Faculty Member Supervising Credits

*** 1 Research Credit = 3 Bench Hours** RESEARCH EXPECTATIONS

Enrollment in FS 698/699 entails an expectation of reasonable progress in scholarly research. These expectations include:

1. Conducting independent research on the background, motivation, and prior work related to the primary subject of the research project
2. Actively participating in laboratory research at a level consistent with a professional research position, contributing to overall laboratory operations
3. Following all safety guidelines and expectations associated with the research environment
4. Following ethical research practices
5. Contributing to the written and oral dissemination of research findings

By signing up for research credits, the student acknowledges agreement with the expectations set forth by the faculty member. By allowing the student to sign up for research credits, the faculty member acknowledges that if the student's progress is acceptable with regard to expectations articulated for the semester, the student will receive a satisfactory grade for the course.

A written set of minimum expectations (e.g. data set, draft of chapter, sampling plan, IRB, lit review, manuscript, objective of proposal, etc.) will be provided to the student by the faculty member supervising research credits. Ideally these expectations would be discussed and developed jointly by the student and faculty member. **The expectations and deliverables should align with the number of credits that the student is registered for (i.e. greater expectations for more credits-see above).**

Acknowledgement of Expectations

_____
SIGNATURE OF STUDENT **Date**

_____
SIGNATURE OF ADVISOR **Date**

This form was developed to facilitate compliance with graduate council policy requiring that faculty and students agree upon a written set of minimum expectations for research credit (See http://catalog.purdue.edu/content.php?catoid=10&navoid=12756 section A, para 5). Faculty retain responsibility for compliance for credits under their direction; please contact the Graduate Program Chair within your department for assistance with compliance with this policy.

INSTRUCTIONS FOR COMPLETING RESEARCH REGISTRATION FORM

Please complete the sections of the Documentation of Expectations for Research Credits Form:

You will need a pin number from the Graduate Coordinator before you can enter your courses in the Banner system for each semester. **All signatures are required.**

Student PUID Number

Student Name

Term (Spring, Fall, Summer)

Year

Research Course Information

Phone number and email

Signatures

Note: You will not be able to register for the fall semester if annual report is not turned in by the due date.

Advisor Code	**Faculty**	Primary Research Area
C5480	Applegate, B.	Food Safety & Microbiology
C5012	Bhunia, A.	Food Safety & Microbiology
C6595	Butzke, C.	Food Processing & Technology Development
C11763	Cantu-Jungles,T.	Food Chemistry, Structure & Function
C12555	Chen, D.	Food Chemistry, Structure & Function
C5960	Corvalan, C.	Food Processing & Technology Development
C8898	Deering, A.	Food Safety & Microbiology
C10394	Feng, Y.	Food Safety & Microbiology
C3820	Hamaker, B.	Food Chemistry, Structure & Function
C9745	Huang, J.	Food Processing & Technology Development
C8271	Jones, O.	Food Chemistry, Structure & Function
C7117	Kim, K.	Foods for Health
C8985	Kokini, J.	Food Processing & Technology Development
C7731	Liceaga, A.	Food Chemistry, Structure & Function
C9935	Lindemann, S.	Foods for Health
C5484	Mauer, L.	Food Chemistry, Structure & Function
C9888	Mishra, D.	Food Processing & Technology Development

C11387	Oh, E.J.	Foods for Health
C7988	Oliver, H.	Food Safety & Microbiology
C10602	Reddivari, L.	Food Chemistry, Structure & Function
C5619	Reuhs, B.	Food Chemistry, Structure & Function
C7260	San Martin, M.	Food Processing & Technology Development
C11679	Simsek, S.	Food Chemistry, Structure & Function
C12097	Smith, D.	Food Science
C12556	Wang, W.	Food Chemistry, Structure & Function
C6468	Yao, Y.	Food Chemistry, Structure & Function

Candidate: The semester you plan to defend your thesis/dissertation, register as a CAND 99100 (regular), CAND 99200 (degree only) or CAND 99300 (exam only).

Candidacy Registration Procedure:

Exam Only:
A student who has been registered for a minimum of three credit hours in the preceding session and has finished all degree requirements except for the final examination and depositing the thesis prior to the first day of the academic session of graduation may request registration for "Examination Only" at a reduced fee. If approved, this registration will remain valid only if both a positive *Report of the Final Examination* and a *Thesis Receipt* has been received in the Graduate School by the eighth week of the semester (fourth week of a summer session). Otherwise, the registration for the current session must be revised following normal registration guidelines.

Degree Only:
A student who has been registered for a minimum of three credit hours in the preceding session and who has finished all degree requirements except depositing the thesis and for whom a positive *Report of the Final Examination* has been received in the Graduate School prior to the first day of the academic session of graduation but who has not been awarded the degree may request registration for "Degree Only" at a reduced fee. If approved, this registration will remain valid only if a Thesis Receipt is received in the Graduate School by the eighth week of the semester (fourth week of a summer session). Otherwise, the registration for the current session must be revised following normal registration guidelines.

If you are on a ½ time assistantship you must adhere to the minimum and maximum credits listed below:

	Coursework and/or Research credits	**Total Credits**	**Full-Time Status**
Summer	Minimum 3	Maximum 9	Minimum 6
Fall/Spring	Minimum 3	Maximum 18	Minimum 8

International students will need to follow ISS regulations and the graduate school requirements.

If you are on a fellowship, see Business Office Assistant in the Food Science building for registration criteria.

The Documentation of Expectations for Graduate Research Credits Form must be completed by the student and major professor each semester and submitted to the Graduate Program Coordinator.

If a student is on a 0.5-FTE graduate staff appointment (which is on average 20 hours per week), realistically the number of research credits for that semester should be limited to no more than about 8 credits. If the student is taking courses, this also must be considered since it will reduce the time they are available to spend on their research.

Registration Credits

STATUS SUMMARY BY CREDIT HOUR FOR ENROLLMENT CERTIFICATION, FEE ASSESSMENT, AND FINANCIAL AID ELIGIBILITY
West Lafayette Graduate Students
Effective Dec. 2008

Fall or Spring Semester

Number of Hours Enrolled	Enrollment Certification	Fees	Financial Aid Eligibility	Enrollment for Financial Aid Cost Of Attendance
8 or more	Full Time	Full	Yes	Full Time
7	½ Time	/cr. hr.	Yes	½ Time
6	½ Time	/cr. hr.	Yes	½ Time
5	½ Time	/cr. hr.	Yes	½ Time
4	½ Time	/cr. hr.	Yes	½ Time
3	< ½ Time	/cr. hr.	Limited	< ½ Time
2	< ½ Time	/cr. hr.	Limited	< ½ Time
1	< ½ Time	/cr. hr.	Limited	< ½ Time

Summer Session

Number of Hours Enrolled	Enrollment Certification	Fees	Financial Aid Eligibility	Enrollment for Financial Aid Cost Of Attendance
6 or more	Full Time	Full &/cr.hr	Yes	Full Time
9	Full Time	Full	Yes	Full Time
8	Full Time	Full	Yes	Full Time
7	Full Time	Full	Yes	Full Time
6	Full Time	Full	Yes	Full Time
5	½ Time	/cr. hr.	Yes	¾ Time
4	½ Time	/cr. hr.	Yes	½ Time
3	½ Time	/cr. hr.	Yes	½ Time
2	< ½ Time	/cr. hr.	Limited	< ½ Time
1	< ½ Time	/cr. hr.	Limited	< ½ Time

Notes: A minimum of research hours is 3 credit hours if being paid by Purdue University

1. A maximum of 18 credit hours taken in the Fall or Spring Semester may be used on a plan of study and/or toward graduation.

2. A maximum of 9 credit hours taken in the Summer Session modules may be used on a plan of study and/or toward graduation.
3. Graduate students enrolled less than half time are typically ineligible for financial aid but should contact the Division of Financial Aid if they are interested in assistance.

Summer session is May – August. Courses (Summer Modules one, two and three). Need Research Credits as FS 69800 for M.S. students and FS 69900 for Ph.D. students.

According to ISS regulations, international graduate students on a ½ time assistantship must carry a minimum of 6 hours for fall and spring sessions. Although ISS regulations state an international graduate student on a ½ time assistantship does not have to register for the summer session, Food Science department requires all international graduate students on a ½ time assistantship with a 12-month appointment to meet the criteria.

If you are on a fellowship, see Business Assistant in the Food Science Business Office for their registration criteria.

Your Major Professor's CRN number must be included in CRN section when registering for research and their signature is required on that line. **Make sure you are careful to use the correct CRN for your professor and for M.S. or Ph.D. student.**

****

After you have entered your courses in the Banner system, please take your Documentation of Research Expectations for Graduate Research Credits form to the Graduate Coordinator.

If you are going to be a CAND for that semester, you will need to put CAND CRN, and GRAD 99100, 99200, or 99300. The Graduate Coordinator needs to enter this as well.

Late registration begins the first day of classes with a late fee of **($200.00) if you have not paid that semester fee yet**.

Food Science Graduate Student Annual Progress Report

(Required to be submitted by June 30th each year to be eligible for Fall research credit registration)

Student Name: _____ **Major Professor:** _____

Degree Track: _____ **Research Signature Area:** _____

Degree Start Date: _____ **Evaluation Year:** _____

Meeting Date: _____

Progress to Date:

☐ **Satisfactory** ☐ **Unsatisfactory**

Progress Summary (to be filled by student**)**

Publications, Conference Presentations, Awards, Other Scholarship Activities

Evaluation (To be filled by the Major Professor with input from Advisory Committee members):

	Needs Improvement	Passable	Good	Exceptional
1. Quality of written progress report	☐	☐	☐	☐
2. Quality of progress report oral presentation	☐	☐	☐	☐
3. Knowledge and understanding of research project	☐	☐	☐	☐
4. Research progress to date	☐	☐	☐	☐
5. Coursework progress to date	☐	☐	☐	☐

Comments, Concerns & Recommendations:

Printed name of Committee Member	**Signature**
(Chair)_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Advisor Signature: _____ Date: _____

Student Signature: _____ Date: _____

To: Food Science Graduate Program Chair

Re: M.S. Bypass for _____

From: Graduate Advisory Committee

_____ (student's name and I.D. number) joined for M.S. in _____semester 20___ has so far completed all the course work in the plan of study and sufficient research that has culminated in a publication in _____ (journal's name) (see attached reprint/preprint/progress report). The advisory committee therefore recommends that this student be allowed to bypass M.S. and proceed for a PhD degree.

Thank you very much for your cooperation.

Advisory Committee:

_____

Major Professor

_____

Advisory Committee member

_____

Advisory Committee member

_____

Advisory Committee member

Approved:

_____

Dr. Owen Jones, Food Science Graduate Program Chair

STATUS FORM ORAL ENGLISH PROFICIENCY (Ph.D. Students only)

Student Name: _____

Email: _____

Is English your first language?_____(Yes/No)

If no: Have you taken the OEPP screening test?_____(Yes/No)

If no, have you registered for screening?_____(Yes/No)

If yes, when? _____

If no, when do you intend to register? _____

If yes, were you certified for oral English proficiency?_____(Yes/No)

If no, have you registered for ENGL 62000? _____(Yes/No)

If no, when do you intend to register?_____

Ph.D. STUDENT DETAILS FOR TEACHING ASSISTANT ASSIGNMENT (FS 69700)

(Please fill out and return this form to the Graduate Coordinator during your first semester)

Name:_____

Major Professor:_____

Research Area:_____

Ph.D. Starting Date:_____

Expected Completion Date:_____

Office Telephone Number:_____

Email:_____

Have you served as a TA before? _____Yes _____ No

If yes, which university, department, course, semester, year?_____

_____

_____

You will be informed of your assignment to one of the following Fall or Spring semester courses as soon as possible.

Fall semester:

1. FS 16100 Science of Food
2. FS 34200 Food Processing I
3. FS 36300 Food Microbiology
4. FS 44700 Food Processing II
5. FS 34200/FS 44700

Spring semester:

6. FS 16200 Introduction to Food Processing
7. FS 43500 Sensory Science
8. FS 44300 Food Product Design
9. FS 45400 Food Chemistry
10. FS 46900 Food Analysis

Teaching Assistant Guidelines

For the Ph.D. Teaching Assistant:

Be prepared to spend approximately 13 hours per week on your T. A. duties which include:

1. Office Hours (optional)
2. Meet with the faculty member (Instructor)
3. Prepare and give at least one lecture
4. Write/grade exam, and quiz questions on lecture(s) given
5. Prepare labs
6. Be present during lab to assist students
7. Grade lab reports
8. Supervise undergraduate helpers

The performance should be satisfactory in order to earn the credit. Otherwise, you will have to do it again.

For the Instructor:

Please ensure that the T.A. fulfills the assignments satisfactorily under your supervision.

You must provide the TA an adequate laboratory instruction manual, in order that they would be able to teach your classes properly, by August 1 for fall semester courses, and by December 1 for spring semester courses. This implies that by these dates you also have the laboratory procedures prepared, as they will be given to students in the class and to the TA. A copy of all these documents is required to be given to Dr. Farkas as well.

Department paid Teaching Assistant requires more time than the Ph.D. student T.A.; it is at least 20 hours per week for 2 semesters.

Form GC-3 (T.A. evaluation by Instructor) is in the Rubrics Section.

Feedback Assessment for Teaching Assistant: (add name here)

Please rate this Teaching Assistant for the following (circle appropriate number):

	Poor	Fair	Good	Very Good	Excellent
1. Attitude/Helpfulness	1	2	3	4	5
2. Organization/Preparedness	1	2	3	4	5
3. Knowledge on Subject	1	2	3	4	5
4. Grading Consistency	1	2	3	4	5

Comments:

Teaching Assistant Experience Evaluation Form

Course for which you served as a Teaching Assistant: _____

Semester and year you served as a Teaching Assistant: _____

What did you do as a T.A., and approximately what percentage of your time was spent on each type of activity listed below?

_____ Set up for lab
_____ Be present during lab, assisting students
_____ Office hours
_____ Grading lab reports
_____ Prepare for and give lecture
_____ Write/grade exam/quiz questions
_____ Supervise undergraduate helpers
_____ Other (specify)

Did you have adequate contact with the course instructor and receive adequate instructions? If not, how could this have been improved?

How many hours per week did you spend as a T.A., averaged over the 16 weeks of the semester?

What was the most valuable experience you had in serving as a T.A.?

How could your experience as a T.A. have been improved?

What advice would you give the next student who will serves as a T.A. for this course?

Please return to Betty Lewis

Thank you!

Teaching Assistant Evaluation

T.A.'s Name:_____Course:_____Year:_____

Name of Faculty Evaluating_____

1. The teaching assistant was always helpful with tasks pertaining to the course.

Strongly Agree _____

Agree _____

Undecided _____

Disagree _____

Strongly Disagree _____

Not applicable _____

Comments:

2. The teaching assistant was always prepared for class.

Strongly Agree _____

Agree _____

Undecided _____

Disagree _____

Strongly Disagree _____

Not applicable _____

Comments:

3. I would use this teaching assistant again in the future.

Strongly Agree _____

Agree _____

Undecided _____

Disagree _____

Strongly Disagree _____

Not applicable _____

Comments:

4. Overall, this TA did an excellent job.

Strongly Agree _____

Agree _____

Undecided _____

Disagree _____

Strongly Disagree _____

Not applicable _____

Comments:

Appendix 6

GUIDELINES FOR PREPARATION OF PROPOSALS

(Adapted from NSF and USDA Guidelines)

The Proposal

The proposal should present the (1) objectives and scientific or educational significance of the proposed work; (2) suitability of the methods to be employed; (3) qualifications of the investigator; and (4) amount of funding required. It should present the merits of the proposed project clearly and should be prepared with the care and thoroughness of a paper submitted for publication. The proposal should be reviewed carefully to insure that all essential data are included or summarized, unless they are readily available in published literature. Omissions frequently generate additional correspondence and delay processing.

Cover Page

The title of the proposed project should be brief, scientifically valid, intelligible to a scientifically literate reader, and suitable for use in the public press (see sample cover page).

The proposed duration for which support is requested should be consistent with the nature and complexity of the proposed activity.

Table of Contents

The table of contents, which is required, should show the location of each section of the proposal as well as major subdivisions of the project description, such as the summary of previous work, statement of proposed research or science education activity, and methods and procedures to be used.

Project Summary

The proposal must contain a 200 word summary of the proposed activity suitable for publication. This summary should not be an abstract of the proposal, but rather a self-contained description of the activity that would result if the proposal is funded by an agency. The summary should include a statement of objectives, methods to be employed, and the significance of the proposed activity to the advancement of knowledge. It should be informative to other persons working in the same or related fields and, insofar as possible, understandable to a scientifically literate reader.

Project Description

The project description (a maximum of 15 single spaced pages) must contain the following components:

(i) Introduction. Long-term goal(s) and supporting objectives of the proposed research should be stated and described in detail. The most significant previous work in the field under consideration, including the work of key project personnel on the current application, should be reviewed. The current status of research in this field of science should also be described. All work cited, including that of key personnel, shall be footnoted or otherwise referenced.

(ii) Hypothesis and Specific Objectives

(iii) Rationale and significance. Rational behind the proposed research must be presented concisely, and specific objectives must be listed for the total period of requested support. How the objectives specifically relate to the applicable research area should be clearly shown. Any novel ideas or contributions, which the proposed project offers, should be discussed under this section.

(iv) Experimental plan. The hypotheses or questions to be asked and the methodology to be applied to the proposed research project should be explicitly stated. The methodology should include but not necessarily be limited to:

(A) Description of proposed investigations an/or experiments in the sequence in which it is planned to carry them out;
(B) Techniques to be employed including their feasibility;
(C) Kinds of results expected;
(D) Means by which data will be analyzed or interpreted;
(E) Pitfalls which might be encountered;
(F) Limitations to proposed procedures; and
(G) Tentative schedule for conducting major steps for investigations and/or experiments.

(v) Facilities and equipment. All facilities, including laboratories, which are available for use or assignment to the proposed research project during the requested period of support, should be described. Any materials, procedures, situations, or activities, whether or not directly related to a particular phase of the proposed research, and which may be hazardous to personnel, must be fully explained, along with an outline of precautions to be exercised. All items of major instrumentation available for use or assignment to the proposed research project during the requested period of support should be listed. In addition, items of nonexpendable equipment needed to conduct and bring the proposed project to a successful conclusion should be listed.

(vi) Budget: Use the revised proposal budget template included in preliminary examination folder.

Each proposal must contain a budget for each year of support requested and a cumulative budget for the full term of request. If funds for requested equipment are considered essential to the success of the research to be performed, the proposal should provide detailed justification.

Senior Personnel

Other Personnel

Permanent

Equipment Travel

Other Direct Costs
Materials and supplies
Publication Costs
Computer Services
Subcontracts
Other

<u>References</u>

All references cited should conform to an accepted journal format.

Budget Template for Proposal

	Year 1	Year 2	Year 3	Total
Salaries and Wages	…….	…… ……	… ……..	…….
Faculty				
Post doctorate				
Research Assistant				
Graduate student				
Undergraduate student				
Total compensation and fringes				
Non-personnel direct costs				
Equipment				
Materials and Supply				
Travel (domestic)				
Publication cost				
Total direct costs				
Indirect cost*				
Total funds requested				

BUDGET Approximate Amounts:

Faculty Salary: $8,500/month for Salary & Fringes (faculty can request up to 2 months of summer salary)
Post Doc (Research Assistant) Salary: $50,000 Salary & Fringes
Graduate Student Salary: $25,000/year Salary, Fringes and Fee Remittance
Undergraduate Student Salary: $8/hour
Use 5% raise in Salary per year for years 2 and 3

Equipment – purchase in 1st year
Materials and Supplies: $10,000 – 25,000/year
Travel – in latter years (2nd-3rd) $1,000 – $1,500/meeting
Publications - in latter years (3rd) $1000/publication

***Calculate Budget with Indirect Costs (rates depend on sponsor: NIH-52%; NSF-52%; USDA-25%)**
(Note: Indirect costs are not charged to all items in budget, but the purpose of this preliminary exam proposal, apply indirect costs to the total direct costs.)

Ph.D. PRELIMINARY EXAMINATION

PREPROPOSAL EVALUATION AND RECOMMENDATION FORM

Date:

Evaluators: Committee Members
Return by: One week
Return to: Betty Lewis

Completed by Student:
Name:
Preproposal Title:
Ph.D. Topic:
Area of Specialization:
Major Professor:

Completed by Advisory Committee Member:
Keep in mind that the Ph.D. degree is primarily a research degree and that effective research output (quality x quantity) is related to the ability to:

1. Generate novel, original, unique ideas.
2. Discipline such ideas by facts imposed by related sciences (soundness of idea).
3. Identify the elements (real or imaginary) required in the investigator and research surroundings to bring the idea to fruition (likelihood to yield useful information).
4. Quality of preproposal (i.e., content, completeness, clarity)

Evaluate the attached preproposal for the following criteria:

	Poor	Medium	Good
1. Originality of ideas	_____	_____	_____
2. Soundness of ideas	_____	_____	_____
3. Likelihood to yield useful information	_____	_____	_____
Overall Score	_____	_____	_____

Recommendation (choose one):

1. Proceed and develop the suggested topic into a complete research proposal. _____
2. Modify the preproposal to bring it more in tune with the objectives of a Ph.D. degree. _____

Comments:

Signature:_____
Please Sign and Print

Note: If this evaluation form is not returned by the date indicated above, it will be assumed that the preproposal is acceptable as is.

Example of Cover Page for Proposal

A PROPOSAL FOR RESEARCH ON

Title Prepared

by Student's

Name

Department of Food Science
Purdue University
West Lafayette, IN 47907

Submitted to Name

of the Agency

Through

Graduate Program in Food Science
West Lafayette, IN 47907

Project Period:

Principal Investigator: Amount Requested:

Signature Delegation on Electronic Examination Forms 7, 10, and 11

Since the preliminary and final examinations are considered to be crucial steps in a graduate student's degree program, recording the results of an examination by each committee member is extremely important. Signature delegation, when necessary, on Electronic Examination Forms 7, 10, and 11 must be accurately documented.

When a proxy is needed to sign for a committee member on an electronic examination form, especially when a special certified examiner is involved, a written record must be provided to the Graduate School to verify the committee member's original vote regarding the degree recommendation. This documentation may be submitted in either paper memo or e-mail form. If e-mail is preferred, once the examination has taken place, please have the committee member e-mail the department's Plan of Study Coordinator (cc gradweb@purdue.edu) with the following information:

Examination Date: _____

Student's Name: _____

Please check one: _____ Form 7: M.S. Final Exam Form

_____ Form 10: Preliminary Exam Form

_____ Form 11: Ph.D. Final Exam Form

Degree Recommendation: _____ Approve/Disapprove/Abstain

A brief statement authorizing the department's Plan of Study coordinator to sign the form on his/her behalf.

The Graduate School will maintain a copy of this email as part of the student's permanent record.

Interviewing for Summer Internships during your Graduate Studies

- Major Professor must submit to Placement Coordinator *in writing* authorization for you to interview and potentially leave for an internship. At that point, the Placement Coordinator can share your résumé with potential employers.

- It is critical that the student meet with the Business Office Manager as soon as the Major Professor approves the internship request to begin the internal paperwork required for the internship process.

- International Students will need to apply for Curricular Practical Training (CPT) through ISS for work authorization during their internship. Since you will be paid by a company during internship, you will no longer be on an assistantship during the internship period. During this period, you will be placed on personal leave without pay. You will be required to register for FS 56000 Food Science Graduate Cooperative Work Experience the semester you will have an internship; this requires paying out-of-state tuition and international student fees for each session in which the student is on an internship.

- Any courses that you register for will be billed at full cost since you will not be paid by Purdue during your internship, therefore you do not qualify for the tuition waiver.

- Since you will not be paid by Purdue during your ***summer*** internship, you will be placed on "Leave of Absence". Your vacation and sick leave accrual will cease during the period you are gone. It will start again once you return to Purdue on an assistantship.

- During your "Leave of Absence" for ***summer*** internship, you will continue to be covered under Graduate Staff health insurance. Once you return to Purdue on an assistantship, you will be billed for the months that you were gone.

- Students and Major Professors must follow the requirements stated in the Graduate Handbook, including completion of required form for leave of absence. You can request Leave of Absence through Success Factors.

- Students must arrange for an Advisory Committee meeting shortly before leaving to present/discuss the following (as appropriate), and a summary report of the meeting must be written by the student, signed by the major professor, and submitted to the Chair of the Graduate Committee and the Department Head (i.e., this must be an actual meeting of the advisory committee) that includes specific details on:
    a. Research progress toward completion (i.e., research yet to be done)
    b. Status of manuscript preparation and plans for completion of manuscripts
    c. Status of thesis preparation and plans for completion of thesis
    d. Projected timeline for completion of degree

- Please note that the Graduate School may have certain registration requirements for those students who are expecting to graduate near the session that they complete an internship. Please check with the Food Science Graduate Program Coordinator for any special registration requirements.

This information is for Summer internships. If you plan to complete an internship during <u>any</u> academic session, please inquire <u>beforehand</u> with the Graduate Program Coordinator and Business Office about appropriate procedures.

I have read and understand the procedure and my responsibilities for obtaining an internship during graduate studies. If I obtain an internship, I understand that I will be required to complete additional forms for the Food Science Graduate Committee <u>and</u> the Food Science Business Office and will notify the appropriate staff representatives in these two areas in a timely manner.

Printer Name: _____

Signature: _____

Date: _____

Graduate Students holding Fiscal Year (12 month) Graduate Staff Appointments

Leaves due to Internships – Major Guidelines

	All Students	International Students	Domestic Students/Permanent Residents
Work authorization		F-1 visa holders may qualify to apply for Curricular Practical Training (CPT) awarded through the ISS office. Otherwise, apply for Optional Practical Training (OPT), awarded by U.S. Citizenship and Immigration Services (CIS). Initial application and information can be obtained from ISS office. J-1 visa holders need to apply for Academic Training (AT) through the ISS office.	N/A

Registration requirements	If working on research/thesis during leave, Graduate School requires student to register for research credit comparable to the amount of time spending on research/thesis. For example, **<u>one</u>** research credit is = to **<u>3 hours per week</u>** of work devoted to research/thesis. Fees will be assessed "**out of state**", unless student is a resident of Indiana. ***<u>Note:</u>*** For Exam Only Registration requirements, refer to the Graduate School Policies and Procedures for Administering Graduate Student Programs, Sec. V, page 9 or the Food Science Graduate Program Student Handbook. **Registration in the Final Academic Session** a. All students must be registered in the session of graduation. b. Students with outstanding incomplete grades for courses listed on the plan of study will not be permitted to graduate.	If Curricular Practical Training (CPT) is being used for work authorization, the student must register for a minimum of **one** credit hour of FS 56000. Fees will be assessed "**out of state**", unless student is a resident of Indiana. This would apply for each academic session the student is utilizing CPT. International Students are required to adhere to minimum registration guidelines according to their visa type. Please seek advice from an ISS Counselor.	If **<u>not</u>** working on research/thesis during leave, **no** registration is required. Students who have interrupted their graduate study must submit a new application if three or more consecutive academic sessions (including summer session) have elapsed since their last registration. Readmission has to be granted by the Dean of the Graduate School.

Graduate Students holding Fiscal Year (12 month) Graduate Staff Appointments
Leaves due to Internships – Major Guidelines

	All Students	International Students	Domestic Students/Permanent Residents
Insurance	***Summer Session Only*** A student having approved leave of absence via a *Request for Absence from Campus (HRS Form 33ABSENCE)* will continue to receive Graduate Staff Medical Insurance coverage without interruption. The Summer health insurance premiums will still be deducted from the student's pay. If the student does not return, the insurance will be cancelled back to the separation date. ***Fall or Spring Semester*** The student will be "separated" from employment at the date of departure for leave. Upon return to complete the requirements for their degree, the student will most likely not be reinstated to a Graduate Staff Appointment: therefore, the student is responsible for their own insurance coverage.	***Fall or Spring Semester*** International Students must maintain appropriate insurance coverage according to ISS guidelines. ***Note:*** *Beginning Fall 2009, students in their final semester at Purdue and registered for Exam/Degree Only* ***will be required*** *to purchase the University Sponsored health insurance unless they are sponsored and also provided health insurance by their Home Government,* ***not*** *just funds to purchase any insurance plan of their choice.*	

All leaves of absence greater than 10 consecutive workdays, for any reason except vacation or Family and Medical Leave Act of 1993 (FMLA) related leave, require the approval of the dean of the Graduate School. To obtain approval, a ***SuccessFactors Leave of Absence Form*** must be processed.
Questions regarding leaves of absence should be directed to your Business Office or Human Resource Services, Employee Relations.

Note: Each request for internship has to be considered for approval on a case-by-case basis.

FS 59000/69000 CONTRACT

Food Science Graduate Program
FS 59000/69000 – Special Problems

This is a contract between an advisor and a student (group of students) for study individually (or as small group) of a special problem in a selected area. FS 59000/FS 69000 is for independent study equivalent to an academic course, and should not be used for research projects. The form must be completed and signed, including approval by the graduate committee, **prior to registration**. The signed copy and electronic file should be submitted to the Academic Coordinator. Distribute approved copies to the academic advisor (for student's permanent file) and the FS 59000/69000 instructor.

Name: _____ **Student I.D. No.** _____

FS 59000/FS 69000 Instructor: _____ **Academic Advisor:** _____

Course Substitute Sought (if any): _____

Registration Information (Please check for appropriate semester):

First Semester	
Second Semester	
Summer Session	
For School Year:	

Students Anticipated Classification Next Semester: _____

Subject	Number	Div. / Sect.	Instr Desig	Credit Hours	Grade Opt	← Enter instructor designator, credit hours and "P" if pass/not pass ↓ Enter course problem title in spaces below

(Delete text in brackets. It is included to aid in completing the form.)

Justification (Why this course needs to be a Special Problem)

FS 59000/FS 69000 CONTRACT

Statement of Topic(s)

Required Readings:

Learning Objectives:
[Clarify what the student will learn in this independent study course. These should not be written as research objectives. Learning objectives are often in the following form:
Learn to ….
Be able to….]

Procedure:
[Describe what the student will do to achieve the learning objectives. The procedure may include readings, assignments, meetings with the Advisor or other faculty, completion of online modules, reports, etc.]

FS 59000/FS 69000 CONTRACT

Basis for Grading:

Report Due Date:_____

Student Time Commitment	**Number of Hours**	**Days and Time of Conferences**
Student-Instructor Conferences		
Independent Reading		NA
Analysis or Lab Work		NA
Final Report Preparation		NA
Other:		NA
Semester Total Hours (approx. 40-45 hrs/cr)		N/A

Student Signature: _____ **Date:** _____

Instructor Signature: _____ **Date:** _____

Graduate Committee Approval:_____ **Date** _____

V. M.S. & PH.D. MAPPING GUIDE AND RUBRICS

M.S. MAPPING GUIDE

	Graduate Student Learning Outcome 1	**Graduate Student Learning Outcome 2**	**Graduate Student Learning Outcome 3**	**Graduate Student Learning Outcome 4**	**Graduate Student Learning Outcome 5**
Graduate Students of the Purdue University PhD programs will be able to demonstrate the ability:	To identify and conduct original research scholarship and creative endeavors	To effectively communicate their field of study	To think critically, creatively and solve problems in their field of study	To conduct research in an ethical and responsible manner	To demonstrate attributes of professional development consistent with expectations within their field of study
Complete FS 55001 Food Chemistry	Understand relationship between chemistry, quality and shelf life				
Complete FS 55101 Food Analysis	Understand the principles behind analytical techniques associated with food and their biological assessment				
Complete FS 55201 Nutritional Sciences	Understand the chemistry underlying the properties and reactions of macro and micro nutrients				
Complete FS 55301 Food Microbiology	Understand the fundamentals of microbial ecology, foodborne illness, food spoilage, and food safety regulations				
Complete FS 55402 Food Processing (Form GC-2)	Learn processing methods and emerging technologies to maintain food safety and quality				
Complete FS 55501 Case Study Course	Conduct team work to solve a problem drawing on what was learned from the Basic Food Science Course Series		Apply the principles of food science in real world situations and problems		
Complete at least 4 credits of additional Food Science related courses at preferably 600 level	Learn contemporary, latest and advanced level knowledge consistent with educational background, research topic and professional objectives				

Complete 3 credits of Statistics	Attend and receive passing grades	Attend and receive passing grades	Attend and receive passing grades	Attend and receive passing grades	Attend and receive passing grades
Complete GRAD 61200 Responsible Conduct in Research	NA	NA	NA	Attend and receive a passing grade	Attend and receive a passing grade
Complete 1 credit of Seminar FS 68400		Prepare and present a scientific seminar in Food Science related topic of current importance. Attend and receive passing grades			
Complete M.S. FS 69800 Research credits	Receive a grade of satisfactory on credits associated with student performance in research	Receive a grade of satisfactory on credits associated with student performance in research	Receive a grade of satisfactory on credits associated with student performance in research	Receive a grade of satisfactory on credits associated with student performance in research	Receive a grade of satisfactory on credits associated with student performance in research
Hold Annual Meetings of Graduate Advisory Committee	Demonstrate acceptable progress towards research and Plan of Study requirements to graduate advisory committee	Demonstrate acceptable progress towards research and Plan of Study requirements to graduate advisory committee	Demonstrate acceptable progress towards research and Plan of Study requirements to graduate advisory committee	NA	Demonstrate acceptable progress towards research and Plan of Study requirements to graduate advisory committee
Publish Results of Research	Successfully publish two or more research articles in peer-reviewed journals	Successfully publish two or more research articles in peer-reviewed journals	Successfully publish two or more research articles in peer-reviewed journals	Successfully publish two or more research articles in peer-reviewed journals	Successfully publish two or more research articles in peer-reviewed journals
Prepare Dissertation	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review
Defend Dissertation	Successfully defend a dissertation in a meeting of the student's graduate advisory committee	Successfully defend a dissertation in a meeting of the student's graduate advisory committee	Successfully defend a dissertation in a meeting of the student's graduate advisory committee	Successfully defend a dissertation in a meeting of the student's graduate advisory committee	Successfully defend a dissertation in a meeting of the student's graduate advisory committee

PH.D. MAPPING GUIDE

	Graduate Student Learning Outcome 1	**Graduate Student Learning Outcome 2**	**Graduate Student Learning Outcome 3**	**Graduate Student Learning Outcome 4**	**Graduate Student Learning Outcome 5**
Graduate Students of the Purdue University PhD programs will be able to demonstrate the ability:	To identify and conduct original research scholarship and creative endeavors	To effectively communicate their field of study	To think critically, creatively and solve problems in their field of study	To conduct research in an ethical and responsible manner	To demonstrate attributes of professional development consistent with expectations within their field of study
Complete FS 55001 Food Chemistry	Understand relationship between chemistry, quality and shelf life				
Complete FS 55101 Food Analysis	Understand the principles behind analytical techniques associated with food and their biological assessment				
Complete FS 55201 Nutritional Sciences	Understand the chemistry underlying the properties and reactions of macro and micro nutrients				
Complete FS 55301 Food Microbiology	Understand the fundamentals of microbial ecology, foodborne illness, food spoilage, and food safety regulations				
Complete FS 55402 Food Processing	Learn processing methods and emerging technologies to maintain food safety and quality				
Complete FS 55501 Case Study Course	Conduct team work to solve a problem drawing on what was learned from the Basic Food Science Course Series		Apply the principles of food science in real world situations and problems		

Complete at least 7 credits of additional Food Science related courses at preferably	Learn contemporary, latest and advanced level knowledge consistent with educational background, research topic and professional objectives				
Complete 6 credits of Statistics	Attend and receive passing grades	Attend and receive passing grades	Attend and receive passing grades	Attend and receive passing grades	Attend and receive passing grades

Complete GRAD 61200 Responsible Conduct in Research	NA	NA	NA	Attend and receive a passing grade	Attend and receive a passing grade
Complete 2 credits of Seminar FS 68400		Prepare and present a scientific seminar in Food Science related topic of current importance. Attend and receive passing grades			
Complete FS 69700 TA in Food Science		Successfully prepare and deliver lecture or laboratory material to undergraduate or graduate students			Successfully prepare and deliver lecture or laboratory material to undergraduate or graduate students
Complete Ph.D. 69900 Research credits	Receive a grade of satisfactory on credits associated with student performance in research	Receive a grade of satisfactory on credits associated with student performance in research	Receive a grade of satisfactory on credits associated with student performance in research	Receive a grade of satisfactory on credits associated with student performance in research	Receive a grade of satisfactory on credits associated with student performance in research
Prepare and Defend Research Proposal for the Prelim. Exam	Successfully define and justify a set of research objectives in a formal research proposal	Successfully write a research proposal and defend it in a meeting of their graduate advisory committee	Successfully define a set of research methods and analyses that will achieve the objectives set forth in the research proposal	Successfully provide information in a research proposal outlining how research conforms to the standards for the responsible conduct of research	Successfully write a research proposal and defend that proposal in a meeting of their graduate advisory committee
Hold Annual Meetings of Graduate Advisory Committee	Demonstrate acceptable progress towards research and Plan of Study requirements to graduate advisory committee	Demonstrate acceptable progress towards research and Plan of Study requirements to graduate advisory committee	Demonstrate acceptable progress towards research and Plan of Study requirements to graduate advisory committee	NA	Demonstrate acceptable progress towards research and Plan of Study requirements to graduate advisory committee
Publish Results of Research	Successfully publish two or more research articles in peer-reviewed journals	Successfully publish two or more research articles in peer-reviewed journals	Successfully publish two or more research articles in peer-reviewed journals	Successfully publish two or more research articles in peer-reviewed journals	Successfully publish two or more research articles in peer-reviewed journals
Prepare Dissertation	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review	Successfully prepare a dissertation for submission to the student's graduate advisory committee for review
Defend Dissertation	Successfully defend a dissertation in a meeting of the student's graduate advisory committee	Successfully defend a dissertation in a meeting of the student's graduate advisory committee	Successfully defend a dissertation in a meeting of the student's graduate advisory committee	Successfully defend a dissertation in a meeting of the student's graduate advisory committee	Successfully defend a dissertation in a meeting of the student's graduate advisory committee