



Food Science

PURDUE UNIVERSITY



2018-2019
Food Science
Graduate Handbook

Food Science Graduate Program

2018-2019

Committee Members

Dr. Arun Bhunia – Chair

Dr. Carlos Corvalan

Dr. Bruce Hamaker

Dr. Owen Jones

Dr. Andrea Liceaga

Dr. Lisa Mauer

Dr. Cordelia Running

Dr. Bernard Tao

Graduate Program Coordinator

Mitzi Barnett

Student Representatives

Gabriela Calzada Luna - Fall

Halak Mehta - Spring

Table of Contents

I. GENERAL INFORMATION	1
1. Overview	1
2. Essential Steps for Graduation.....	1
3. Role of the Graduate Program Coordinator	2
4. Duties of the Graduate Student.....	2
Workload and Relationship with Major Professor	2
Performance Requirements	3
Research Expectations	4
5. Guidelines from Graduate School and Purdue University	4
6. Policy on Nondiscrimination, Amorous Relationships and Anti-harassment.....	4
Nondiscrimination.....	4
Amorous Relationships	5
Anti-harassment.....	5
7. Policy on Cheating and Plagiarism	5
Cheating or Academic Dishonesty.....	5
Plagiarism.....	6
Integrity in Research.....	6
Useful websites:	7
8. Student Appeal or Grievance Procedures.....	7
9. Offices to Assist Graduate Students.....	8
10. Assistantships.....	8
Employment as Graduate Research Assistants	8
Employment as Teaching Assistants	8
Graduate Students on Assistantships.....	9
Scholarships and Travel Awards	9
Tuition and Fee Remissions.....	9
11. Travel to Scientific Meetings.....	10
12. Libraries.....	10
13. Food Science Organizations	11
14. Student Health	11
PUSH.....	11
Health Insurance (Individual and Family).....	11
15. Miscellaneous Department Policies Important to Graduate Students	12
Computers and Printers	12

Copy Machines	12
Seminar Refreshments	12
Secretarial Help	13
Thesis Copying	13
II. REQUIREMENTS OF THE GRADUATE PROGRAM AND GRADUATE SCHOOL	14
1. Written English Proficiency	14
Students Whose Native Language Is English:	14
Students Whose Native Language Is Not English:	14
2. Registering for Classes	14
3. Plan of Study	14
Steps to follow:.....	15
Helpful links:.....	16
Concentration Codes	17
Description of Major Research Areas on the Plan of Study	17
Required and Additional Courses in Research Areas.....	18
Expected Undergraduate Preparation ^a	18
4. Graduate Program Minimum Requirements* [Primary on POS].....	18
Basic Food Science Course Series.....	19
Test Out Option	20
Credits Needed for Graduation	20
5. Graduate Program Additional Requirements	21
Research Area Related Graduate Courses by Area of Specialization Options	21
M.S. PLAN OF STUDY MINIMUM COURSEWORK TEMPLATE	24
Ph.D. PLAN OF STUDY MINIMUM COURSEWORK TEMPLATE	24
6. Other Interdisciplinary Programs	25
Computational Science and Engineering (CS&E).....	25
Interdepartmental Nutrition (INP)	26
PULSe	26
7. Non-Thesis M.S. Degree	26
8. Annual Progress Reports.....	27
9. Internships	28
Absences for all other reasons:.....	28
10. Extended Leave of Absence	29
11. Bypassing the M.S. Degree.....	29
12. Ph.D. Student Teaching	30
13. Policy on Preliminary and Final (M.S. and Ph.D.) Examination	31

14. Ph.D. Preliminary Examination	31
Preproposal	32
Proposal	32
Seminar and Oral Examination.....	32
Criteria to Pass the Preliminary Examination	33
15. Research in Absentia.....	33
16. M.S. and Ph.D. Final Examination	34
17. Procedural Requirements to Complete a Thesis	36
18. Direct Ph.D. Program	37
III. TIMETABLES AND CHECKLISTS	39
Suggested Timetable for the M.S. Program.....	39
Suggested Timetable for the Ph.D. Program	40
M.S. Students	41
M.S. Students	42
M.S. Students	43
Ph.D. Students	44
Ph.D. Students	45
Ph.D. Students	46
Ph.D. Students	47
IV. APPENDICES	48
Appendix 1	49
Administering Graduate Degree Programs.....	49
A. Departmental Advising and Supervision.....	49
B. Plan of Study	51
C. Theses	55
D. Establishing Examining Committees.....	57
E. Conducting Examinations.....	58
F. Reporting the Results of Examinations	59
G. Depositing the Completed Thesis.....	60
H. Thesis Publishing Fee	61
I. Survey of Earned Doctorates and Graduate School Exit Questionnaires	61
J. Certifying and Depositing Confidential Theses.....	62
K. Multiple Degrees.....	63
Work Loads of Students with Graduate Staff Appointments	64
Appendix 3	64
Policies and Guidelines for Research Practices and Professional Ethics.....	64

Research Expectations in the Food Science Graduate Program	64
B. Guidelines on Research Notebooks and Publications	64
C. Grounds for Dismissal	66
D. Ethical Obligations of Authors	66
Appendix 4	68
Graduate Education at Purdue University.....	68
Appendix 5	69
Academic and Research Affairs - Intellectual Property (I.A.1)	69
Appendix 6	79
Registration Credits.....	83
Food Science Graduate Student Annual Progress Report	85
Appendix 7	87
M.S. Bypass Sample Letter.....	87
STATUS FORM ORAL ENGLISH PROFICIENCY (Ph.D. Students only)	88
Ph.D. STUDENT DETAILS FOR TEACHING ASSISTANT ASSIGNMENT (FS 69700)	89
Teaching Assistant Guidelines.....	90
Teaching Assistant Evaluation by Students	91
Survey of Teaching Assistants	92
Appendix 8	93
Master/Ph.D. Degree Plan of Study	93
Appendix 9	94
GUIDELINES FOR PREPARATION OF PROPOSALS.....	94
Budget Template for Proposal	102
Ph.D. PRELIMINARY EXAMINATION	103
PREPROPOSAL EVALUATION AND RECOMMENDATION FORM.....	103
Example of Cover Page for Proposal.....	104
Ph.D. PRELIMINARY EXAMINATION PROPOSAL EVALUATION FORM.....	105
Request for Appointment of Examining Committee.....	106
Appendix 10	107
Proxy Procedure.....	107
Signature Delegation on Electronic Examination Forms 7, 10, and 11.....	108
Interviewing for Summer Internships during your Graduate Studies.....	109
Food Science Graduate Student Leave of Absence Form	110
FS 59000 CONTRACT	113
Direct Ph.D. Annual Progress Forms	116
V. M.S. & PH.D. MAPPING GUIDE AND RUBRICS	118
M.S. MAPPING GUIDE	119

PH.D. MAPPING GUIDE 121

Teaching Assistant Evaluation Rubric 124

Employer Survey of Food Science Graduates from Purdue University 126

I. GENERAL INFORMATION

1. Overview

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

In the semester declaring candidacy, the home department's Field of Study Code (e.g. FDSC for Food Science) will be reflected 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 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 & Function; Foods for Health; Food Safety & Microbiology; Food Processing and Technology Development. In addition, interdisciplinary research is possible with Computational Science and Engineering, or the Nutrition Program. 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. Appendixes contain many of the forms needed. Also see the Policies and Procedures Manual for Administering Graduate Student Programs from the Graduate School (Appendix 1), which contains information for both student and Major Professor. Refer to the manual Graduate Education at Purdue University published by the Graduate School (Appendix 4).

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
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

3. Role of the Graduate Program Coordinator

Graduate Program Coordinator:

Assists with recruitment of prospective graduate students. Arranges campus visits. Initially screens applicants for minimum requirements and contacts student if required information is missing. Initializes applicant's file, verifies test scores. Maintains applicant files, checks for completeness. Corresponds with applicant after committee representative reviews file. Assists with questions concerning entry into graduate program, corresponds with applicants on status for admission. Circulates prospective student information to faculty. Organizes and maintains a supply of application materials. Maintains web site for graduate information. Acts as a liaison to the Graduate School and Registrar's Office for the graduate program. Maintains direct contact with students and handles questions/inquiries from graduate students. Maintains graduate files. Completes proper electronic enrollment forms for incoming students. Completes appropriate electronic forms required by the Graduate School. Registers student research credits and courses requiring an override using the Banner system. Prepares reports for Graduate Committee and faculty. Processes minutes from graduate committee meetings. Assists in updating graduate student handbook.

4. Duties of the Graduate Student

Workload and Relationship with Major Professor

The expectation for graduate students are to engage full-time on their research and coursework. You 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, your Major Professor may ask you to work on tasks such as assisting with research projects other than your own. Such tasks are as 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 the courses, establish frequent communication with the Major Professor and members of the Advisory Committee to 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).

Within this framework, the student-major professor relationship is of vital importance because the major professor is often the graduate student's employer, counselor, advisor, mentor, examiner, and referee. 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 assistant's health and sanity, of the dangers inherent in extended periods of high stress, and of the reasonable claims family, friends, and society have on the time and energy of the assistant. (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).

According to Graduate School Guidelines on Graduate Education (see Appendix 4), 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.

Performance Requirements

If the cumulative graduate index should fall below 3.0 in a semester on A = 4.0 scale, the student is placed on academic probation 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. The student will be removed from academic probation once the cumulative graduate index matches 3.0.

This must be accomplished in time as follows:

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

Also, if the semester grade point index falls below 3.0 in two consecutive semesters and the cumulative index also remains below 3.0, the student will be terminated from the graduate program immediately.

In the meantime, 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.

Satisfactory progress should be made in research credit hours (FS 69800 or 69900). 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.

Note: No incompletes can be given for research credits

Research Expectations

The research project is a major component of 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.

5. Guidelines from Graduate School and Purdue University

Appendix 4 provides the guidelines on thesis writing and issues related to publication of materials from was the thesis. Please make note that Purdue University has a policy on intellectual property (Appendix 5). This relates to inventions, copyrightable works, and other creative products from your research activities at Purdue University.

6. 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, marital status, parental status, sexual orientation, disability, or status as a disabled or Vietnam-era 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 Executive Memorandum No. D-1 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 Vietnam-era 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 Affirmative Action Office, the Graduate School, Human Resource Services, or the Office of the Dean of Students.

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.

7. Policy on Cheating and Plagiarism

Cheating or Academic Dishonesty

Honesty and high ethics are important to professionals in any field. Therefore, the Food Science Graduate 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 Purdue University as outlined in the University 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.

The 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 professor, colleagues, or English professionals. It is better to write improper English grammar than to steal the 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 and can result in disciplinary action as outlined in the University 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 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>

8. 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 referral.

9. Offices to Assist Graduate Students

Numerous brochures are available from the Graduate Program Coordinator, supplying information on the Visitor Information Center (VIC), Student Health Center, Libraries, Parking Permits, Purdue Memorial Union (PMU), the Information Technology at Purdue (ITaP), and the Lafayette Limo, Inc. (van to airport in Indianapolis).

Dean of Students: Schleman Hall (SCHL) Room 207 (494-1257)

International Students & Scholars: Schleman Hall (SCHL) Rm 136 (494-5770)

Bursar's Office: Hovde Hall (HOVD) Room 5 (494-1024)

Registrar's Office: Hovde Hall (HOVD) Room 45 (494-8581)

Transcripts: Hovde Hall (HOVD) Room 45 (494-6153)

Graduate School: Young Hall (YONG) Room 170 (494-2600)

10. Assistantships

Research or teaching assistants holding appointments ranging from 25 through 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 Assistants

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 residence is set by the Graduate School 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 total of two years for the M.S. degree and three additional years for Ph.D. (five years in total if bypassing M.S.), starting from the B.S. degree. Assistantship funds after the maximum timeframe allowed must be discussed with the Major Professor.

Employment as Teaching Assistants

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), American Society of Microbiology (ASM) and 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 Aides, 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 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 www.purdue.edu/bursar/forms/ 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" www.purdue.edu/bursar/forms/.

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" www.purdue.edu/bursar/forms/.

Pursuant to the Board of Trustees' September 2002 resolution, the definition of "spouse" includes same-sex domestic partners. For more information regarding same-sex domestic partner benefits, contact Staff Benefits on the West Lafayette campus.

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 as 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 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

The Purdue University Student Health Center can be reached at 494-1700. As a full-time fee paying student, you are entitled to an unlimited number of cost-free visits to its physicians and five hours of consultation with staff in the Mental Health Service. Fees are charged, however, for urgent care services, minor procedures, supplies, and services such as x-ray, laboratory, and physical therapy. Accordingly, make certain that you have adequate health insurance coverage. One option to consider is the Student Insurance Plan. Brochures explaining services at the Student Health Center and Student Insurance Plan Packages can be obtained from the Graduate Program Coordinator or from the Student Health Center by contacting 1826 Student Health Center, Room 136, Phone 496-1670.

Health Insurance (Individual and Family)

If you have questions, please contact a representative of the Student Insurance Office in Rooms 338/340 of the PUSH Building.

They can also be reached at 496-3998 or by email to student-insurance@purdue.edu. For further information, visit the PUSH website www.purdue.edu/push

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 Gwen Shoemaker, if unable to locate.

Computers and Printers

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 copier (not during the day time hours when copier is busy) or sent to Printing Services. (See information below about copying theses.)

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. Personal copies can be made on the machine located in the first floor lobby area.

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 exams. 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) should be routed through the Major Professor. Thesis (including tables, graphs, etc.) is the sole burden of the student UNLESS the secretaries or A/P staff agree to assist after working hours and are paid by the student for their time.

Thesis Copying

Check with the Major Professor if you will be allowed to use their code number to make copies of your thesis. **If allowed, note this cannot be done between 8 a.m. and 5 p.m. on the copy machine in Room 2212.** Also, as described above, multiple copies of a thesis CANNOT be sent to our department printers. However, you can go to the Memorial Union for the printing and binding of multiple copies for your department and committee members as necessary at your own expense.

II. REQUIREMENTS OF THE GRADUATE PROGRAM AND GRADUATE SCHOOL

1. Written English Proficiency

You must demonstrate acceptable proficiency in English composition before a graduate degree can be awarded. You must complete this requirement before meeting with your Advisory Committee or filing a Plan of Study. Students cannot ask for the appointment of an Advisory Committee or file a Plan of Study until after this requirement is met.

As detailed below, if a student whose native language is English does not satisfy the English Composition course grade requirement, or the TOEFL and Test of Written English (TWE) score requirements in case the native language is not English, the Graduate Committee will administer a screening test in written English to determine if additional training is needed to become proficient in English composition.

Students taking the screening test will write a short composition in English to be evaluated by three members of the Graduate Committee. If two of them indicate a “pass”, no further training in English composition is required. Otherwise, the student must obtain assistance in English composition at the Writing Lab in the Department of English, Heavilon Hall (Room 226), then pass a second screening test (if native language is English), or take and pass the course ENGL 62100 (if native language is not English).

Students Whose Native Language Is English:

If the grade is less than “B” in any undergraduate course taken in English composition, the student will take the screening test in written English.

Students Whose Native Language Is Not English:

If the TOEFL score is < 575 (paper-based exam) or < 233 (computer-based exam) or < 88 (iBT based exam), and a TWE score < 5, the student will be required to take the written English screening test.

2. Registering for Classes

Students can pick up a Research Registration Form and PIN number from the Graduate Coordinator before registering for each semester. Specific registration instructions can be found in the student’s myPurdue account.

3. Plan of Study

During your first semester in the graduate program, pick up the Plan of Study (POS) folder from the Graduate 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.

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 first semester, in consultation with Major Professor, select faculty members to serve on your Advisory Committee. It will consist of at least three graduate faculty members for M.S., and **four** for Ph.D. students, such that two or more departments are represented. A minimum of two members must be from the Food Science Graduate Program.

2. According to the Graduate School regulations, more than 51% of this committee must be regular certified faculty on campus.

3. All members chosen must be Faculty Certified by the Graduate School. Those on campus have certified numbers.

4. If an off-campus person with suitable qualifications is needed as an advisor, fill out the special Faculty Certification form (see the Graduate Coordinator) and submit it along with current vitae of this person for acceptance by the Head of the Graduate Program and the Dean of Agriculture, and subsequent formal approval.

5. Upgrade the **saved** plan of study from *preliminary* to *current* stage by adding the advisory committee members, and the remaining courses for fulfilling the degree requirements. Take courses leading to and including those at the highest level offered in the particular field of specialization. The course names must be identical to those on the transcript of courses taken. See Appendix for the forms for the M.S. and Ph.D. Plans of Study.

6. 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.

7. 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 proper channel (Advisory Committee members, Graduate Committee, Chair of the Graduate Program, Department Head and Dean of

College of Agriculture) 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.

10. Note that the Advisory Committee and Examining Committee are one and the same for our Graduate Program. This is different from the Graduate School regulation.

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 Head of the Graduate Program, to the Graduate School.

3. Graduate Council 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 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.

4. 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.

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:

http://www.purdue.edu/purdue/course_INFO/

3. Online Interdepartmental Food Science Graduate Program Student Handbook

https://ag.purdue.edu/foodsci/Pages/grad_overview.aspx

Concentration Codes

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

<u>Name</u>	<u>Code</u>
Carbohydrate Chemistry	CARB
Computational Science	CMSI
Food Biotechnology	FDBI
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
Food Toxicology	FDTX
Ingestive Behavior	INBG
Molecular Food Microbiology	MOFM
Polymer X-ray Crystallography	PXRC
Sensory Evaluation	SENS

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**

- Applied biochemistry, analytical chemistry, molecular sciences, polymer science, and enzymology
- Compositions, structures, quality, and functional properties of foods, food constituents, and food product ingredients

B. **Foods for Health**

- Application of fundamental food science principles to the study of food matrix as a critical delivery vehicle of consumer health benefits
- Chemistry, biology, assessment, characterization and metabolism of plant and animal based bioactive food ingredients
- Evaluation of the impact of processing on stability and bioavailability of bioactive food components

C. **Food Safety and Microbiology**

- Study of microorganisms and their reaction to foods and their environments
- Understanding the ecology for microbial inactivation with computer models
- Biosensor and nanotechnology-based detection methods for pathogens

D. Food Processing and Technology Development

- Integration of engineering with chemistry and microbiology to solve food processing and packaging problems
- Food processing unit operations to produce safe, high-quality, and value-added products

Required and Additional Courses in Research Areas

The number of courses and 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:

Expected Undergraduate Preparation^a

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

^a Limited deficiencies in this category may be removed concurrently with the advanced degree program.

- ^b Research Areas:
- Food Chemistry, Structure and Function
 - Foods for Health
 - Food Safety and Microbiology
 - Food Processing and Technology Development

4. Graduate Program Minimum Requirements* [Primary on POS]

- Basic Food Science Course Series** to be taken early in M.S. or Ph.D. program.
 - Food Chemistry (1 cr.) FS 55001 – Fall
 - Food Analysis (1 cr.) FS 55101 – Fall
 - Nutritional Sciences (1 cr.) FS 55201 – Fall
 - Food Microbiology (1 cr.) FS 55301 – Fall
 - Food Processing and Packaging (2 cr.) FS 55401 – Fall
- Case Study Course** (1 cr.) FS 55501 – Spring

3. **Statistics** (3 cr. for M.S.; 3 more cr. for Ph.D. including those who have bypassed M.S.)**
4. **Seminar** (1 cr. for M.S.; 1 more cr. for Ph.D.) FS 68400 – Fall and Spring
FS 68400 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. **Responsible Conduct in Research** (1 cr.) GRAD 61200
6. **Supervised Teaching Assistant in Food Science** (1 cr.) FS 69700 (Required for Ph.D. only). Include this only in the comment section of the Plan of Study because it has a P/F grade.
7. **Attendance for FS 68400 Graduate Seminar:**
All graduate students not registered for the seminar course **must attend every semester at least six weekly seminars presented by students registered for this course.** Students with schedule conflict must contact the course instructor in order to be excused as necessary. Regular attendance will boost the speaker's morale and also increase the attendee's knowledge in current important topics in food science, including research, that are the subject matter of the seminar series. "Knowledge and Scholarship" is one of the major learning outcomes of all the graduate programs university-wide. The student's attendance record will be made available by the course instructor to the major professor who can use this as an additional and significant attribute for P/F (S/U) grading of the student's research progress each semester.

****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 project.

Basic Food Science Course Series

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 give them an opportunity to apply that knowledge. The course relies in part on independent learning by the student. With some direction by the instructor, 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 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 as 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 55401). 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, 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).

Credits Needed for Graduation

At least 30 credits for M.S. and another 60, for a 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 in residence on the Purdue campus where the degree is to be granted. Course credits obtained via distance learning technologies from a campus shall be considered to have been obtained in residence 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) in continuous residence on the Purdue campus where the degree is to be granted.
 - b. A Master's degree from any accredited university is considered to contribute to 30 credit hours toward satisfying this residency requirement.

5. Graduate Program Additional Requirements

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 3 credit hours for the M.S. degree, and 6 credit hours for the Ph.D. degree of Food Science-related coursework at the highest level available (preferably at the 600 level)*. Appropriate courses are listed below. *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.*

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.

A student must submit a contract form for independent study (FS 59000 Contract is given in the Appendix) for the approval of the Graduate Committee in order to be included in the plan of study. Before the graduate committee approves the FS 59000 contract, the plan of study must be justified by the student defending the additional coursework.

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

Check the on-line course catalog for other latest available courses.

Research Area Related Graduate Courses by Area of Specialization Options

Food Chemistry, Structure and Function

3.0 CR	ANSC 62000	Proteins and Amino Acids in Nutrition (Fall Odd Years)
3.0 CR	BCHM 56100	Biochemistry I (Fall)
3.0 CR	BCHM 56200	Biochemistry II (Spring)
3.0 CR	BCHM 60501	Macromolecules (Fall)
2.0 CR	BCHM 62000	Protein Mass Spectrometry and Proteomics (Spring)
2.0 CR	BIOL 51700	Molecular Biology: Proteins (Spring)
1.0 CR	FS 53000	Food Ingredient Technology (Spring)
1.0 CR	FS 54100	Postharvest Technology of Fruit & Vegetables (Spring)
1.0 CR	FS 55001	Food Chemistry (Fall)
1.0 CR	FS 55100	Food Analysis (Fall)
1.0 CR	FS 59100*	Aquatic Products (Fall Odd Years)
1.0 CR	FS 59100*	Food Enzymes (Fall Odd Years)
3.0 CR	FS 59100*	Food Physical Chemistry (Fall Even Years)
3.0 CR	FS/NUTR 63000	Carbohydrates (Fall Odd Years)
2.0 CR	FS 69000*	Conformation of Polysaccharides (Spring Even Years)
2.0 CR	FS 69000*	Polysaccharide Analysis (Spring Even Years)
1.0 CR	FS 69000*	Sensory Evaluation Techniques (Summer Odd Years)
3.0 CR	NUTR 53400	Human Sensory Systems and Food Evaluation (Spring)

Foods for Health

3.0 CR	ANSC 62000	Proteins & Amino Acids in Nutrition (Fall Odd Years)
1.0 CR	FS 55200	Nutritional Sciences (Fall)
1.0 CR	FS 59100*	Functional Foods (Fall Even Years)
1.0 CR	FS 69000*	Phytochemicals
2.0 CR	FS 69000*	Phytochem: Biochemistry & Physiology (Spring Even Years)
3.0 CR	NUTR 53400*	Human Sensory Systems and Food Evaluation (Spring)
1.0 CR	NUTR 59000*	Special Problems in Nutrition (Fall)
4.0 CR	NUTR 60500	Nutritional Biochemistry & Physiology I (Fall)
2.0 CR	NUTR 60600	Nutritional Biochemistry & Physiology II (Spring)
2.0 CR	NUTR 60700	Nutritional Biochemistry & Physiology III (Spring)
1.0 CR	NUTR 61600*	Special Topics in Ingestive Behavior
2.0 CR	NUTR 64000	Human Feeding (Fall)
1.0 CR	PSY 69200	Topics in Psychology

Food Safety and Microbiology

1-3 CR	ABE 59100*	Biotechnology and Systems Biology (Fall)
3.0 CR	AGRY 64900	Molecular Microbial Ecology (Fall)
3.0 CR	BCHM 56100	Biochemistry I (Fall)
3.0 CR	BCHM 56200	Biochemistry II (Spring)
3.0 CR	BIOL 52900	Bacterial Physiology (Spring)
3.0 CR	BIOL 53700	Immunobiology (Fall/Spring)
3.0 CR	BIOL 54100	Molecular Genetics of Bacteria (Fall)
2.0 CR	BIOL 54900	Microbial Ecology (Spring)
3.0 CR	BIOL 58000	Evolution (Spring)
3.0 CR	BIOL 59500*	Genetics Omics Host Microbe
3.0 CR	BIOL 59500*	Genomics in Ecology and Evolution
3.0 CR	BIOL 59500*	Practical Biocomputing
2.0 CR	CPB 62200	Microbial Pathogenesis (Fall)
1-5 CR	CS 59000*	Topic Life Sciences (Fall/Spring)
1.0 CR	FS 55301	Food Microbiology (Fall)
2.0 CR	FS 56400	Food Fermentation (Spring Even Years)
3.0 CR	FS 56500	Microbial Foodborne Pathogens (Spring Odd Years)
2.0 CR	FS 56600	Microbial Techniques for Food Pathogens (Spring Even Years)
1-5 CR	FS 59000*	Microbial Genomics and Metabolism*
3.0 CR	FS 59100*	Food Sanitation (Fall)
1.0 CR	FS 66000	Intestinal Microbiology & Immunology (Fall)

Food Processing and Technology Development

3.0 CR	ABE 30700	Momentum Transfer for Food and Bio System (Fall)
3.0 CR	ABE 30800	Heat and Mass Transfer Food and Biological Systems (Spring)
3.0 CR	ABE 45700	Transport Operations in Food and Biological Engineering I (Spring)
3.0 CR	ABE 55700	Transport Operations in Food and Biological Engineering II (Fall)
3.0 CR	ABE 55800	Process Design for Food and Biological Systems (Springs)
3.0 CR	ABE 56000	Biosensors: Applications and Fundamentals (Fall)
3.0 CR	ABE 58000	Process Engineering of Renewable Resources (Spring)
	CHE 54000	Transport Phenomena (Spring)
	CHE 62000	Transport Phenomena I (Spring)
	FS 506/HORT 506*	Commercial Grape & Wine Production
1.0 CR	FS 53500	Aseptic Processing Technology (Spring)
2.0 CR	FS 55401	Food Processing & Packaging (Fall)

2.0 CR	FS 59100*	Emerging Technologies for Food Processing (Fall Even Years)
1.0 CR	FS 64000	Aseptic Processing Technologies (Summer)

General

1.0 CR	FS 55501	Case Study (Spring)
1-5 CR	FS 59000*	Special Problems (Fall/Spring)
1-3 CR	FS 59100*	Special Topics (Fall/Spring)
2.0 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)
1.0 CR	FS 69000*	Product Development (Spring Odd Yrs)
1.0 CR	FS 69700	Supervised Teaching in Food Science Ph.D. only (Fall/Spring)
1-18 CR	FS 69800	Research, M.S. Thesis (Fall/Spring)
1-18 CR	FS 69900	Research, Ph.D. Thesis (Fall/Spring)

M.S. PLAN OF STUDY MINIMUM COURSEWORK TEMPLATE

<u>Course</u>	<u>Credits</u>	<u>Title</u>
FS 55001	1	Food Chemistry
FS 55101	1	Food Analysis
FS 55201	1	Nutritional Sciences
FS 55301	1	Food Microbiology
FS 55401	2	Food Processing and Packaging
FS 55501	1	Case Study
STAT 51100	3	Statistical Methods
FS 68400	1	Food Science Seminar
GRAD 61200	1	Responsible Conduct in Research

Plus, graduate level courses needed to strengthen your knowledge base in Food Science. Of these, **a minimum of three credit hours must be advanced level Food Science courses in your research/signature area.**

If FS 55001-55401 are tested out, indicate in the comment/remarks or note section.

In the English language requirement section: All students have requirements for this listed in the Handbook. Please write how you fulfilled this requirement by GRE, TOEFL, ENGL exam or otherwise.

Students are also required to register for FS 698 research credits each semester.

Fall/Spring semesters	12-18
Summer semesters	6-9

Ph.D. PLAN OF STUDY MINIMUM COURSEWORK TEMPLATE

<u>Course</u>	<u>Credits</u>	<u>Title</u>
FS 55001	1	Food Chemistry
FS 55101	1	Food Analysis
FS 55201	1	Nutritional Sciences
FS 55301	1	Food Microbiology
FS 55401	2	Food Processing and Packaging
FS 55501	1	Case Study
STAT 51100 or 51200	3	Statistical Methods
STAT 51400	3	Design of Experiments
FS 68400	1	Food Science Seminar (First Time)
FS 68400	1	Food Science Seminar (Second Time)
GRAD 61200	1	Responsible Conduct in Research
FS 69700	1	Teaching Assistant (Comments Section)

Plus, graduate level courses needed to strengthen your knowledge base in Food Science. Of these, **a minimum of six credit hours must be advanced level Food Science courses in your research/signature area.**

If FS 55001-55401 are tested out, indicate in the comment/remarks or note section.

The major professor should indicate the number of transfer credits (0-30) from M.S. courses toward the Ph.D. degree in the “Total Master’s Credits Allowed on this Ph.D. Plan” in the graduate course tallies section.

In the English language requirement section: All students have requirements for this listed in the Handbook. Please write how you fulfilled this requirement by GRE, TOEFL, ENGL exam or otherwise.

Students are also required to register for FS 698 research credits each semester.

Fall/Spring semesters	12-18
Summer semesters	6-9

6. Other Interdisciplinary Programs

Some graduate students might work with a Major Professor who is a member of the Computational Science and Engineering (CS&E) Program or 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.

Computational Science and Engineering (CS&E)

This Program provides students with the opportunity to study a specific science or engineering discipline along with computing in a multi-disciplinary environment. The aim of the program is to produce a student who has learned how to integrate computing with another scientific or engineering discipline.

Food science graduate students may register in this program. Graduate degrees in Food Science with a specialization in CS&E are designed to give students a solid and thorough background in the application of quantitative and computational methods to food and agricultural systems. Successful completion of the program results in the student’s transcript indicating a specialization in “Computational Science”. M.S. graduates should be well prepared to join and make significant contributions to interdisciplinary research teams. Ph.D. graduates are expected to become leaders in research and development at the forefront of their fields, applying advanced computational techniques and theory to solve key problems.

The CS&E course load for students is roughly the same as for degrees in food science, with approximately one-third of the courses in computing and two-thirds in food science. However, 9 credit hours for M.S. and 12 for Ph.D. of the electives are to be chosen from a list of CS&E courses. The student is strongly encouraged to include at least three for M.S. and six credit hours for Ph.D. of food science-related coursework (see Section 5) at the highest level available (preferably 600 level) in their plan of study. Students are expected to have a strong interest in

computation and its application to science and engineering. The course, CS 50100: Introduction to CS&E, offered each fall, is specifically designed to allow students who did not major in computer science or computer engineering to learn quickly the key concepts from upper level undergraduate computer science courses. Detailed information on the CS&E program is available from Dr. Arun Bhunia.

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: Foods and Nutrition; Animal Sciences; Food Science; Veterinary Clinical Sciences; Veterinary Pathobiology; Forestry and Natural Resources; Restaurant, Hotel and Institutional Management; Health, Kinesiology and Leisure Studies; 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.

7. Non-Thesis M.S. Degree

1. Minimum coursework required is 42 credit hours, to include:
 - a. Basic Food Science Course Series (6 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 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.
5. The degree will be called non-thesis Master of Science.
6. Upon completion of coursework, request 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 through to the Graduate Coordinator to the Graduate School immediately before the degree is awarded.

See Section 5 for Food Science-Related Additional Courses

8. Annual Progress Reports

Your progress in the Graduate Program each year must be reviewed by your Advisory Committee (See Appendix 6).

Meet with the Advisory Committee in the Spring each semester to discuss and analyze research progress. The student will complete the progress summary and publications, conference presentations, awards and other scholarship activities on page 1. Sensitive confidentiality material need not be disclosed in summary, but there must be adequate scientific material that validates satisfactory research progress when evaluated by 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 all 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**. Your research assistantship funding is contingent, in part, on completing these yearly reporting and meeting requirements. Otherwise, you will **not** be able to **register for next semester classes**.

9. Internships

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 first 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 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 internship is a valuable experience, please remember that the time-to-degree extends by the duration of 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 required form for leave of absence (See Appendix 10).

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 research assistantship from Major Professor. See business office for additional information.

Absences for all other reasons:

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, according to the Graduate School, the student has to be registered for a minimum of 3 research credit hours 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 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 time lines set up by the Graduate School.

Both the student and Major Professor should fill out the Leave of Absence form (see Appendix 10) 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.

10. Extended Leave of Absence

Students in the graduate program must complete their research, submit thesis, and receive degree before taking jobs. 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, contact immediately the Major Professor, Department Head, Graduate Chair and Graduate Coordinator with a resignation letter.

11. 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 of the Graduate Committee for you to bypass the M.S. degree within the first three semesters or else there is no time savings, for entry into the Ph.D. program. The request should include a letter of support from the Advisory Committee (see Appendix 7) 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).

12. Ph.D. Student Teaching

1. Every Ph.D. student is required to serve as a Teaching Assistant.
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 $\frac{1}{4}$ time teaching assistantship and the Major Professor will pay $\frac{1}{4}$ time research assistantship.
3. Duties will primarily include laboratory teaching, grading of exams and term papers, and preparing for laboratory experiments (see Appendix 7) and may also involve some classroom teaching.
4. During their first semester of study, Ph.D. students should fill out the details for TA assignment (see Appendix 7) and submit 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. The Graduate Chair will assign "Pass" or "Fail" grade with input from the course instructor who completes the T.A. Evaluation form, and students in the class in which the Teaching Assistant serves.
7. 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 7) and return it to the Graduate Program Coordinator.
8. In preparation for serving as a teaching assistant, it is required for you to attend an orientation program for incoming teaching assistants at Purdue.

9. At the end of the teaching semester, complete a T.A. experience evaluation form and submit it to the Graduate Program Coordinator. Also, the course instructor will complete a T.A. evaluation form and submit it to the Graduate Program Coordinator. The T.A. will also be evaluated by the students in the class. If the report is negative, the Graduate Committee may require that you fulfill the teaching obligations in some other manner.
10. The rubrics used for evaluating the student's performance are given in Part V.

13. Policy on Preliminary and Final (M.S. and Ph.D.) Examination

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.

14. Ph.D. Preliminary Examination

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 end of second year after completing or bypassing M.S. is appropriate for this examination. The three major steps of The Preliminary Examination, which are described below, must be completed at least two semesters before expected graduation. See Form 8 in Appendix 9 for requesting appointment of the examining committee.

The student's advisory committee will complete electronic rubrics used for evaluating the student's performance.

Preproposal

The process of the Preliminary Examination must begin before the end of the student's second year in the Ph.D. program (since graduation cannot take place until two semesters after completion of this examination).

[A] The student should schedule a meeting of the Advisory Committee, which will help in choosing a topic for the research proposal. The topic can be in the student's research area, but must be different from the actual Ph.D. research. This should then be developed into a preproposal within two weeks.

[B] It should contain the following information/sections: Title, Introduction/Background, Rationale, Significance, Hypothesis and/or Objectives, Experimental plan, and References, *all in two pages*.

It should conform to 1" margin, font size 12, single space (same as for the Proposal). *If it exceeds two pages, the preproposal will be automatically rejected by the Graduate Committee.*

The Major Professor may guide the student for proper format. Along with written permission from the Major Professor, the preproposal should be submitted to the Graduate Program Coordinator for distribution to the Advisory Committee for evaluation. Its members are given one week to evaluate and respond to the Graduate Program Coordinator.

Proposal

The student should prepare a full proposal (1" margin, font size 12, single space) in the NIH, NSF or USDA style (see Appendix 9) within six weeks after approval of the preproposal. The Major Professor will help with the budget and only to the extent of style, but not content. Along with written permission from the Major Professor, the final proposal should be submitted to the Graduate Program Coordinator for distribution to the Advisory Committee, which has two weeks to evaluate. If approved with no more than one dissenting vote, the student will then defend the proposal in a departmental seminar followed by an oral examination by the Advisory Committee.

Seminar and Oral Examination

The seminar and oral examination must be electronically scheduled with the Graduate School (Form 8) at least **three weeks** prior to the intended seminar. The graduate student will provide a one-page abstract to the Graduate Program Coordinator for announcement at least **one week** before the scheduled seminar. The Advisory Committee will complete an electronic evaluation and rubric upon completion of the oral examination.

At the oral examination, held immediately following the seminar, the Advisory Committee will examine you on the proposal submitted, and also may ask questions related to topics beyond the immediate area of the proposal. All Advisory Committee members have voting status. If there is no more than one dissenting vote, you pass and become a Ph.D. candidate.

Criteria to Pass the Preliminary Examination

[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 Exam in 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.

15. 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, a completed *Request for Ph.D. Degree Candidate Research in Absentia (G.S. Form 12)* 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. (See

Sections 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 for accomplishing research at the absentia location.

See the Graduate Program Coordinator for more information on Research in Absentia out of the Policies and Procedures Manual for Administering Graduate Student Programs. Form 12 can be gotten in our share/forms/GS-12.

Also refer to this Manual - V. Registration of Graduate Students, Section V, page 8.

16. 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/Degree 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 to 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 only:** 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 must 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>.
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, which changes each year. 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 non-resident 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 Manual 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 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 (see Appendix 9) is approved not less than two weeks in order to get their approval. ***All Advisory Committee members listed on Form 8 have to be present to sign final Exam Form 11 or 7 whichever is appropriate. If an external advisory member who cannot attend the Final Exam has formally designated the Graduate Chair as Proxy, they can be listed on Form 8.***

According to the Graduate School, 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 for 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. The seminar is open to faculty, students, and staff, but the Final Examination is limited to the Advisory Committee.

See the Graduate Program Coordinator to schedule a room and audio/visual equipment for the seminar and defense. The seminar announcement will be posted by this Coordinator at least **one week** before the examination.

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).

17. 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. Obtain a copy of "A Manual for the Preparation of Graduate Theses", Eighth Revised Edition, prepared by the Graduate School at Purdue University, or from the Graduate Program Coordinator or accessed on the web <https://www.purdue.edu/gradschool/documents/thesis/graduate-thesis-manual.pdf>. The Food Science Graduate Program follows this manual for thesis format specifications. (See information on departmental policies regarding printing and copying theses, in section 14 of Part I of this Handbook). A sample blank thesis format is in S:\Restricted Shared\Grad Program\blnkthes.doc.
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, contact the Graduate Program Coordinator, who will submit the Request for Appointment of Examining Committee (Form 8 in Appendix 9) 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.
 - c) The electronic ProQuest Doctoral Agreement Form 14 needs the signature of the student and the Major Professor, if necessary.
 - c) The Master's Thesis Agreement Form 19 requires the student's signature only.
 - e) Exit questionnaire in the Survey for M.S. and Ph.D. students from the Graduate School have to be completed before final submission of their thesis or they will not graduate, and our FS department exit survey completed before leaving the University.

All Master and Ph.D. students have to submit their Thesis online to ProQuest.

If you have questions please read the Graduate School Policy and Procedures Manual, Thesis Section VII, page 6.

Paper copies are for the Food Science department, and the Major Professor. Also, check with individual Advisory Committee members if he/she wants a copy.

18. Direct Ph.D. Program

The faculty approved in Spring 2011 a new option to admit the very best B.S. degree applicants seeking doctoral 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 11) 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.

Consolidated list of useful websites:**Course Catalog:**

[http://www.purdue.edu/purdue/course INFO/](http://www.purdue.edu/purdue/course_INFO/)

Interdepartmental Food Science Graduate Program Student Handbook

https://ag.purdue.edu/foodsci/Pages/grad_overview.aspx

Employment Manual:

[http://www.gradschool.purdue.edu/downloads/Graduate Student Employment Manual.pdf](http://www.gradschool.purdue.edu/downloads/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>

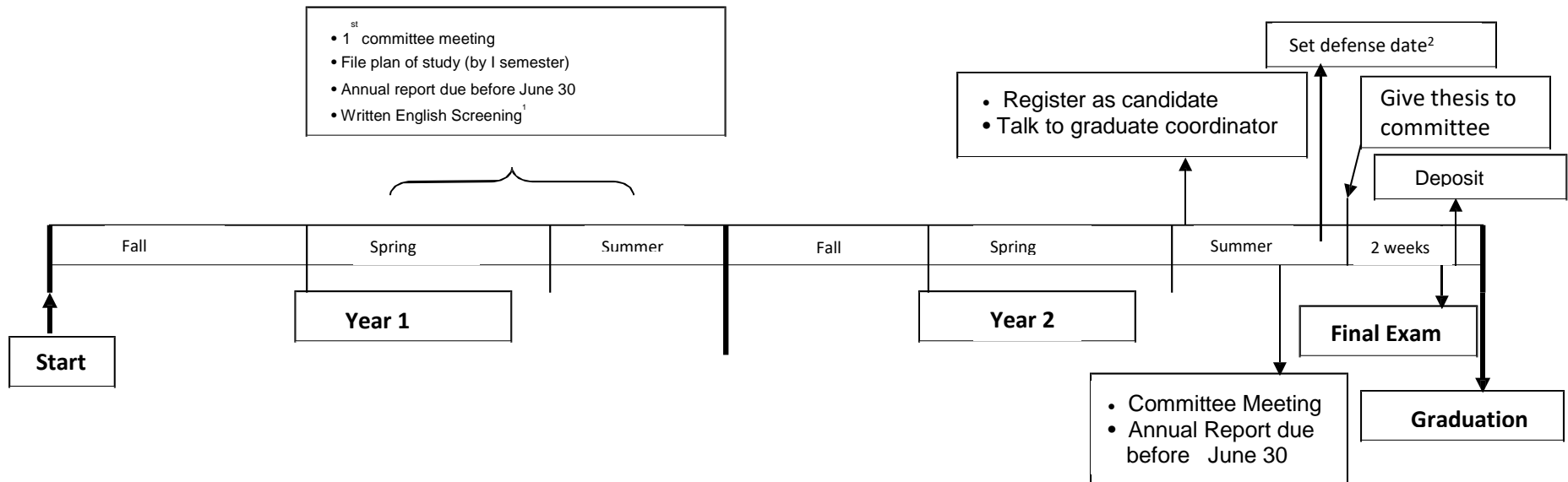
<http://owl.english.purdue.edu/owl/resource/589/01/>

<http://turnitin.com/static/index.html>

<http://www.ithenticate.com>

III. TIMETABLES AND CHECKLISTS

Suggested Timetable for the M.S. Program

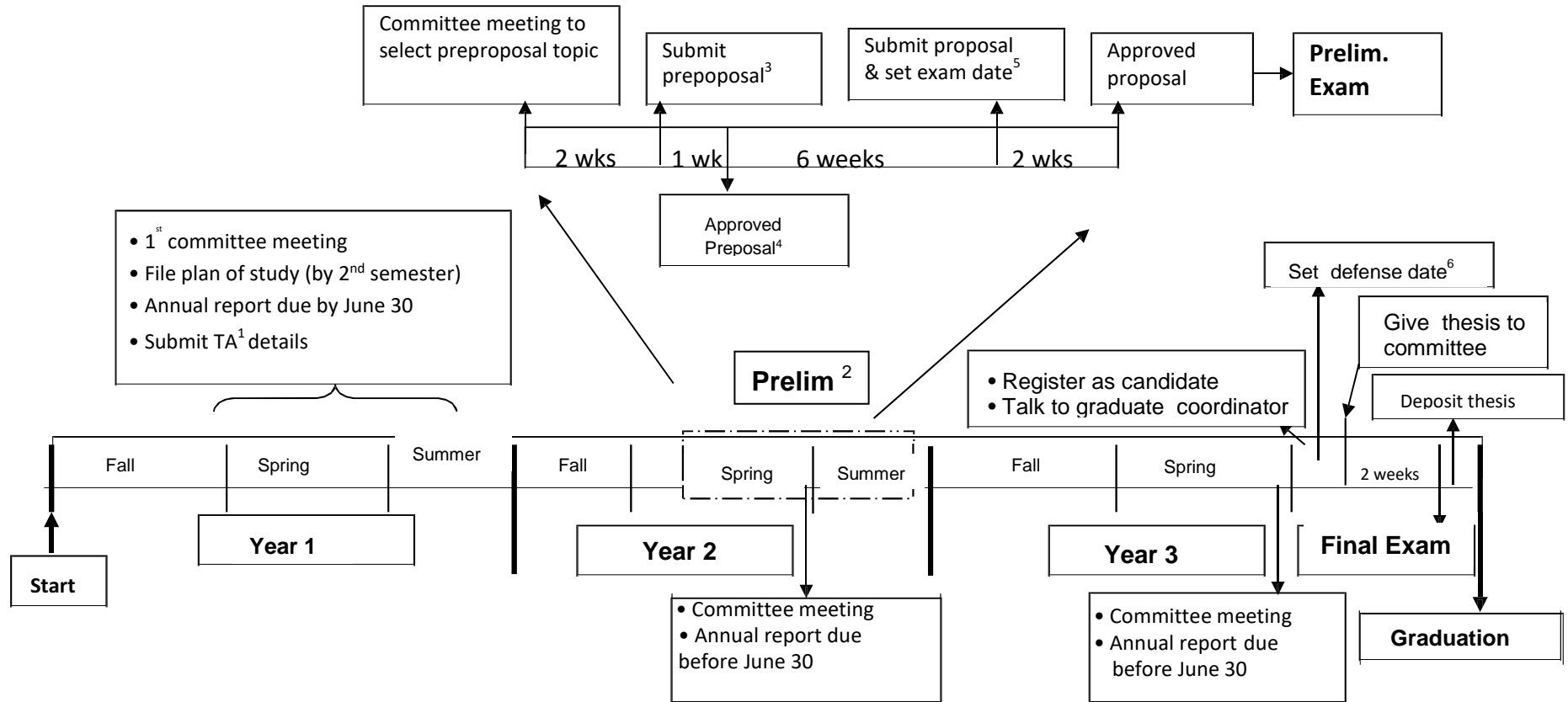


- Register for classes each semester. Form to be signed by Major Professor. Pick up PIN number from the Graduate Program Coordinator.
- Pay fees a week before school starts to avoid cancellation of registration and late fee \$200 extra!
- Obtain exit/final exam file from graduate coordinator in the first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

¹ International student has to take the required screening test in written English

² At least three weeks before the final exam. Give Form 8 information to Graduate Coordinator

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. Give Form 8 information to Graduate Coordinator.

M.S. Students

TASK	ACTION	CONTACT	CHECK WHEN COMPLETED
1. Written English Proficiency	Check in the Graduate Handbook; by 2 nd semester, 1 st year	Graduate Program Coordinator	
2. Research Registration Form (Handbook has sample form)	Turn one in for every semester (fall, spring, summer). Upon arrival or before for first semester. Later, at least one month before the semester starts	Graduate Program Coordinator, for forms and course offerings; Major Professor, for advice and approval on Research Registration Form	
3. Purdue Assistantship payment	Complete the registration form with your Major Professor	See Business Assistant	
4. Research Credit Registration	myPurdue	Return completed Research Registration 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 in on My Purdue. Registration will be canceled otherwise		
7. Purdue picture I.D.	Fees receipt and two pieces of I.D. needed	Purdue Memorial Union Room 130	
8. Current address and phone number	Complete the form in your folder. Must keep current address on file.	Take to Graduate Program Coordinator	
9. Admissions conditions	Satisfy in the first semester		
10. 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	
11. Yearly meeting with Advisory Committee	Submit yearly by June 30. Forms are in Graduate Handbook. All committee members must sign	Take to Graduate Program Coordinator	
12. Submit Plan of Study (Masters)	Before the end of your 1 st semester. See Handbook for details and Graduate Program Coordinator	Go to myPurdue to submit EPOS; <u>See Graduate Program Coordinator</u>	
13. Thesis	Thesis Format Manual, required to attend thesis workshop the semester you register as a candidate/exam only	Before you begin to format your thesis on the computer; Use the Blank thesis format on the thesis web site.	
14. Thesis Format	Must have thesis format approval 4 weeks before requesting final exam	Major Professor	

M.S. Students

TASK	ACTION	CONTACT	CHECK WHEN COMPLETED
15. <u>Final Exam:</u> Check Grad. Handbook	Need at least <u>30 total credit hours</u> , this includes coursework & research credits		
16. 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	
17. Have Major Professor check thesis and discuss date of exam	At least 4 weeks before exam to make sure you are eligible to proceed for final exam	Major Professor	
18. Schedule seminar date with Advisory Committee	At least 4 weeks before exam	Schedule Morgan Conference Room for final exam	
19. Submit request for final exam (Form 8) with date, time & room no. & title	3 weeks before exam	Graduate Program Coordinator	
20. Distribute Thesis to Advisory Committee members	2 weeks before exam	Committee	
21. 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	
22. Present seminar and defend thesis			
23. Advisory Committee submits electronic signature on GS Form 7	Graduate School emails request for electronic signature	Graduate Program Coordinator	
24. Advisory Committee submits electronic signature on GS Form 7	Electronic signature Must be submitted as soon as exam is completed	Graduate Program Coordinator	
25. Complete Grad School Thesis Acceptance Forms (ETAF) electronic forms	ETAF is found in student's myPurdue	Graduate Program Coordinator	
26. Deposit Thesis Electronically to Pro Quest	Check the Graduate School Thesis web site for graduation deadline calendar	Graduate School Thesis web site	

M.S. Students

TASK	ACTION	CONTACT	CHECK WHEN COMPLETED
27. Thesis Deposit is electronically sent to Graduate school for Pro Quest	Set up an appointment in advance to deposit thesis forms to Thesis office. Thesis office will not accept any appointments in the last two weeks of the semester	Thesis Deposit Office; Young Room 170, Telephone: 42600 for an appointment early in the final semester	
29. Department Head Signature - electronic	Will sign electronically only when all other parties have signed	Department Head or Head of the Interdepartmental program	
30. Department Copy of Thesis	Give a copy to Grad. Program Coor. This copy should be bound and can be on regular 20 pound paper	Graduate Program Coordinator	
31. Pay thesis deposit fees	Pay fees to deposit thesis electronically; graduate school exit survey form must be turned in.	Thesis Office Ashlee Messersmith	
32. Thesis Receipt	Thesis receipt will be emailed to student and Graduate Program Coordinator	Graduate Program Coor.	
33. Complete Exit Interview for Department Head & give to Adm. Asst.	Obtain <u>Exit Interview form</u> from Graduate Program Coordinator at the beginning of semester in final exam folder	Schedule appointment with for Dept. Head Adm. Asst. at the beginning of your final session	
34. 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	
35. Return forwarding address, phone number, and e-mail on form in the exit/final packet	Provide details for future correspondence.	Purdue Graduate Program Coordinator	
36. 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	

Ph.D. Students

TASK	ACTION	CONTACT	CHECK UPON COMPLETION
1. Written English Proficiency	Review graduate handbook; 2 nd semester	Graduate Program Coordinator	
2. Oral Proficiency (International students TAs)	Review graduate handbook; 2 nd semester	Graduate Program Coordinator	
3. Research Registration Form See Graduate Coordinator to for form. (Sample in handbook)	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	
4. Purdue Assistantship payment	Complete the registration form with your Major Professor		
5. Registration entry in computer via myPurdue	Submit completed form to Graduate Program Coordinator	Return completed Research Registration to Graduate Program Coordinator	
6. Fees	Pay a week before classes start	Bursar's Office, Hovde Hall	
7. 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.		
8. Purdue picture I.D.	Fees receipt and two pieces of I.D. needed	HOVD Room 14	
9. Current address and phone number	Complete the form in your folder. Must keep current address on file.	Submit to Graduate Program Coordinator	
10. Admissions conditions	Satisfy in the first semester		
11. Yearly Research Annual Progress Report	Submit report annually no later than <u>June 30</u> . Forms are in Graduate Handbook.	Take to Graduate Program Coordinator	
12. 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	
13. Submit Plan of Study (Ph.D.)	Before the end of <u>second semester</u> . Check Handbook for details.	Log into myPurdue to submit EPOS; <u>See Graduate Program Coordinator</u> ; See Major Professor	
14. TA details	Submit form during first semester of Graduate study.	Graduate Program Coordinator	

Ph.D. Students

TASK	ACTION	CONTACT	CHECK WHEN COMPLETED
15. Complete TA Orientation	Take T.A. Orientation before you T.A.	Check Graduate Handbook for details; for questions, see Graduate Program Coordinator	
16. FS 69700	FS 69700 is your teaching experience. Register for this class the <u>semester you T.A.</u>		
<u>17. Ph.D. Preliminary Exam</u>	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	
18. Write Preproposal	Check Handbook	Meet with Graduate Program Coordinator	
19. Write Proposal within 6 weeks from approved Preproposal	Check Handbook	Meet with Business office to help with budget facts and Graduate Program Coordinator	
20. Request date of Prelim Exam	3 weeks before exam	Graduate Program Coordinator	
21. Submit request for exam (Form 8) with date, time & room number & title	3 weeks before exam	Graduate Program Coordinator	
22. Reserve Audio Visual Equipment and rooms for Exam	As soon as you have scheduled your exam	Main office receptionist	
23. 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	
24. Present seminar and defend proposal		See Graduate Program Coordinator and Major Professor for details.	
25. Form 11 completed electronically by Advisory Committee	Submit signatures electronically	Graduate Program Coordinator	
26. Complete Exam Form 11	Must be approved on preliminary exam date	Graduate Program Coordinator	
<u>27. Final Exam:</u> Register for candidate & attend required Grad School thesis workshop	Start of final session (during the first month) meet with the Graduate Program Coordinator for Final Exam folder.	See Graduate Program Coordinator	

Ph.D. Students

TASK	ACTION	CONTACT	CHECK WHEN COMPLETED
28. 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	
29. Schedule seminar with Advisory Committee	Three weeks before exam schedule Morgan Conference room	Main office receptionist	
30. Provide Form 8 information to Graduate Program Coordinator	Three weeks before exam	Graduate Program Coordinator	
31. Distribute thesis to Advisory Committee members	Two weeks before exam	Graduate Program Coordinator	
32. Submit electronic abstract in Word document via e-mail 350 words	Email abstract to Graduate Program Coordinator	Graduate Program Coordinator	
33. Present seminar and defend thesis			
34. Form 7 completed electronically by Advisory Committee	Submit signatures electronically	Graduate Program Coordinator	
35. Completed Exam Form 7	Must be approved on exam date	Graduate Program Coordinator	
36. Complete ETAF Form (electronic thesis acceptance form 9).	Submit signatures on ETAF form electronically	Graduate Program Coordinator or Graduate School Thesis website	
37. Department Head Signature	Submit signature electronically		
38. Department Copy of Thesis	Provide bound thesis copy on 20# paper to Graduate Program Coordinator.	Boiler Copy Center	
39. Thesis Deposit is electronically sent to Pro Quest.	Schedule thesis deposit appointment electronically early in final semester.	Thesis Deposit Office; Young Hall Room 170, Telephone: 42600.	
40. Thesis Deposit		Your previously set appointment made in advance	

Ph.D. Students

TASK	ACTION	CONTACT	CHECK WHEN COMPLETED
41. 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	
42. 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	
43. 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	
44. 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

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. (See Sections I-C, I-D, and I-E) Although Graduate School deadlines are specified throughout this section of the manual, departments may set earlier deadlines.

A. Departmental Advising and Supervision

1. Major Professor

Every student in a degree program is required to select a major professor who acts as the chair of the advisory committee and who agrees to supervise the student's graduate study, research, and writing. The major professor/student relationship must be a mutually acceptable one.

2. Advisory Committee

The student and the major professor are responsible for the selection of an advisory committee. The duties of that committee are to assist the student in the preparation of the plan of study and to offer advice during the period of graduate work, including research and thesis preparation when these are required components of the student's degree program.

The committee consists of the major professor and at least two other members of the graduate faculty (with the exception of non-thesis master's degree programs that have approval for a one-member advisory committee. Please refer to Section VII. A. 2. a).

Committees must be approved by the head of the graduate program, the college dean (if requested by the college), and the dean of the Graduate School. Because it is crucial for advisory committee members to bring independent thought and decision-making to their advisory committee roles, the Graduate School strongly recommends that major professors, graduate students, and other individuals involved in the advisory committee selection process strive to avoid appointments where there may be potential conflicts of interest. Advisory committee appointments of spouses/partners, partners in business, or

those with financial conflicts of interest connected to the graduate student, for example, should be carefully reviewed and alternatives considered. Members of the committee need not be faculty with whom the student has taken coursework, however, at least 51% of the committee members must have regular graduate faculty certification. The request to the dean of the Graduate School for appointment of the advisory committee is made on the same form and at the same time as the request for approval of the student's plan of study. (See Section VII-B.) The dean of the Graduate School may appoint additional members if it seems advisable.

a. One-Member Advisory Committee Flexibility Option

A minimum of one member of the graduate faculty may be permitted to serve and fully constitute the membership of the advisory committee for non-thesis master's students who are meeting degree requirements entirely through the completion of courses. Departments wishing to pursue this option should submit a request to the Graduate Records Manager in the Graduate School, or the appropriate director of graduate studies at the regional campuses. Being as specific as possible, this request should outline what concentrations, cohorts, delivery methods (distance or campus based) or other features will qualify for this option.

Once approved, all non-thesis students within the department will be given technical access to list just one advisory committee member on the plan of study, even if this option is not appropriate for all. It is the department's responsibility to carefully review each proposed plan of study; if a student who does not qualify for the one-member advisory committee option lists only one member, the form must be rejected.

Please note that a Final Examination Report Form (G.S. Form 7) must be submitted for all master's students using the One Member Advisory Committee Flexibility option, unless the department also has an approved Alternative Graduation Criteria option. (See Section VII-F.2.)

3. Changes in the Advisory Committee

Changes to the advisory committee must be submitted electronically via myPurdue if the plan of study was submitted electronically. Advisory committee changes on a paper plan of study should be requested using the Request for Change to the Plan of Study (G.S. Form 13). Each request for a change must be accompanied by a rationale and be signed by the student and each committee member whose status is affected by the request. If a paper form is used, it is the responsibility of the chair of the advisory committee to obtain the signatures of all committee members whose status is being changed. The request must be approved by the major professor, the head of the graduate program, and the

college dean (if requested by the college). It is important to notify the Graduate School immediately of any change in the major professor to ensure that appropriate signatures are on forms.

In very rare instances in which an advisory committee member in any role does not approve a student's request for a change in the advisory committee, the student may ask (in writing) for review and assistance from the dean of the Graduate School who will forward it to his/her designee. This action by the student should be utilized after he/she has made at least three contacts (in writing) to the advisory committee member over a period of at least one month to secure approval. The dean of the Graduate School's designee will convene a committee of three faculty members/administrators, normally including the graduate student's college associate dean, department head, and departmental graduate committee chair, to consider the situation. A majority vote of this committee is required to ask the dean of the Graduate School's designee to remove an advisory committee member from that role. The dean of the Graduate School's designee is a non-voting facilitator and serves as a liaison between the Graduate School, the college/department, and the student. If the student believes that either composition of the committee did not allow him/her to have a fair review or the process was not properly followed, he/she may appeal directly to the dean of the Graduate School within 10 days of the issuance of the committee's decision.

B. Plan of Study

Each graduate student admitted to a degree program must submit a plan of study. Although there are no Graduate School requirements for the specific number of credit hours of courses that must appear on the plan of study (except for nonthesis plans of study), the plan must be appropriate to meet the needs of the student in his or her chosen field, as determined by the advisory committee and approved by the head of the graduate program, the college dean, and the dean of the Graduate School. The plan of study includes a primary area and may include a related area or areas that are chosen on the basis of the student's interests and needs. It is to include the specific courses the student is expected to complete and other requirements of the particular degree being sought. Research credits (69800 or 69900) are not to appear on the plan of study. Doctoral degree requirements may only be satisfied by 69900 credits; however, under certain conditions, 69900 credits may be applied toward the requirements of a thesis master's degree. A request to use 69900 credits to satisfy master's degree requirements must be submitted to the Graduate School explaining the need for the use of the 69900 credits and listing which credits (based on session taken) are to be used. This request must be signed by the major professor and the head of the graduate program. These 69900 credits, used to satisfy master's degree requirements, will no longer be eligible to be used for the Ph.D. degree, unless they are utilized as part of the up to 30 credits potentially allowed for use from a master's degree toward a doctoral degree. (See Section VI-2-2-c.) A tentative plan of study should be drawn up

in advance of registration for the first session of graduate work, and the formal plan of study should be submitted electronically as soon as possible (by the end of the third session for doctoral students and by the end of the first session for master's students). For plans of study that are not submitted electronically, the *Request for Master's Degree Advisory Committee and Plan of Study Approval (G.S. Form 6)* is used for master's degree programs. The *Request for Ph.D. Degree Advisory Committee and Plan of Study Approval (G.S. Form 4)* is used for doctoral degree programs. The *Request for Educational Specialist Degree Advisory Committee and Plan of Study Approval (G.S. Form 2)* is used for educational specialist degree programs.

1. Developing the Plan of Study

a. Requirements Applicable to Any Plan of Study

Course credits earned by a student whose graduate study and/or professional activity has been inactive for five years or more cannot be used on a plan of study for an advanced degree. A plan of study approved prior to such a period of inactivity is invalid. (See Section III-B-5.)

Additional requirements that depend on the status of the student when the course was taken are as follows:

(1) Courses Taken as a Graduate Student at Purdue University

Neither 10000- nor 20000-level courses may appear on a plan of study. Otherwise, requirements for the numerical level (30000 through 60000) of courses are determined by each department or administrative unit subject to the restriction that not more than a total of six 30000- or 40000-level course credit hours, with a B- or better, may appear on a plan of study. (See Section VI-B.)

(2) Courses Taken in Non-Degree, Teacher License, or Graduate Certificate Status at Purdue University

Although there is no limit to the number of course credit hours that an individual may accumulate while registered in any of these classifications, no more than 12 total hours of credit earned (with a grade of C- or higher) in non-degree, teacher license, or graduate certificate status may be used on a plan of study. However, if an application to a degree program is approved during the session in which a person is enrolled for the 12th credit hour as a non-degree, teacher license, or graduate certificate student, all credits taken prior to and during that session will be eligible for inclusion on a plan of study for a degree program, providing the courses are appropriate to the degree program and the courses and grades are acceptable first to the department and then to the Graduate School.

Please note that the above limitation on course credit hours taken in non-degree, teacher license, or graduate certificate status that can be used on a plan of study will be modified if excess undergraduate credit also is to be applied to the plan of study.

(3) Courses Taken as Excess Undergraduate Credit

Graduate course credits earned while an undergraduate at Purdue University or other accredited institutions of higher learning may be applied toward an advanced degree if these credits are in excess of any requirements for the baccalaureate degree. Such credits must be certified as available for graduate credit by the institution from which the student received the baccalaureate degree, but will be accepted only if:

- (1) The student had senior standing when taking the course
- (2) The student received a grade of B- or better (work taken under the pass/not-pass option is not acceptable)
- (3) The course was designated as a graduate course

At Purdue University only, if the work is completed satisfactorily on this basis, the academic advisor (or candidate coordinator or other designee) shall then complete the Academic Record Change (Registrar Form 350), which indicates that the course may be used for graduate credit, and submit the form to the registrar, along with the grade reported, at the close of the student's final term. The academic advisor's (or candidate coordinator's or designee's) signature will attest to the fact that the credit is in excess of that required for the baccalaureate degree so that the registrar can then enter the notation "available for graduate credit" on the student's record.

The sum of credits earned as undergraduate excess and the credits earned in graduate non-degree, teacher license, or graduate certificate status that can be used on a plan of study is limited to 12 credit hours except as stated in Section VII-B-1-a(2) above. Any additional conditions under which excess undergraduate credit may be used for graduate credit are determined by the various departments (Graduate Council, April 16, 1992).

(4) Graduate Courses Taken as a Non-degree Undergraduate Student after Receipt of the Baccalaureate Degree

Graduate courses taken as an undergraduate student, even if completed after receipt of the baccalaureate degree and with the intent to use the credits toward a graduate degree program, are not eligible to satisfy requirements for a graduate degree.

(5) Combined Degree Program Credits

If students are admitted to an approved combined degree program, they are permitted to use a certain number of credits to apply toward both undergraduate and graduate degrees (as outlined in the approved program proposal). Such courses must be listed on the graduate plan of study, and a supplemental note must be added to the plan of study indicating those courses that are to be used for both degrees.

(6) Courses Taken as a Graduate Student at Other Accredited Institutions of Higher Learning

Subject to the restrictions stated below, credits earned for graduate study at other universities (both domestic and international) may be applied toward an advanced degree. Only credit hours associated with graduate courses for which grades of B- or better were obtained will be

eligible for transfer. Any additional conditions under which credit transfers may be made are determined by the various departments.

b. Requirements Applicable to a Master's Plan of Study

A minimum of 30 credit hours are required on a plan of study for a thesis option master's degree. Fewer than 30 credit hours of coursework may be listed on the plan of study for a thesis option master's degree, providing there is a total of at least 30 hours of coursework and research credits.

A maximum of nine Purdue credit hours of coursework at the 50000- and 60000-level used to satisfy the requirements of one Purdue master's degree may be used on the plan of study for another Purdue master's degree. Coursework used to satisfy the requirements of a master's degree from an institution other than Purdue may not be used on a Purdue master's plan of study.

c. Requirements Applicable to a Ph.D. Plan of Study

Coursework from one (and only one) master's degree or doctoral professional degree may be used on the plan of study for a doctoral degree.

2. Filing the Plan of Study

A plan of study should be filed as early as is feasible (by the end of the third session for doctoral students and by the end of the first session for master's students) in the student's study. It must be filed with the Graduate School prior to the first day of the academic session of graduation, and students not meeting this deadline may be asked to register for "Degree Only" for the following session to receive the degree. (Departments may set earlier deadlines.)

A plan of study for the Ph.D. degree must be filed with the Graduate School prior to the submission of a request for the appointment of a preliminary examination committee. The plan of study will not be approved until all technical conditions have been met, and normally all academic conditions of admission must have been met. [See Section IIIB- 1-a-(2).]

A plan of study for a doctoral student in a department that does not have "blanket" approval to administer Ph.D. degree programs must be submitted to the Graduate School no later than eight weeks after the beginning of the second semester of study toward a Ph.D. degree at Purdue. The plan of study will be referred to the appropriate area committee of the Graduate Council for approval or referral to the Council. No such student may be continued into a third semester of graduate study toward the Ph.D. degree unless a plan of study has been approved. In special cases, where such early submission is not practical, the Graduate Council may make exceptions to this deadline at the request of the department and the Council's area committee. (See Section VI-C.)

3. Course Changes in the Plan of Study

Course changes in the plan of study may be requested on the *Request for Change to the Plan of Study*. Changes in electronic plans of study must be submitted electronically via myPurdue. The Graduate School regards the plan of study as an individualized curriculum designed by the

advisory committee to assist the student in achieving his or her educational objectives. Although changes in the plan of study may be necessary, each change requested must be accompanied by a brief rationale in the space provided. Poor performance in a course is not an appropriate reason for removing a course from the plan of study. A request for changes in a plan of study must be signed by the student and approved by the major professor, the head of the graduate program, and the school dean (if requested by the school).

4. Fulfilling the Plan of Study Course Requirements

Graduate courses taken while registered as a graduate student at Purdue University may be considered for fulfilling the plan of study requirements only if the student has received grades of C- or better. These course grades must meet departmental requirements, such as limits on the number of C-, C, or C+ grades permitted, grades of A, A-, B+, B, or B- in certain courses, and/or minimum GPA for courses on the plan of study.

For courses at the 300 or 400 level taken as a graduate student or courses that represent either undergraduate excess credit or transfer credit, grades of B- or better are required for fulfilling plan of study requirements. Once again, departments and advisory committees may set higher standards. (See Sections VII-B-1-a-(3) and (4) for other conditions governing the use of undergraduate excess and transfer credit on a plan of study.)

Courses taken as pass/not pass or satisfactory/unsatisfactory are unacceptable on plans of study. Except in cases of clerical or mechanical error, grade option changes will not be approved by the Graduate School. It is expected that clerical or mechanical errors will be detected early and corrections requested within the normal drop/add period.

C. Theses

A master's thesis or Ph.D. dissertation (hereafter referred to in this section as thesis) is a document authored by an individual, describing results of original research undertaken by that individual, and asserting a position which that individual is willing to defend. Joint or collaborative research endeavors are not prohibited; however, in such situations, unique aspects of the broad problem are to be explored by each individual, and the thesis written and presented to the final examining committee is to be a personal document describing the student's creative effort and contribution.

All theses must be prepared according to both departmental format requirements (available in departmental graduate offices) and University format requirements, as described in *A Manual for the Preparation of Graduate Theses*. In addition to stating the University format requirements, established by the Graduate School, this manual delineates regulations concerning the use of copyrighted material in a thesis. In addition,

copyrighted software may not be used without permission, and its use must be acknowledged.

University format requirements include: 1) paper requirement; 2) font style and size; 3) spacing; 4) margins; 5) pagination; 6) title page; 7) abstract; and 8) electronic submission guidelines (Ph.D. candidates only). Format of candidate theses is reviewed by the staff in the Thesis/Dissertation Office, Room 170, Young Hall, during the final thesis deposit appointment.

Departmental format requirements cover such matters as how figures are prepared and numbered; style of references; placement of notes; headings; chapter headings, etc. Departments have chosen either to adopt format requirements that will help students learn the stylistic requirements extant in their own field or they have chosen to adopt the "Purdue Format," as detailed in *A Manual for the Preparation of Graduate Theses*. All matters of manuscript style not covered by the University format requirements are addressed in the departmental requirements. If there is overlap between departmental style specifications and University format requirements, the University requirements must be satisfied. The departmental format requirements are checked in the department either by an individual(s) who has been designated as thesis format advisor or by the chair of the student's examining committee, whichever method has been chosen by the department and filed with the Graduate School. Departments must keep the Graduate School informed of any change in the method of format checking and the current names of thesis format advisors, and this information is filed for reference in the Thesis/Dissertation Office.

A first draft of the thesis should be in the hands of the major professor at least six weeks before the end of the session in which conferral of the degree is expected.

A copy of the thesis and an appropriate number of duplicate copies must be submitted to the major professor at least three weeks before the end of the session in which the degree is to be conferred. The thesis must bear the written approval of the professor who has directed the research before it is submitted to the final examining committee. Each member of the examining committee must receive a copy of the thesis at least two weeks before the date of the final oral examination.

After the examining committee meets, the student prepares a final copy of the thesis or dissertation. That copy, called the "deposit" copy, incorporates all revisions requested by the members of the examining committee. 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.

Doctoral students will submit their deposit copies in electronic form via the Purdue Electronic Thesis Deposit (ETD) Web site. Master's candidates will submit theses in paper form until further notice. A final copy of the thesis should be provided to both the major professor and the head of the graduate program.

Upon successful deposit of their theses, degree candidates are provided a Thesis Receipt from the Thesis/Dissertation Office. A copy of the receipt must be delivered to the Graduate School Student Records Office (Room 170, Young Hall) no

later than the close of business (5 p.m.) on the last day of classes of the session in which their degree is to be awarded. A thesis may be held in confidential status for a limited period of time. (See Section VII- J.)

D. Establishing Examining Committees

All examining committees are established following the same procedures. Preliminary and final examining committees may or may not be identical to the advisory committee. *A Request for Appointment of Examining Committee (G.S. Form 8)*, signed by the major professor and the head of the graduate program, must be received by the Graduate School at least two weeks prior to the proposed examination date in order to give the dean of the Graduate School adequate time to appoint and arrange for additional members, if he or she wishes. (Departmental deadlines may be earlier.) Final examinations must be held before the last week of classes.

1. Thesis Option Master's Degree

The final examining committee must be composed of at least three members of the graduate faculty and may or may not be identical to the advisory committee.

2. Nonthesis Option Master's Degree

If the student's department requires a final examination for a nonthesis master's degree, the examining committee usually will be identical to the advisory committee, in which case, no additional request for appointment of a committee is required. If, however, the examining committee is to be different from the advisory committee (e.g., when a committee member is unable to serve), appointment of a committee of at least three graduate faculty must be requested in the usual manner.

3. Doctoral Qualifying Examinations

Departments may require their doctoral students to complete qualifying or mastery examinations at various stages between admission and the preliminary examination. These examinations do not require Graduate School authorization, nor are the results to be reported to the Graduate School.

4. Doctoral Preliminary Examinations

To become eligible to take the examination, the student must have filed a plan of study, satisfactorily completed most of the formal study, and satisfied any foreign language requirements. Satisfactory completion of any foreign language requirement is monitored and determined by the department. The examination should be scheduled as soon as possible and must be completed at least two sessions (including summer session) before the date of the doctoral final examination. For example, a doctoral student who passes the preliminary examination during a spring semester is not eligible to take the final examination (provided that the student is registered for the subsequent summer session and fall semester) before the following spring semester.

The preliminary examining committee must consist of a minimum of three members of the graduate faculty who need not be faculty members with whom the student has taken coursework. All members of the examining committee are to be notified of the scheduled examination. Other faculty members may be requested by any member of the examining committee to participate, without vote, in the examination, and any interested faculty member may be present, without vote. Although only three committee members are required, if the committee has four or more members, a single member may withhold his or her signature of approval.

A preliminary examination passed by a student whose graduate study and/or professional activity has been inactive for five years or more is invalid. (See Section III-B-5.)

5. Doctoral Final Examinations

At least two academic sessions devoted to research and writing must elapse between the preliminary and final doctoral examinations. For instance, a doctoral student who passes the preliminary examination in a summer session is eligible to take the final examination (provided that the student is registered the following fall and spring semesters) beginning with the following summer session.

After the research has been completed and the thesis written and presented to the committee, a final oral examination must be held in which the candidate defends the thesis and demonstrates to the examining committee the capabilities for which the Ph.D. degree is to be awarded.

The committee will consist of a minimum of four members of the graduate faculty. Final doctoral examinations will be announced so that interested members of the Purdue faculty and student body may attend.

Final examinations must be held before the last week of classes. When the *Request for Appointment of Examining Committee (G.S. Form 8)* is approved by the Graduate School, an approved copy of the form will be sent to the departmental graduate office with the following additional materials for the candidate: a) *Report of the Final Examination (G.S. Form 11)*; b) *Thesis Acceptance (G.S. Form 9)*; c) exit questionnaire; d) a *Doctoral Dissertation Agreement Form* with ProQuest Information and Learning and an *Addendum (G.S. Form 14)* to that form; and e) a survey form on Earned Doctorates Awarded in the United States.

E. Conducting Examinations

The Graduate Council has recommended that oral examinations not last more than two hours. If additional time is needed, the examination may be continued at a later date.

1. Thesis Option Master's Degree

The final examination is usually an oral examination in which the student defends the thesis; however, the examining committee shall set procedures for the examination.

2. Non-thesis Option Master's Degree

The final examining committee may conduct an oral examination, administer a written examination, or conduct a conference in the absence of the student. Departments may waive the examination process entirely. (See Section VII-F-2.)

3. Doctoral Preliminary Examination

The written as well as the oral preliminary examination will be conducted by the examining committee. In some cases, responsibility for the written examination is delegated to certain other faculty, but the final responsibility for the examination rests with the examining committee.

4. Doctoral Final Examination

The examining committee shall set procedures for the examination.

F. Reporting the Results of Examinations

At the conclusion of an examination, the committee chair should present the examination committee with an appropriate examination report form. This report should be completed and presented without delay to the head of the graduate program for recording and prompt transfer to the Graduate School. In the case of a final examination, the report must be received by the Graduate School before the last week of classes of the academic session in which graduation is expected. After a satisfactory examination involving a thesis defense, committee members who approve the thesis must sign a *Thesis Acceptance (G.S. Form 9)* provided to the student when the *Request for Appointment of Examining Committee* is approved.

The members of the committee might wish to examine the deposit copy prior to signing the *Thesis Acceptance*. Once a committee member has signed the *Thesis Acceptance*, the document is approved by that individual. No changes may be made to the thesis or dissertation after it has been deposited in the Thesis/Dissertation Office. A signature either by the thesis format advisor or the examining committee chair (depending on the procedural decision made by the department) indicating that the departmental format requirements have been met is required on the *Thesis Acceptance*.

1. Report of the Final Examination for the Master's Degree

The exact degree title must be designated on the *Report of Master's Examining Committee (G.S. Form 7)*, and each member is encouraged to make a recommendation regarding study toward the Ph.D. degree. Committee certification for a master's degree requires that all members of a three-person committee concur that the student has satisfactorily completed the examination. Although only three committee members are required, if the committee has four or more members, a single member may withhold his or her signature of approval. If the examination is unsatisfactory, a candidate must wait at least until the following session to repeat the final examination. A new request (*G.S. Form 8*) must be submitted.

2. Alternative Graduation Certification for Non-Thesis Master's Degrees

A department may elect not to submit final examination reports for its students who are candidates for non-thesis master's degrees. A department making this election must submit alternative graduation criteria (e.g., minimum graduation cumulative GPA) to the dean of the Graduate School. These alternative criteria will apply to all non-thesis master's students from that department. Satisfaction of these criteria will be monitored jointly by the department and the Graduate School as part of the graduation audit/certification process.

3. Report of the Doctoral Preliminary Examination

It is the responsibility of the examining committee to determine whether the student is qualified and ready to undertake or continue research and proceed toward the Ph.D. degree. The committee should report the examination as "satisfactory" or "unsatisfactory" by completing the *Report of Preliminary Examination (G.S. Form 10)* immediately following the examination.

If the report of the examining committee is favorable, the student will be formally reclassified as a candidate for the degree of Doctor of Philosophy.

If the report is unfavorable, the examining committee may recommend that the student be permitted to request a second examination by submitting a new request (*G.S. Form 8*). The student must wait at least until the following session (including summer session) to repeat the examination.

Should the preliminary examination be failed twice, the student may not be given a third examination, except upon the recommendation of the examining committee and with special approval of the Graduate Council.

4. Report of the Doctoral Final Examination

At the completion of the final examination, the committee chair should present the examination committee with a *Report of the Final Examination (G.S. Form 11)*, which is sent to the department by the Graduate School upon approval of the request for an examining committee. Each member of the examining committee must indicate approval or disapproval and sign the report form. Only members of the approved examining committee may take part in the evaluation. No more than one dissenting vote is acceptable in certifying a candidate to receive the Ph.D. degree. If the examination is unsatisfactory, a candidate must wait at least until the following session (including summer session) to repeat the final examination. A new request (*G.S. Form 8*) must be submitted.

G. Depositing the Completed Thesis

Theses are reviewed, in either their electronic or paper form, in the Thesis/Dissertation Office (Room 170, Young Hall). In-person final thesis deposit appointments are scheduled and conducted, whenever possible, with either the candidates or a designated proxy. Final deposit appointments are scheduled events and may be made by contacting

the Graduate School. Due to the large number of theses deposited during the last week of classes, it is strongly recommended that candidates deposit their theses early to avoid the possibility of not meeting the deposit deadline and not being able to graduate.

Following a successful final defense examination, the complete and corrected deposit copy of the thesis must be submitted electronically to the Thesis/Dissertation Office on or before the last day of classes of the session in which the student is to graduate. Candidates must also ensure their *Electronic Thesis Acceptance (G.S. ETAF Form 9)* is completed and must provide all materials requested in their respective final deposit checklists, which are posted on the Thesis/Dissertation Office web site. A final copy of the thesis should be provided to both the major professor and to the head of the graduate program.

H. Thesis Publishing Fee

To satisfy the requirement that all doctoral theses be published, Purdue University has made arrangements for all theses to be published by ProQuest Information and Learning, Ann Arbor, Michigan. In a mailing from the registrar, candidates are notified of the doctoral thesis publishing fee that must be paid to the bursar. Candidates will receive no direct billing or reminder from the bursar relative to the payment of this fee. (See Section X-D.) Candidates must pay the publishing fee directly to the bursar; however, any other optional fees (e.g., "Open Access," "Copyright Registration," etc.) will be paid to the Thesis/Dissertation Office by money order.

I. Survey of Earned Doctorates and Graduate School Exit Questionnaires

Although completing this survey is optional, departments should strongly encourage doctoral candidates to complete the Survey of Earned Doctorates, conducted by the National Opinion Research Center of the University of Chicago. This questionnaire is supplied to the candidate by the Graduate School upon approval of the *Request of the Final Examination*. Responses provide data that are important for statistical studies by federal agencies that conduct studies of national trends in doctoral education and of manpower supply and demand. Such studies may influence the funding of research and doctoral fellowships. The questionnaire should be submitted to the Graduate School either before or with the *Thesis Receipt (G.S. Form 16)*. In addition, the Graduate School administers an exit questionnaire that is provided to both master's and doctoral

candidates at the time the final examination is scheduled. Students should be assured that their answers are maintained confidentially in the Graduate School. The trend data, however, is distributed to departments and is useful in strengthening our graduate programs.

J. Certifying and Depositing Confidential Theses

If the thesis contains proprietary information or other information that should be withheld temporarily from the public domain, a *Request for Confidentiality of Thesis (G.S. Form 15)* may be completed and submitted to the dean of the Graduate School. The request must be signed by the student, the major professor, and the head of the graduate program.

Candidates must deliver the approved *G.S. Form 15* and the appropriate number of thesis copies, as indicated in their respective final deposit checklist to the Thesis/Dissertation Office, Room 170, Young Hall. Master's candidates must deliver their bound deposit copy, as well as the copy for the head of the graduate program. As necessary, doctoral candidates must deliver a copy for the head of the graduate program, in addition to their electronic thesis submission.

As for any thesis, degree candidates must deliver their Thesis Receipt (*G.S. Form 16*) from the Thesis/Dissertation Office, acknowledging deposition of their thesis, to the Graduate School Student Records Office no later than the close of business (5 p.m.) on the last day of classes of the session in which their degree is to be awarded. The initial period of confidentiality normally is granted for one year. An extension for a period of six months may be requested but requires the approval of the Graduate Council. In cases where the sponsoring organization has a contractual arrangement, which expressly stipulates a longer time period of confidentiality, with Purdue University and/or the Purdue Research Foundation, a two-year initial period of confidentiality may be requested.

The Thesis/Dissertation Office will retain both the deposit copy of the thesis and the copy for the head of the graduate program and will not permit access to these copies during the period of confidentiality without authorization in writing by the author, the major professor, or the head of the graduate program and the endorsement of the dean of the Graduate School. At the end of the approved period of confidentiality, the thesis will be removed automatically from such status unless a request for extension is approved by the Graduate Council. Earlier removal from confidentiality may be authorized in the same manner as access during confidentiality.

When the period of confidentiality has elapsed or is terminated, the deposit copy will be removed from the confidential files, entered in the Purdue Libraries THOR (The Online Resource) Catalog, and permanently placed in the Purdue Libraries Repository. Electronic thesis submissions will be taken out of the "holding queue" and electronically forwarded to ProQuest Information and Learning for processing.

K. Multiple Degrees

1. Master's Degrees

A student may earn more than one Purdue master's degree. The student must meet the requirements for each master's degree program, and there can be a maximum of nine Purdue credit hours (at the 50000- and 60000-level) of overlap of coursework from one plan of study to another. Coursework from only one Purdue master's degree may be used to partially satisfy Ph.D. degree requirements.

2. Ph.D. Degrees

Although the Graduate School discourages the admission of students who hold a Ph.D. degree, from any institution, for a second Ph.D. degree, it recognizes that there may be special circumstances in which such an admission is appropriate. Such decisions can be made at the level of the departmental graduate committee and will be processed like other recommendations for admission that come to the Graduate School.
(See Section III-B-10.)

Appendix 2

Work Loads of Students with Graduate Staff Appointments

A graduate student employee's work load should reflect both the work assignment and contractual obligations of the assignment. The following statement of principle, endorsed by the Graduate Council on November 15, 1990, defines the mutual obligations of faculty employers/supervisors and graduate student employees:

The practice of employing graduate assistants is vital to the operation of Purdue, as it is to all large research universities. A good assistantship program benefits everyone. A student on a graduate appointment receives a salary, health and other benefits, tuition remission, and valuable experience in research and teaching. The University is able to conduct classes and to staff research groups at levels that would otherwise not be possible.

For an assistantship program to be successful, certain goals and safeguards need to be kept in mind. Whenever possible, duty assignments should stimulate the intellect and enhance the professional knowledge and skill of the assistant. But in all instances, the duties of the assistant must be fairly and equitably assigned, and the demands placed upon the assistant must not be unreasonable. The Graduate School claims neither the mandate nor the wisdom to direct the day to day interaction of professors and their assistants.

However, we do seek to discover a rational frame of reference within which the wide variety of policies and practices may be calibrated and justified. The generally accepted measure for setting graduate assistant assigned work loads is time. Purdue, like many other major research universities, assumes that a half-time appointment entails 20 hours of service per week. If an assistant's duties are *independent of the student's coursework and research*, the definition of the half-time work load is relatively straight forward: not more than 20 hours per week. Of course some flexibility is necessary, both because one individual may work faster or more efficiently than another and because the pressure of work to be done ebbs and flows across the semester. "Overworking" an individual whose assistantship tasks are distinct from his or her student tasks and thesis research has a double consequence. Not only is the *assistant* being required to work without pay, the *student* is being deprived of time that might be spent in study and research.

When there is no clear distinction between the duties required by the assistantship and a student's own study and research – when all or most of the *assistant's* tasks contribute directly toward the *student's* degree – judgments as to the reasonableness of a work load can be very difficult. Under such circumstances, it would be foolish to encourage a student to think that a total of 20 hours of work per week would be likely to bring about the desired work product and to advance his or her intellectual and technical progress at an acceptable rate. The very fact that individual cases differ makes it especially important for those who supervise graduate assistants to discuss work obligations with their students, early and often. One final word. The supervisor is often the assistant's employer, counselor, advisor, mentor, examiner, and referee. 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 assistant's health and sanity, of the dangers inherent in extended periods of high stress, and of the reasonable claims family, friends, and society have on the time and energy of the assistant. Departments are urged to establish a formal mechanism by which students who feel they are being treated unfairly may receive counseling, guidance, and redress.

Appendix 3

Policies and Guidelines for Research Practices and Professional Ethics

The document “Graduate Education at Purdue University” [Appendix 4; <http://www.gradschool.purdue.edu/faculty/resources/policies.cfm>] describes the expectations and experiences of graduate students, graduate advisers, and departments at the university and recommends general practice for successful achievement of the goals of graduate education. All graduate faculty and graduate students are urged to read these guidelines and discuss with each other their expectations and responsibilities.

The document “American Chemical Society Ethical Guidelines” [5 pages; <http://pubs.acs.org/instruct/ethic.html>] describes the ethical obligations of (a) editors of scientific journals, (b) authors, (c) reviewers of manuscripts and (d) scientists publishing outside the scientific literature. Part of that document is given in section IV.

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. The

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

Graduate Education at Purdue University

Please take a few moments and read the information about Graduate Education at Purdue University, which applies to **Graduate Students**, **Advisers**, and **Faculty**. This information is found on the following web sites:

http://www.purdue.edu/policies/pages/teach_res_outreach/c_22_print.html

<http://www.gradschool.purdue.edu/documents/GradEd.pdf>

<http://www.gradschool.purdue.edu>

Appendix 5

Academic and Research Affairs - Intellectual Property (I.A.1)

<http://www.purdue.edu/policies/academic-research-affairs/ia1.html>

Volume I: Academic and Research Affairs

Chapter A: Education and Research Issuing

Office: Office of the President Responsible

Officer: Vice President for Research

Responsible Office: OVPR/Office of Research Administration

Originally Issued: May 18, 2007

Most Recently Revised: November 18, 2011

POLICY VIII.4.1

Volume VIII: Teaching, Research, and Outreach

Chapter 4: Intellectual Property Issuing Office:

Office of the President Responsible Officer: Vice

President for Research

Responsible Office: OVPR/Office of Research Administration

Originally Issued: March 21, 1973

Most Recently Revised: May 18, 2007

Table of Contents

Statement of Policy

Definitions

Reason for Policy

Who Should Know This Policy

Contacts

Exclusions

Procedures

Responsibilities

History

Statement of Policy

I. Inventions

1. **Principle of University Ownership.** The University shall own each Invention conceived in whole or in part during the course of any employment, research, or scholarship activity involving or relating to the use of University Resources.

2. **Disclosure.** Inventors shall promptly in writing disclose and assign each Invention to the University and/or its designee, and shall not disclose any Invention to any third-party except as specifically authorized by the University or its designee. If more than one individual participated in the discovery or development, the report shall be signed by all such participants. The report shall constitute a full and complete disclosure of the Invention subject matter of the discovery or development and the identity of all persons participating therein.

II. Copyrightable Works

1. **Principle of University Ownership.** The University permits authors to retain the copyright to Instructional Copyrightable Works and Scholarly Copyrightable Works. Excepting only Instructional Copyrightable Works and Scholarly Copyrightable Works, the University shall own the copyright to each Copyrightable Work conceived in whole or in part during the course of any employment, research, or scholarship activity involving or relating to the use of University Resources.

2. **Disclosure of Copyrightable Works with Potential Commercial Value.** Each author of a Copyrightable Work that is University-owned according to the foregoing Principle of University Ownership and that may have potential commercial value shall promptly disclose the Copyrightable Work in writing to the University and/or its designee.

3. **License to University for Instructional or Scholarly Copyrightable Works.** Each Instructional or Scholarly Copyrightable Work shall, by operation of this policy, be subject to a perpetual nonexclusive, royalty-free license from the author to the University to use, duplicate, and internally distribute the Instructional or Scholarly Copyrightable Work for any pedagogical, research, or educational purpose of the University, subject to attribution of original authorship and to internal academic procedures and requirements of the department and school of origin of the Instructional or Scholarly Copyrightable Work. The foregoing license shall be broadly construed to enable the University's efforts to preserve research integrity and prevent fabrication, falsification, and plagiarism.

4. **Works of Independent Contractors.** The University ordinarily requires a written agreement from independent contractors that ownership of Copyrightable Works made in the course of a University retention will be assigned to the University.

5. **Commercialization by Author.** An author of an Instructional or Scholarly Copyrightable Work that is not University-owned is free to publish it, register the copyright in the author's name, and retain any revenues which may result therefrom.

III. Trademarks

The University owns all rights, title and interest in Trademarks that relate to University Intellectual Property or relate to a program of education, service, public relations, research or training by the University.

IV. Tangible Research Property and Research Data

The University owns all rights, title, and interest in Tangible Research Property and Research Data developed with support from University Resources. Subject to the University's control of the Disposition of Intellectual Property under Section V of this policy, in most instances the University permits the creators of University-owned Tangible Research Property or Research Data to retain primary physical custody of it solely for use in scholarship and not for any commercial purpose.

V. General Policy on University Resources

University Resources are to be used solely for University purposes and not for personal commercial activities.

VI. Disposition of University Intellectual Property

This policy shall be deemed 1) a term and condition of employment for every employee of the University, 2) a term and condition of enrollment and attendance at the University by students, and 3) a term and condition of participation in any University research or other use of University Resources by any person (whether or not employed by, compensated by, or enrolled at the University). Outside Activities authorized by the University for University faculty or staff remain subject to this policy to the extent that they involve or relate to the use of University Resources.

As directed and requested by the University and/or its designee, all creators of University Intellectual Property shall execute legal documents required to effect this policy. The University (on its own behalf and on behalf of its designee) reserves the sole right in its exclusive discretion to make agreements regarding the retention, ownership, patenting, licensing, accessing, and any other use or disposition of any right, title or interest in University Intellectual Property. The University and/or its designee will determine whether to commit funding to obtain patent, copyright, or trademark protection for particular disclosed University Intellectual Property and/or to seek to identify one or more licensees who will bear the cost of obtaining that legal protection.

No creator of University Intellectual Property has the capability or authority to assign, license or otherwise dispose of University Intellectual Property except to the University or its designee pursuant to this Agreement. University personnel engaged in Outside Activities shall have no authority to enter into an Intellectual Property agreement that conflicts with this policy. Persons who wish to confirm that a consulting, employment, or other agreement that addresses assignment of intellectual property associated with a proposed Outside Activity does not conflict with this policy should submit a copy of the agreement for review with their Form 32A. The Office of Research Administration in the Office of the Vice President for Research is available to assist as needed.

VII. Reconveyance of University Intellectual Property

At the recommendation of the Provost, the Vice President for Research, and the Executive Vice President and Treasurer of the University, and upon the approval of the President of the University, University Intellectual Property may be reconveyed to the University personnel who disclosed it, upon their request, if the reconveyance would not: (i) violate any legal obligations of or to the University, (ii) limit appropriate University uses of the materials, (iii) create an unmanageable conflict of interest for the inventor/creator, (iv) have significant commercial or public value which may best be exploited by the University itself, or (v) otherwise conflict with University goals or principles.

VIII. Equities of Participating Parties

1. General Policy. Income derived by the University and/or its designee directly from the commercialization of University Intellectual Property shall be administered in accordance with this policy. It is the policy of Purdue University to encourage and recognize the creative efforts of University personnel and, in so far as the Board of Trustees of the University deems it consistent with the public interest, to share the financial rewards of such efforts on an equitable basis. This general policy may be rescinded or amended at any time by the University, and it is not intended to and does not create any legally enforceable rights whatsoever in any University personnel with respect to any present or future University Intellectual Property or proceeds therefrom.

2. Determination of Equities. Upon analysis and advice solicited by the Office of the Vice President for Research from the Committee on Patents and Copyrights, and/or other persons with relevant expertise, the Vice President for Research shall determine:

- ☐ whether particular Intellectual Property is University Intellectual Property;
- ☐ whether the University's identified costs of development shall be recovered from gross proceeds prior to distribution of Net Proceeds from particular University Intellectual Property.
- ☐ whether any of the Net Proceeds from particular University Intellectual Property shall be distributed to persons who disclosed it and, if so, in what proportion.

3. General Principle of Division. In most instances, Net Proceeds will be distributed according to the following formula: a) two-thirds to the University, and b) one-third to University personnel who created the University Intellectual Property that gives rise to the Net Proceeds. Any agreement among those University personnel setting relative distribution shares among themselves shall be taken into account. In most instances, Net Proceeds distributed to the University shall, in turn, be distributed 50% to the department/administrative unit from which the underlying University Intellectual Property originated and 50% to the Trask Fund, which supports end-stage development and increases the utility to the public of University Intellectual Property. If a recognized University center/institute plays a significant role in the development of University Intellectual Property and the dean or vice president having administrative responsibility for the center/institute so recommends in writing, the share of Net Proceeds normally distributed to the department/administrative unit shall be distributed one-third to the

center/institute and two-thirds to the academic units having administrative responsibility for those staff who are participating in the distribution of the inventor's share of royalty proceeds. The President may authorize a variance from the foregoing principles, depending upon the circumstances of an individual case, including relevant contractual arrangements and any applicable funding regulations.

IX. Committee on Patents and Copyrights

The Committee shall consist of at least thirteen members. There shall be six *ex officio* members: the Executive Vice President and Treasurer; the Vice President for Research; the Vice President for Business Services and Assistant Treasurer; the Director, Purdue Research Foundation Office of Technology Commercialization; the Director, Office of Research Administration; and the Director, University Copyright Office. There shall be at least seven additional members appointed by the Vice President for Research for terms of three years each. Three of these shall be appointed upon the recommendation of the University Senate. The terms of the Senate members shall be staggered to provide that one new member per year will be added to the Committee.

The Vice President for Research shall be Chairman of the Committee, which shall elect such other officers as it deems necessary. One of the Committee members appointed by the Vice President for Research shall be designated as Executive Secretary of the Committee and will be responsible for keeping appropriate written records of its proceedings and actions.

As directed by the Vice President for Research, the Committee shall convene to review and advise the Vice President for Research on any matter and/or determination under this policy. University personnel shall be entitled to appear before the Committee and present evidence with respect to any matter specifically involving the application of this policy to them or their work.

The President of the University may review any action or recommendation of the Committee, and the President shall do so at the request of any person subject to this Policy. The President may instruct the Provost and the Vice President for Research with respect to any recommendation of the Committee, or refer the matter to the Board of Trustees of the University, with the President's recommendations. The determination of the Vice President for Research, the Provost and the President of the University, or the Board of Trustees of the University, as the case may be, shall be final and conclusive.

X. Miscellaneous

- 1. Designee.** The University may designate Purdue Research Foundation or any other representative to act for it in any respect hereunder.
- 2. Amendments.** This Memorandum may be amended or rescinded in whole or in part at any time by the Board of Trustees of the University or by the President of the University under the authority of the Board of Trustees.

Definitions

<u>Word</u>	<u>Definition</u>
Intellectual Property	The term “Intellectual Property” means property such as an invention, patent, copyrightable work, copyright, trademark, service mark, trade secret, integrated circuit mask, research data, plant variety protection certificate, tangible research property, or physical embodiment such as a model, machine, device, design, apparatus, instrumentation, circuit, computer program, visualization, biological material, chemical, other composition of matter, or plant that originates in or relates to academic or research activity and that is protectable by any law.
Invention	The term “Invention” means a type of discovery, process, method, device, plant, composition of matter, or other creation that may be considered inventive within the meaning of patent laws.
Copyrightable Work	<p>The term “Copyrightable Work” means an original work of authorship, which has been fixed in any tangible medium of expression, such as:</p> <ul style="list-style-type: none"> • Literary works such as books, journal articles, poems, manuals, memoranda, tests, computer programs, instructional material, databases, bibliographies; • Computer software; • Musical works including any accompanying words; • Recorded performance, including instructional performance; • Dramatic works, including any accompanying music; • Pantomimes and choreographic works (if fixed, as in notation or videotape); • Pictorial, graphic and sculptural works, including photographs, diagrams, sketches and integrated circuit masks; • Motion pictures and other audiovisual works such as videotapes; • Sound recordings; • Architectural works; and • Any other works determined to be copyrightable under copyright laws as now existing or hereafter amended or supplemented.

A Copyrightable Work may be the product of a single author or a group of authors who have collaborated on a project.

Instructional Copyrightable Work	The term “Instructional Copyrightable Work” means a Copyrightable Work that a) is authored by an identifiable University faculty member or instructor primarily for the instruction of students, b) is not specifically commissioned by the University, and c) is not a recording of a teaching performance made to or for University students.
Scholarly Copyrightable Work	The term “Scholarly Copyrightable Work” means a Copyrightable Work created by any person subject to this policy primarily to express and preserve scholarship as evidence of academic advancement or academic accomplishment. Such works may include, but are not limited to, scholarly publications, journal articles, research bulletins, monographs, books, plays, poems, musical compositions and other works of artistic imagination, and works of students created in the course of their education, such as exams, projects, theses or dissertations, papers and articles.
Trademark (including Service Mark)	The terms “Trademark” and/or “Service Mark” mean any word, name, symbol or device, or any combination thereof, whether or not registered as a trademark, that is used to identify goods or services and distinguish them from those manufactured or sold by others
Research Data	The term “Research Data” means the recorded factual material commonly accepted in the research and scholarly communities as necessary to validate research findings, but not any of the following: preliminary analyses, drafts of scholarly manuscripts, plans for future research, peer reviews, or communications with colleagues.
Tangible Research Property	The term “Tangible Research Property” means items produced in the course of research, such as compositions, biological materials, materials, drawings, devices, and equipment
University Resources	The term “University Resources” means any support administered by or through Purdue University, including but not limited to funds, facilities, equipment or personnel, and funds, facilities, equipment, or personnel which are provided by governmental, commercial, industrial, or other public or private organizations and administered or controlled by the University.
University Intellectual Property	Intellectual Property which is owned or controlled by the University pursuant to this policy and/or applicable law is University Intellectual Property.

Net Proceeds The net proceeds derived from University Intellectual Property shall mean the gross receipts there from (including, but not limited to, rents, royalties, dividends, earnings, gains, and sales proceeds), less all costs, expenses and losses paid or incurred by the University or its designee in connection therewith (including, but not limited to, all direct and indirect costs and expenses specific to the creation, preservation and legal protection of the University Intellectual Property, including attorney fees).

Outside Activity An Outside Activity is an activity authorized by the University pursuant to Form 32a and in conformance with University policies applicable thereto.

Committee on Patents and Copyrights The term "Committee on Patents and Copyrights" means a standing committee appointed by the Vice President for Research whose organization, purpose and powers are specified in this policy.

Reason for Policy

Inventions, copyrightable works and other creative products of scholarship that have the potential to benefit the public through practical application may result from the activities of University employees in the course of their employment or through the use, by University students or by any person, of University resources such as facilities, equipment, or funds. The purpose of this policy on intellectual property is to provide the necessary incentives and protections to encourage the discovery and development of new knowledge, and its application and transfer for the public benefit. In so doing, the University is guided by the following goals:

1. To optimize the environment and incentives for research and scholarship, and for the creation of new knowledge at the University;
2. To enhance and protect the discovery, learning, and engagement missions of the University;
3. To recognize and protect the interests of the public; of individual creators of novel concepts, inventions, and materials; of the University; and of sponsors of research and scholarship;
4. To bring the fruits of scholarship into practical use for the benefit of society as quickly and effectively as possible;
5. To protect the interests of the people of Indiana and The Trustees of Purdue University through a due recovery by the University of its investment in research and scholarship; and
6. To protect the traditional freedom of its faculty and staff to publish pedagogical, scholarly, or artistic works.

Who Should Know This Policy

- President
- Provost
- Executive Vice President and Treasurer
- Chancellors
- Vice Presidents/Vice Provosts
- Deans
- Department Heads/Directors
- Faculty
- Business Office Staff
- Administrative and Professional Staff
- Clerical and Service Staff
- All employees
- Graduate Students
- Undergraduate Students
- Visiting Scientists/Visiting Scholars

Contacts

Persons needing assistance or guidance for this policy are encouraged to contact the Office of the Vice President for Research. Persons who have any question regarding application of this policy to potential Intellectual Property shall report the relevant facts to the Office of the Vice President for Research. Interpretation of Policy Director, University Research Administration, 494-6840 pedunn@purdue.edu

Disclosure of Intellectual Property

Director, Office of Technology Commercialization, 494-2610, OTCIP@prf.org

Exclusions

There are no exclusions from this policy.

This policy shall not be interpreted to limit the University's ability to meet its obligations for deliverables under any contract, grant, or other arrangement with third-parties, including sponsored research agreements, license agreements and the like. The University shall coordinate reporting requirements and other obligations to research sponsors regarding University Intellectual Property developed under a research contract or grant, including but not limited to obligations to the United States Government under 37 CFR 401.

Procedures

For procedures to disclose inventions or copyrightable materials to Purdue University see the Purdue Research Foundation Office of Technology Commercialization Web site at www.prf.org/otc/processes.asp.

Responsibilities

1. **Board of Trustees**
Amend or rescind this policy, in whole or in part, as appropriate.
2. **President**
Approve reconveyance of University Intellectual Property; review actions or recommendations of the Committee on Patents and Copyrights as needed; provide instructions regarding recommendations of the Committee on Patents and Copyrights or refer matters to the Board of Trustees; amend or rescind this policy, in whole or in part, as appropriate.
3. **Provost**
Recommend reconveyance of University Intellectual Property.
4. **Executive Vice President and Treasurer**
Recommend reconveyance of University Intellectual Property; serve as ex officio member of the Committee on Patents and Copyrights.
5. **Vice President for Research**
Determinations identified under Determination of Equities and General Principle of Division; serve as Chairperson of the Committee on Patents and Copyrights; appoint members to the Committee on Patents and Copyrights.
6. **Vice President for Business Services**
Serve as ex officio member of the Committee on Patents and Copyrights.
7. **Director, University Research Administration**
Interpret this policy.
8. **Purdue Authors/Creators/Inventors**
Disclose inventions and/or copyrightable materials to the University.
9. **Director, Purdue Research Foundation
Office of Technology Commercialization**
Serve as ex officio member of the Committee on Patents and Copyrights

History

November 18, 2011: Policy number changed to I.A.1 (formerly VIII.4.1).

May 18, 2007: This policy supersedes Executive Memorandum B-10, Policy on Intellectual Property, issued July 10, 2000.

Appendix 6

Department of Food Science

Graduate Student

RESEARCH REGISTRATION FORM

PUID _____ Name _____

Term _____ Year _____

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

RESEARCH COURSE INFORMATION						
Add Drop Modify	CRN	SUBJECT	COURSE NO.	VAR. CREDIT	Instructor Signature	Date

RESEARCH EXPECTATIONS
<p>Enrollment in FS 698/699 entails an expectation of reasonable progress in scholarly research. These expectations include:</p> <ul style="list-style-type: none"> i) conducting independent research on the background, motivation, and prior work related to the primary subject of the research project, ii) actively participating in laboratory research at a level consistent with a professional research position, iii) contributing to overall laboratory operations, iv) following all safety guidelines and expectations associated with the research environment, v) following ethical research practices, vi) contributing to the written and oral dissemination of research findings <p>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.</p> <p>If a faculty member anticipates assigning an unsatisfactory grade due to the student's failure to meet expectations in one or more of the areas above, a detailed description of specific expectations must be provided and these expectations fully discussed with the student at the time of registration.</p>

Acknowledge of Expectations

SIGNATURE OF STUDENT	Date
----------------------	------

SIGNATURE OF ADVISOR	Date
----------------------	------

INSTRUCTIONS FOR COMPLETING RESEARCH REGISTRATION FORM

Please complete the sections of the Research Registration 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
C6595	Butzke, C.	Food Processing & Technology Development
C5012	Bhunja, A.	Food Safety & Microbiology
C5093	Campanella, O.	Food Processing & Technology Development
C5960	Corvalan, C.	Food Processing & Technology Development
C8898	Deering, A.	Food Safety & Microbiology
C10394	Feng, Y.	Food Safety & Microbiology
C7851	Farkas, B.	Food Processing & Technology Development
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
C1824	Ladisch, M.	Food Processing & Technology Development
C7731	Liceaga, A.	Food Chemistry, Structure & Function
C9935	Lindemann, S.	Foods for Health
C4451	Mattes, R.	Foods for Health

C5484	Mauer, L.	Food Chemistry, Structure & Function
C2879	Narsimhan, G.	Food Processing & Technology Development
C9888	Mishra, D.	Food Processing & Technology Development
C2500	Nielsen, S.	Food Chemistry, Structure & Function
C0113	Okos, M.	Food Processing & Technology Development
C7988	Oliver, H.	Food Safety & Microbiology
C9961	Xu, Q.	Food Processing & Technology Development
C5619	Reuhs, B.	Food Chemistry, Structure & Function
C7260	San Martin, M.	Food Processing & Technology Development
C4932	Santerre, C.	Foods for Health
C3171	Tao, B.	Food Processing & Technology Development
C1906	Weaver, C.	Foods for Health
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:

	Research Credits	Total Credits	Full-Time Status
Summer	Minimum 3	Maximum 9	Minimum 5
Fall/Spring	Minimum 6	Maximum 18	Minimum 9

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

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

Your Major Professor needs to sign for your research course hours and at the bottom of your form as Advisor.

Graduate Program Coordinator will need the form for processing your research credit hours and any other course needing signature approval.

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
10 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 INS regulations, international graduate students on a ½ time assistantship must carry a minimum of 6 hours for fall and spring sessions. Although INS regulations state an international graduate students 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 course request form to the Graduate Coordinator for processing of research credits and any other courses that you have to get signature authority for.

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 Occurrence (circle one): 1 2 3 4 5 6 7 8

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.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Quality of progress report oral presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Knowledge and understanding of research project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Research progress to date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Coursework progress to date.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments, Concerns & Recommendations:

Printed name of Committee Member

Signature

(Chair) _____

Advisor Signature: _____ **Date:** _____

Student Signature: _____ **Date:** _____

Appendix 7

M.S. Bypass Sample Letter



Food Science Graduate Program

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 201____ 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. Arun Bhunia, Food Science Graduate Program Chair

Department of Food Science



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.

Teaching Assistant Evaluation by Students

(Note: This will not be read until after the end of the semester)

T.A.'s Name: _____ **Course:** _____ **Year:** _____

1. The teaching assistant was helpful during office hours.

Strongly Disagree	Disagree	Undecided	Agree	Agree Strongly	Not applicable
1	2	3	4	5	N/A

Comments:

2. The teaching assistant explained course material clearly.

Strongly Disagree	Disagree	Undecided	Agree	Agree Strongly	Not applicable
1	2	3	4	5	N/A

Comments:

3. The teaching assistant was prepared for class.

Strongly Disagree applicable	Disagree	Undecided	Agree	Agree Strongly	Not applicable
1	2	3	4	5	N/A

Comments:

4. I would like to have this teaching assistant in more courses.

Strongly Disagree applicable	Disagree	Undecided	Agree	Agree Strongly	Not applicable
1	2	3	4	5	N/A

Comments

Survey of Teaching Assistants

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 serve as a T.A. for this course?

Please return to Mitzi Barnett

Thank you!

Appendix 8

Master/Ph.D. Degree Plan of Study

Purdue University Department of Food Science

Student Name: _____ Email: _____

Area of Specialization: _____

AREA	COURSE TITLE	SUBJECT ABBR.	COURSE NO.	CREDIT HRS
<i>Primary</i>	<i>Food Sci. Mini series</i>	<i>FS</i>	<i>55001/55101/55201/55301/55401</i>	<i>6</i>
<i>Primary</i>	<i>Case Study</i>	<i>FS</i>	<i>55501</i>	<i>1</i>
<i>Primary</i>	<i>Statistics M.S. (3cr)</i> <i>Ph.D. (additional 3cr)</i>	<i>STAT</i>	<i>51100, 51200, 51400</i>	<i>3</i> <i>+ 3</i>
<i>Primary</i>	<i>Food Sci. Seminar M.S.</i> <i>(1cr)</i> <i>Ph.D. (additional 1cr)</i>	<i>FS</i> <i>FS</i>	<i>68400 (MS)</i> <i>68400 (Ph.D.)</i>	<i>1</i> <i>+ 1</i>
<i>Primary</i>	<i>Responsible Conduct in Research</i>	<i>GRAD</i>	<i>61200</i>	<i>1</i>
Related	X-ray Fiber Diffraction	FS	63200	2
Related	Human Sensory Systems	FS	53400	3
Related	Food Proteins	FS	60800	3
Related	Carbohydrates	FS	63000	3
Related	Biochemistry	BCHM	56100	3
Related	Rheology	ABE	59000	3
Related	Scientific Writing in Food Science	FS	62000	2
Related	Product Development	FS	69000	1
Total				32 - 36
Comment Section: Include test out information for M.S. and Ph.D. Include FS 69700 Supervised Teaching (Ph.D.). Include Transfer of eligible M.S. courses (Course number, title and credit hours for each).				

Note: Primary courses - required core courses*Related courses - courses taken in research/signature area****Approval by Advisory Committee:**

 Printed Name (Chair) Signature Date

 Printed Name Signature Date

 Printed Name Signature Date

 Printed Name Signature Date

Appendix 9

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. Rationale 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 Budget template for proposal – it is in your prelim packet; see Graduate Coordinator.

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

References

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: Mitzi Barnett

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:

Ph.D. PRELIMINARY EXAMINATION PROPOSAL EVALUATION FORM

Date: _____

Student: _____

Evaluators: _____

Return By: _____

Return To: _____

Proposal Title: _____

RATING:

_____ Acceptable

_____ Unacceptable

Please save all comments for the Oral Examination.

Signature: _____

Please Sign and Print

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

PURDUE UNIVERSITY GRADUATE SCHOOL

Request for Appointment of Examining Committee

Name of Student _____ PUID No. _____

Examination to be taken:

Preliminary Examination

Final Examination

(Please type)

Degree sought (exact title) _____

It is recommended that the following serve as members of the Examining Committee:

	Graduate Faculty Identifier	Area
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

It is planned to hold the examination:

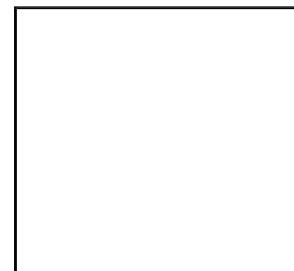
Date _____ Time _____ Building _____ Room No. _____

Thesis Title _____

Recommended by: _____
Major Professor
Head of the Graduate Program

Department: Food Science Dept. Code: FDSC

Date Submitted _____



Appendix 10

Proxy Procedure

1. When is it needed?

An examiner for MS/PhD final/preliminary examination cannot be present here but will be able to participate via conference call (telephone, Skype or other).

2. What to do?

The Major Professor first obtains written permission from the examiner allowing the Graduate Chair to be their proxy in signing the exam form(s); then fills out this section and submits to the Graduate Chair, along with the permission, at least a day prior to the exam.

Student's name: _____ Major Professor's name: _____

Examination: (a) MS _____ (b) Prelim _____ (c) PhD _____ (Tick one)

Date of exam: _____

External examiner: (a) Name _____
 (b) University/Company _____
 (c) E-mail _____
 (d) Phone _____

Examiner's written permission: Yes, attached _____ (Required for approval)

Approval of Graduate Chair: Signature _____ Date _____

3. What next?

The Graduate Coordinator will send the day before the exam relevant rubrics to the external examiner for evaluating the student's performance in oral and written parts of the exam.

4. Then what?

The examiner must take care of the following two things as soon as the examination is over, the same day:

(a) Inform decision (Approve/Disapprove/Abstain) to the Graduate Chair by e-mail who could then enter this on the examination form along with proxy signature to be forwarded to the Graduate School (see page 108).

(b) Return electronically the evaluated rubrics to the Graduate Coordinator.

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 Sheri Fell 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 1 credit hour of research, paying out of state tuition at the rate of \$948.30 plus international student fee of \$80.00 for a total of **\$1028.30** per session. These are the fees for the 2014-2015 academic year.
- 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.
- 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 any academic session, please inquire beforehand 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 and the Food Science Business Office and will notify the appropriate staff representatives in these two areas in a timely manner.

Printer Name: _____

Signature: _____

Date: _____

Food Science Graduate Student Leave of Absence Form
(to be filled out and approved two weeks before you leave)

To Whom It May Concern:

Date: _____

I. Student to complete _____
Student's name

I will be on leave of absence without pay during the period _____ to _____ in order to (give the reason) _____ . I understand that my appointment will be removed from the payroll system during this period and re-instated on my return by my Major Professor sending an email to the Business office.

Company/Organization Name: _____
Company Address: _____
Students Summer contact information including phone number: _____
Supervisor Name, email & phone number: _____

International Student will need the following information to check off and attach to this document

ISS Approval form _____
Optional Practical Training (OPT) (Awarded through Immigration) – for F-1 visa holders _____
or Curricular Practical Training (CPT) (Awarded through ISS) – for F-1 visa holders _____
J-1 visa holders need to apply for Academic Training (AT) through the ISS office.

Note: *This will require you to be registered for 1 hour of research course work while you are off of campus, usually either FS 69800 or FS 69900.*

II. Major Professor to complete

Your assistantship will resume on _____ and will be effective until _____ at the salary of _____.

Major Professor's name (print) and signature

Business office signature

Graduate Chair approval

Dept. Head approval

Note: Consult the business office on the policy of benefits.

RETURN THIS FORM AND OTHER DOCUMENTS TO MITZI BARNETT. THANK YOU.

cc: Mitzi Barnett, Food Science Graduate Program Coordinator
Sheri Fell, Food Science Business Office
Major Professor
ISS
Student
Laurie Van Keppel, Career Services Coordinator

**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		<p>F-1 visa holders may qualify to apply for Curricular Practical Training (CPT) awarded through the ISS office.</p> <p>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.</p> <p>J-1 visa holders need to apply for Academic Training (AT) through the ISS office.</p>	N/A
Registration requirements	<p>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.</p> <p>For example, one research credit is = to 5 hours per week of work devoted to research/thesis. Fees will be assessed “out of state”, unless student is a resident of Indiana.</p> <p>Note:</p> <p>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.</p> <p>Registration in the Final Academic Session</p> <ol style="list-style-type: none"> 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. 	<p>If Curricular Practical Training (CPT) is being used for work authorization, the student must register for a minimum of one credit hour of research. 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.</p> <p>International Students are required to adhere to minimum registration guidelines according to their visa type. Please seek advice from an ISS Counselor.</p>	<p>If not working on research/thesis during leave, no registration is required.</p> <p>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.</p>

**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	<p><u>Summer Session Only</u></p> <p>A student having approved leave of absence via a <i>Request for Absence from Campus (HRS Form 33ABSENCE)</i> will continue to receive Graduate Staff Medical Insurance coverage without interruption. Upon return to the graduate staff position, the Summer health insurance premiums will be deducted from the student's pay. If the student does not return, the insurance will be cancelled back to the separation date.</p> <p><u>Fall or Spring Semester</u></p> <p>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.</p>	<p><u>Fall or Spring Semester</u></p> <p>International Students must maintain appropriate insurance coverage according to ISS guidelines.</p> <p><u>Note:</u> <i>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.</i></p>	

All leaves of absence greater than 10 consecutive work days, 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 *Request for Absence from Campus (HRS Form 33ABSENCE)* must be processed. All other leaves require approval by the appropriate vice president or dean or designee on the same form (*HRS Form 33ABSENCE*). 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 590 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 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
<u>Semester Total Hours (approx. 40-45 hrs/cr)</u>		N/A

Student Signature: _____ **Date:** _____**Instructor Signature:** _____ **Date:** _____**Graduate Committee Approval:** _____ **Date** _____

Direct Ph.D. Annual Progress Forms**Food Science - Annual Progress Review of Graduate Student**

Student Name: _____ **Date of Evaluation within a Year:** _____
Start Date: _____

Student: Attach 1 to 2 page research progress report (including objectives, hypotheses, methods, results of research progress to date, further work etc.).

Evaluation (To be filled by each Advisory Committee member):

	Satisfactory	Unsatisfactory
1. Written progress report	<input type="radio"/>	<input type="radio"/>
2. Progress report oral presentation	<input type="radio"/>	<input type="radio"/>
3. Knowledge and understanding of research project.....	<input type="radio"/>	<input type="radio"/>
4. Research progress to date	<input type="radio"/>	<input type="radio"/>
5. Potential for research publication	<input type="radio"/>	<input type="radio"/>
6. Coursework progress to date.....	<input type="radio"/>	<input type="radio"/>

Comments & Recommendations:

Overall, the student is fit to continue in the Ph.D. program (check one): Yes No

Printed name of Committee Member

Signature & Date

Student Name:

Direct Ph.D. ANNUAL PROGRESS

Summary of written comments from all the committee members for student concerning continuation in the Ph.D. program (To be filled by the Major Professor):

Final recommendation on student's stay in the Ph.D. program (check one): Yes No

Major Professor's Signature: _____ **Date:** _____

Student's Signature: _____ **Date:** _____

Date reviewed by Graduate Committee Chair: _____

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
<i>Graduate Students of the Purdue University PhD programs will be able to demonstrate the ability:</i>	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 55401 Food Processing and Packaging (Form GC-2)	Learn processing methods, packaging techniques 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 3 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
<i>Graduate Students of the Purdue University PhD programs will be able to demonstrate the ability:</i>	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 55401 Food Processing and Packaging	Learn processing methods, packaging techniques 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 6 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

Teaching Assistant Evaluation Rubric

(This rubric should be completed by the Instructor overseeing the teaching assistant. Please check or otherwise indicate the level of mastery of each of the criteria in the attached rubric.)

Student _____ Instructor _____

Course Taught _____ Semester & Year _____

Number of students _____

Describe teaching assistant's responsibilities in the course. Include if course was in lecture or laboratory format; and responsibilities student had regarding course content and course development.

At the conclusion of the semester, please complete the response sheet (page 2) and return to the Graduate Coordinator for the student's file.

Student _____

Graduate Outcome Teaching Rubric

Attribute	Not acceptable (1 Pt)	Meets Expectations (3 Pts)	Exceeds Expectations (5 Pts)
Preparation & organization for class			
Knowledge in teaching material			
Notes & handouts			
Interaction with students			
Delivery of teaching material (lecture or laboratory)			
Responses to student questions			
Communication skills			
Overall assessment			

Completed by: _____

Date: _____

Employer Survey of Food Science Graduates from Purdue University

The Department of Food Science at Purdue University (PU) requests your assistance in assessing our graduate curriculum. ***We need your help to determine how employers view the quality of training of graduates from our program.*** Please complete this survey form in reference to the person identified in your cover letter. Your responses will be seen only by a select committee, who will be responsible for analyzing and summarizing the information provided. Any information you provide will be held in the ***strictest professional confidence.*** Individuals will not be associated with responses; only group-level data will be reported.

If you have any questions, please feel free to contact Dr. Brian Farkas, Department Head, at bfarkas@purdue.edu or (765) 494-8256.

Thank you for your time and consideration.

For the following items, please indicate two things:

How important to the identified PU graduate's actual job are the areas listed in **bold**. Using the following scale, please write the appropriate number in the **space to the left** to indicate your answer. Please fill in all spaces.

5 = very important 3 = moderately important 1 = not important
4 = important 2 = of limited importance 0 = not applicable

How would you rate this PU graduate on the characteristics and skills listed below? Using the following scale, please write the appropriate number in the **spaces to the right of each characteristic or skill listed** to indicate your answer. Please fill in all spaces.

5 = excellent 3 = average 1 = poor
4 = good 2 = fair 0 = not applicable/unable to rate

**How important
is this area?**

**How would you
rate this PU
graduate?**

Communication skills: Oral
communication skills Written
communication skills
Ability to make effective oral presentations
Listening skills

Overall knowledge of Food Science:
A broad, comprehensive knowledge of discipline
Depth of knowledge base within area of specialization

**How important
is this area?**

**How would you
rate this PU
graduate?**

Understanding and application of scientific principles:

Ability to conduct independent research
 Ability to use conventional methodologies to obtain scientific
 or technological results
 Ability to formulate and conduct a systematic research
 Program
 Ability to develop innovative techniques for solving complex
 scientific or technological problems
 Ability to provide scientific or technological leadership
 Ability to critically analyze research data

Team/group adaptability:

Ability to work in a collaborative group
 Ability to work cooperatively within a group
 Ability to work with people of diverse backgrounds

Leadership and management skills:

Ability to supervise people
 Ability to lead a team or group
 Project management skills
 Influential in setting work priorities and making decisions
 Ability to deliver on key work objectives

Knowledge and skills specific to the employment position:

Knowledge and skills needed to solve problems
 Acquired increased technical knowledge and skills
 Innovative and creativity skills
 Writing proposals for funding
 Preparing articles for publication

Professional Development:

Ability to learn independently
 Ability to grow on the job
 Willingness to accept new responsibilities

**How important
is this area?**

**How would you
rate this PU
graduate?**

Work attitudes and skills:

- Attitude towards work
- Ability to adjust to new job demands
- Being dependable and on time
- Working under pressure
- Making decisions under pressure
- Ability to work independently
- Understanding and carrying out assignments

Graduate Academic Background:

- Grade point average
- Relevant coursework
- Relevant research experience
- Relevant teaching experience

Previous Work, Volunteer, or Internship experience

Traits:

- Resourcefulness
- Self-confidence
- Professionalism
- Conducts work activities in an ethical manner

Overall Program:

- How would you rate the curriculum of the graduate program at Purdue University?
- How would you rate the overall quality of the graduate program at Purdue University?

Background information pertaining to you and your organization:

Type of organization

- Food or allied industries
- Government
- Academic

Your job title: _____

At your location, how many food scientists are employed? _____

At your location, how many food scientists from Purdue University are employed? _____

The remaining questions are in reference to the person identified in your cover letter

Job title of Purdue University graduate _____

Brief description of duties performed by Purdue University graduate:

On average, how frequently do you have contact with this person?

- | | |
|----------------------------------------------|-----------------------------------------------|
| <input type="radio"/> Several times per day | <input type="radio"/> At least once per week |
| <input type="radio"/> At least once per day | <input type="radio"/> Several times per month |
| <input type="radio"/> Several times per week | <input type="radio"/> At least once per month |

How long have you known this employee? _____

How long has this employee been with your organization? _____

Has this person been promoted since joining the organization?

- Yes No Don't know

In your judgment, what rate of progress is this person making in their career development:

- | | |
|------------------------------------------|------------------------------------------|
| <input type="radio"/> Faster than normal | <input type="radio"/> Slower than normal |
| <input type="radio"/> About normal | <input type="radio"/> Unable to judge |

What kinds of information or experiences in their graduate program would have improved this graduate's preparation for their present employment? (Please be specific.)

Beyond your comments regarding this individual, please make any comments or suggestions that would help this department better serve the needs of the food industry.