

# Food Science and Human Nutrition Graduate Program Handbook

Department of  
Food Science and Human Nutrition

College of Agriculture and Natural Resources

*Michigan State University*

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## FOREWORD

Welcome to the graduate program in the Department of Food Science and Human Nutrition at Michigan State University. We hope that this Graduate Student Handbook will provide all of the necessary information to make your stay in the Department both successful and enjoyable.

This handbook provides a summary of Department, College, and University policies for graduate students. Responsibilities of graduate students are also outlined. To avoid misunderstandings or mistakes, please read all parts of the handbook. Your Major Professor is also an important source of information.

Requests for modifications of policies listed in this Handbook or time extensions due to extenuating circumstances should be submitted in the form of a petition to the Chair of the FSHN Graduate Affairs Committee (GAC) for review by the committee.

We hope that you will participate in all of the Department's academic and social programs during your studies in Food Science and Human Nutrition. It is important also that you apply for scholarships and awards given by the Department, College, and national organizations. Please work with your Major Professor in preparing the documentation for these awards. Watch the appropriate emails for announcements of rules and deadlines for the various awards. All have a monetary prize, but equally important is the recognition of your excellence. It is important for you to have documentation of these successes on your resume; it is important for this Department to demonstrate that FSHN/MSU students are among the best in the nation.

Graduate students are an important component of a department. You are the present phase of a long history of successful graduate students who have been mentored by the faculty of this Department. You will find many FSHN/MSU graduates in important positions in industry, government, and academia. You as students, and we the faculty, have an obligation to see that you get the very best training so that you can carry on this tradition in successful careers.

On behalf of the faculty and graduate students I extend appreciation to the various Graduate Affairs Committee members, Graduate Directors and Graduate Students who contributed to this Handbook.

Leslie Bourquin  
Professor and Chairperson  
Department of Food Science and Human Nutrition

# 1. THE FIRST SEMESTER AT MSU

## 1.1. Introduction

This handbook was developed to help the student become oriented at MSU. This handbook is intended primarily to supplement and extend the information in the Academic Programs handbook published by Michigan State University. <https://reg.msu.edu/AcademicPrograms/>. Academic Programs is MSU's legal document describing graduate programs. Students are expected to be aware of the information therein whether or not it is specifically restated in the departmental handbook.

## 1.2. Administrative Organization

The College of Agriculture & Natural Resources (CANR) administers the Department of Food Science and Human Nutrition.

## 1.3. Program Formulation

Prior to choosing courses, the student should consult the University Registrar's Office website at <http://www.reg.msu.edu/> for the most up-to date information concerning **1)** Description of Courses, **2)** Academic Programs, and **3)** Schedule of Courses and Calendar.

Specific courses will be selected by the student in consultation with the Major Professor in accordance with the specific interests and qualifications of the student. In addition, all international students must take an English proficiency test and follow the recommendation of the English Language Center with regard to enrolling in English language courses.

## 1.4. Enrollment Procedures

The following items must be obtained prior to enrollment.

1. Net ID (Campus ID), Password or Personal Identification Number (ID) and Personal Access Number (PAN).
2. The Major Professor's approval of the schedule of courses.
3. Proof of assistantship or scholarship (will be provided by Department for billing).
4. Information on time of enrollment.
5. Clearance from the International Student Office (for first-semester international students only).

Students must have their Campus ID and Password or Personal Identification Number (ID) and their Personal Access Number (PAN) for online registration at <http://schedule.msu.edu/> . The selection of a Major Professor is the student's prerogative; however, a Major Professor is assigned at the point of admission. Admission is contingent on the availability of and acceptance by a faculty member agreeing to serve as a Major Professor (section 3.4). A student may select an alternate Major Professor according to the guidelines for changing a Major Professor (section 3.5). The Major Professor must approve the course schedule. Once approved, the graduate student must enroll for approved classes at <http://schedule.msu.edu/> .

Students should contact the Department of their Major Professor if questions arise when enrolling. For additional enrollment and registration information please visit <http://www.reg.msu.edu/ROInfo/Enrollment.asp> .

Students with assistantships: Students who are on assistantships will be assessed the residential rate of tuition and fees and are entitled to nine credits tuition waiver for Fall and Spring semesters and five credits tuition waiver for Summer semester. See section 3.7 for minimum enrollment requirements.

Students without assistantships: For MS candidates without an assistantship, full time is considered 9 credits. For Ph.D. without an assistantship, full time is considered 6 credits.

International students: First-semester international students are required to have clearance from the International Student Office prior to registration. This clearance is obtained at the International Student Office (Room 105, Center for International Programs). All international students are required to have health insurance prior to registration. All international students should check their visas and make sure that their proposed course hour load is consistent with the terms of the visa. Specific information on credit-hour loads and visa regulations is available from the International Student Office.

Health services: All regularly enrolled graduate students are provided with health services during the semester in which they are enrolled. All graduate assistants are provided with health insurance. Students may also purchase a Health Service card at Olin Health Center. International students are required to purchase Michigan State University's foreign student health and accident insurance plan for themselves and family members in the United States. See the Academic Programs handbook for more information.

Motor vehicle registration and parking: Students at MSU are required to register all motor vehicles as described in the current student motor vehicle regulations. Generally, students on assistantships can obtain parking permits which will allow them to park their vehicles on the campus, south of the river. Other graduate students can obtain permits to park at designated lots. Proof of appointment will be required for students on assistantships to obtain parking privileges. All students must present their vehicle registration, student ID, and valid current driver's license, before the current year's MSU vehicle registration can be obtained. For additional information go to <http://police.msu.edu/parking-services/permits/>

Bicycle Permits: Bikes operated or possessed on campus must have a valid permit affixed and must be parked at a bike rack, locked, and in operable condition. To register your bicycle, you must have the serial number from the bike. This may be found in several different places on bikes depending on the make and model. The most common location for bike serial numbers is just under the seat and underneath the bike below the pedals. Be sure to know the make of the bike, the color of the bike, and whether the style is male or female. There is no cost for a bike permit. Bike permits must be obtained online at <http://police.msu.edu/parking-services/permits/>. All permits must be properly affixed to your bike before they are considered valid.

MSU maintains an excellent bus system on campus. Specific information on campus transportation is available at the time of registration. CATA bus routes on campus connect to other CATA routes serving the East Lansing and Lansing area (<http://www.cata.org>). CATA free-fare campus routes serve all university apartments, residence halls, commuter lots and main campus facilities. <https://www.cata.org/Routes-Schedules/Where-can-I-Ride/MSU-Campus>

Sporting and cultural events: Students who are enrolled full time are eligible:

- To purchase football, basketball, and/or hockey season tickets for themselves and their spouses at reduced rates.
- For free admission to many other regularly scheduled athletic events.

- For student discounts on series and single tickets to professional performing arts events at the Wharton Center for Performing Arts.
- To purchase one student ticket and one guest ticket to many professional performing arts events at the Wharton Center for Performing Arts at the student rate. One validated student ID card must be presented with every two student-rate tickets when attending a performance.

Online Teaching Workshops: Both faculty and graduate students can access nine online modules on improving your classroom teaching. The Graduate School purchased access for 3 years from Epigeum, a spin-off company from Imperial College of London <http://epigeum.com>. These are high-quality interactive modules on a variety of topics related to teaching and learning. For more information and to access the modules visit: <https://grad.msu.edu/sites/default/files/content/researchintegrity/guidelines.pdf>.

### *1.5. Drops and Adds*

Specific information is available in the Schedule of Courses and Calendar concerning the procedure to add or drop a course. The graduate student is advised to be familiar with this information prior to the time of enrollment. No course changes may be made without the Major Professor's approval. Drops and adds will be handled by the same computer method as enrollment during the first eight days of class. After that they will be handled in the department or college offices.

## **2. UNIVERSITY POLICIES AND SERVICES**

### *2.1. Introduction*

Certain statements of University-wide policy and/or facilities will likely have a direct effect on your welfare. The policies are described in detail in other publications such as the Academic Programs, Schedule of Courses and Calendar and Graduate Student Resource Guide.

### *2.2. Credits and Grades*

Graduate students in the Department of Food Science and Human Nutrition are required to maintain a cumulative grade point average (GPA) of 3.0 in order to remain in good standing. University regulations require that every full-time graduate student using University facilities be registered for a minimum of 1 credit. For MS candidates without an assistantship, full time is considered 9 credits. For Ph.D. without an assistantship, full time is considered 6 credits. See section 3.7 of this handbook for minimum and maximum credit enrollment requirements. This information can also be found at <https://grad.msu.edu/assistantships>.

### *2.3. Special Services*

**Resource Center for Persons with Disabilities (RCPD)** is responsible for the coordination of services for students with disabilities. Additional information is available at (<http://rcpd.msu.edu>).

**The Student Health Service** is located in the MSU Olin Health Center. Consultation and hospital facilities are provided as specified in the Graduate Studies catalog.



The University maintains a **Veterans Certification Office** to assist veterans and war orphans who are attending the University. This office may be contacted at (517) 355-5032 or [www.reg.msu.edu/ROInfo/VeteranInfo.asp](http://www.reg.msu.edu/ROInfo/VeteranInfo.asp).

**Office of Career Services and Placement** in the Student Services Building is available to assist in placement for full-time, part-time or summer employment. There is a Graduate Career Consultant that is joint between the Graduate School and Career Services. The career services web site can be found at <http://careernetwork.msu.edu/>

**Spartan Child Development Center** is available for children of students. Contact the school directly for charges involved. The website is located at <http://www.scdc.msu.edu/>.

MSU offers various scholarships, fellowships, grants and short-term and long-term loans through the **Office of Financial Aid**. Students should apply directly at the Office of Financial Aids, 252 Student Services Building (353-5940 or <http://www.finaid.msu.edu/>). Graduate students are eligible to use the MSU Federal Credit Union. Additional information regarding these services can be obtained by inquiry at the Credit Union located at 4825 East Mount Hope Road, 517-333-2424 or <https://www.msufcu.org/> ).

### **Office of the University Ombudsperson**

Conflicts, disagreements, and issues sometimes arise during the course of a graduate program. If you find yourself in this situation and have exhausted the internal resources for resolving the issue, you may contact the Office of the University Ombudsperson.

The Office of the University Ombudsperson provides assistance to students, faculty, and staff in resolving University-related concerns. Such concerns include: student-faculty conflicts; communication problems; concerns about the university climate; and questions about what options are available for handling a problem according to Michigan State University policy. The University Ombudsperson also provides information about available resources and student/faculty rights and responsibilities. The office operates as a confidential, independent, and neutral resource. It does not provide notice to the University - that is, it does not speak or hear for the University.

Contact the Ombudsperson at any point during an issue when a confidential conversation or source of information may be needed. The Ombudsperson will listen to your concerns, give you information about university policies, help you evaluate the situation, and assist you in making plans to resolve the conflict.

Contact information:

Office of the University Ombudsperson  
129 N. Kedzie Hall  
(517) 353-8830  
ombud@msu.edu  
<https://ombud.msu.edu/>

## 2.4. Graduate Student Rights and Responsibilities

Students are expected to familiarize themselves with the [Academic Freedom for Students Document](#) and [Adjudication of Cases Involving Graduate Student Rights and Responsibilities and the Graduate Student Rights and Responsibilities Document](#) <http://grad.msu.edu/gsrr> . Students should conduct themselves in accordance with the procedures outlined in these documents.

The Graduate Student Rights and Responsibilities (GSRR) Articles address professional standards for graduate students as follows:

- “Each department/school and college shall communicate in writing to graduate students, at the time of their first enrollment in a degree program or course in the unit, any specific codes of professional and academic standards covering the conduct expected of them. (Article 2.4.7)”.
- “The graduate student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards”. (Article 2.3.7).

In addition to meeting academic standards included in the Academic Progression Guidelines, students and faculty teaching in the Graduate Program in FSHN have shared responsibility for adherence to the following professional standards:

- 1) Integrity in interpersonal relations and communication with faculty, peers, research participants, and other personnel/staff who are interacted with during activities in the graduate student role;
- 2) Responsible fulfillment of all academic obligations, including ethical conduct in the research setting; and,
- 3) Honesty and integrity in all academic and professional conduct.

These standards of professional conduct are central to the Graduate Program in FSHN. Satisfactory academic progress includes adherence to these professional standards. Professional expectations are rooted in the maintenance of high quality working relationships with faculty, peers, research participants, staff, and all others with whom the graduate student interacts. Aspects of high quality working relationships that are addressed in the GSRR as shared faculty-student responsibilities include: mutual respect, understanding, and dedication to the education process (2.1.1); maintenance of a collegial atmosphere (2.3.7); and, mutual trust and civility (2.3.6). Effective conflict management/negotiation skills are essential for navigating the graduate school experience and maintaining high quality working relationships. Specific principles for conflict management/negotiation are addressed in the Graduate Student Resource Guide. Graduate students are responsible for making concerted good faith efforts to resolve conflicts with others in a constructive and informal fashion, prior to proceeding to formal conflict resolution options (Article 5.3). Graduate students who have specific questions or concerns about professional standards or conflict resolution issues should consult with their Major Professor, the Director of the Graduate Program, and/or the University Ombudsperson for guidance, as appropriate.

### FSHN Department Board

Adjudication of cases involving graduate student rights and responsibilities shall be conducted according to Article 5 of *Graduate Student Rights and Responsibilities* <http://grad.msu.edu/gsrr> which describes judicial procedures at the department, college, and university levels. Regarding departmental procedures, Article 5.1.2 states:

“For adjudication to be conducted at the department/school level the parties shall attempt first to resolve the problem in informal, direct discussions. If the problem remains unresolved, adjudication may be handled formally through a department/school hearing board. The hearing board shall be composed of equal numbers of faculty and graduate students selected by their respective groups in accordance with the

department/school/program hearing procedures. If the unit administrator is involved in the case, the unit administrator may not serve on the hearing board”

In the Department of Food Science and Human Nutrition, the unit administrator is the department chairperson. If a hearing board is needed, two or more faculty members shall be selected by the FSHN Department Advisory Committee (DAC) and an equal number of graduate students shall be selected by the elected officers of the FSHN Graduate Student Organization. If the FSHN Graduate Student Organization is not functional, the graduate student representatives to the hearing board shall be selected at random from currently enrolled graduate students who have completed at least 18 credits of study in a FSHN degree program. Hearing boards shall be appointed on an ad hoc basis to adjudicate specific cases.

## *2.5. Graduate Assistant Illness/Injury/Pregnancy Leave and Grief Absence Policy*

A graduate assistant unable to fulfill the duties of his or her appointment because of illness or injury shall notify their Major Professor and the department Chairperson of his/her major unit as soon as circumstances permit. Similarly, a graduate assistant unable to fulfill the duties of her appointment because of pregnancy shall notify their Major Professor and the department Chairperson as soon as circumstances permit.

During the illness, injury, or pregnancy the Department shall adjust (reduce, waive, or reschedule) the graduate assistant's duties as those duties and the assistant's physical circumstances dictate. If total absence from duties becomes necessary, the major unit shall maintain the stipend of the appointment, provided the graduate assistant is still enrolled for a period of two months, or to the end of the appointment period or of the semester, whichever should occur first.

The graduate assistant shall have the right to return to the assistantship, within the original terms of the appointment, at such time as he or she is able to reassume the duties of the position.

Grief Absence Policy: For master's (Plan A), master's (Plan B) with research responsibilities, and doctoral students, it is the responsibility of the student to: a) notify their advisor/major professor and faculty of the courses in which they are enrolled of the need for a grief absence in a timely manner, but no later than one week from the student's initial knowledge of the situation, b) provide appropriate verification of the grief absence as specified by the advisor/major professor and faculty, and c) complete all missed work as debelow ed in consultation with the advisor/major professor and faculty. It is the responsibility of the advisor/major professor to: a) determine with the student the expected period of absence – it is expected that some bereavement processes may be more extensive than others depending on individual circumstances, b) receive verification of the authenticity of a grief absence request upon the student's return, and c) make reasonable accommodations so that the student is not penalized due to a verified grief absence. If employed as a RA or TA, the graduate student must also notify their employer. Both employer and student will swiftly communicate to determine how the student's responsibilities will be covered during their absence. Graduate teaching assistants (TAs) should refer to the bereavement policy in the MSU GEU CBU Article 18. Students who believe their rights under this policy have been violated should contact the University Ombudsperson.

## *2.6. Work Related Illness/Injury*

Employees who suffer a work-related illness or injury, should immediately report the illness or injury to their supervisor. Supervisors are to call 911 immediately if the illness or injury is a critical emergency. If the illness or injury is not critical the supervisors will complete the Authorization to Invoice Michigan State University Form

([http://www.hr.msu.edu/benefits/benefits\\_docs/InvoiceMSU.pdf](http://www.hr.msu.edu/benefits/benefits_docs/InvoiceMSU.pdf)) and direct the employee to the proper medical facility.

Students not employed at MSU but injured in a classroom/lab/academic activity should report the injury to the instructor or department in charge.

## *2.7. Equal Rights Policy*

Michigan State University is committed to an active policy of no discrimination on the basis of race, creed, ethnic origin or sex. All students and employees should familiarize themselves with the Anti-discrimination Policy and Procedures, and conduct themselves in accordance with that Policy. [https://hr.msu.edu/policies-procedures/university-wide/ADP\\_policy.html](https://hr.msu.edu/policies-procedures/university-wide/ADP_policy.html), The Anti-discrimination Policy and Procedures is also contained in Spartan Life, a student resource manual which is available at <http://splife.studentlife.msu.edu/> or in the Department Office or from 162 Student Services Building.

## *2.8. Responsible Conduct of Research*

FSHN stresses the importance of intellectual integrity in all aspects of graduate education, including research, scholarly and creative activities. To ensure intellectual integrity, all graduate students will complete the department's requirements for initial and refresher training in the Responsible Conduct of Research (RCR). All graduate students should discuss RCR training with their major advisor. Requirements can be found on the department website in the "Food Science and Human Nutrition Responsible Conduct of Research" document [FSHN RCR Requirements](#). Students should log into the ABILITY information management system at <http://ora.msu.edu/train/> to complete their on-line RCR training. This is the system that must be used for proper documentation of training. All RCR information will be added by student to their GradPlan.

Violations of integrity in research, including plagiarism or data falsification, will be referred to the FSHN director of graduate studies and/or department chairperson, who may consult the FSHN Department Hearing Board. Penalties may include dismissal from the program. The Research Integrity Office is an additional source of information (<http://www.rio.msu.edu>), as is The Graduate School research and scholarly integrity webpage: <http://grad.msu.edu/researchintegrity/>.

## *2.9. RVSM and DEI Training Requirement*

Yearly, all students must complete the on-line training about the Relationship Violence and Sexual Misconduct Policy [http://www.hr.msu.edu/documents/uwidepolproc/RVSM\\_Policy.htm](http://www.hr.msu.edu/documents/uwidepolproc/RVSM_Policy.htm). **Students should log into the ABILITY information management system at <http://ora.msu.edu/train/> to complete their on-line RVSM training.**

All students, faculty, and staff must complete MSU's online DEI training. If it was completed in Fall 2020, they will not likely have to take it again in 2021-2022. [Visit the Training page](#) from MSU's Office of Regulatory Affairs for FAQs and the link to take the training in the Ability system, and watch for updates as this requirement evolves.

## *2.10. Human Subject Research*

Policy on research with human subjects: Graduate or undergraduate student research programs may involve the use of human subjects. "Human subject" is defined as an individual about whom an investigator conducting research obtains (1) data through intervention or interaction with the individual or (2) identifiable, confidential information about the individual. Both Federal and University regulations require that all proposed research projects involving human subjects be reviewed and approved by an Institutional Review Board **prior** to the initiation of such studies.

At Michigan State University, the Board operates through the Human Research Protection Program <http://www.hrpp.msu.edu/>. All applications for human subject approval are to be submitted via this website. Specific information regarding procedures for obtaining appropriate review of proposed research projects involving human subjects is available from either the Office of the Dean of the student's college, the Office of the Vice President for Research and Graduate Studies, or the FSHN Department Office.

No human subject projects will be approved after the fact from the Office of the Vice President for Research and Graduate Studies.

## *2.11. Laboratory Animals in Research*

At Michigan State University all laboratory animal research must be approved by the All-University Committee on Animal Use and Care; this includes funded as well as unfunded research. Compliance with University policy regarding animal use in research projects is the responsibility of the Major Professor. Michigan State University's website <http://animalcare.msu.edu/> provides general information, detailed procedures and applications for use of animals in research.

The work with laboratory research animals is under strict regulations in compliance with NIH standards. Prior training or instruction is required in order to conduct research with laboratory animals. No work with laboratory research animals may be conducted prior to obtaining the approval. It is the student's responsibility to verify/ascertain that the student's research professor has obtained approval for the use of laboratory animals in the student's project. The following MSU documents pertaining to animal care are available at <http://animalcare.msu.edu/> "Policies, Responsibilities and Procedures for Animal Use and Care" and "NIH Guide for Care and Use of Lab Animals".

No laboratory animal research will be approved after the fact from the Office of the Vice President for Research and Graduate Studies.

## *2.12. Use of Hazardous Materials*

The Michigan Department of Public Health has implemented a Medical Waste Management Act with new requirements for the handling of medical and chemical wastes. Environmental Health and Safety (used to be ORCBS) has prepared the Hazardous Waste Disposal Guide to address the current legislation and permit requirements on labeling, packaging and disposing of hazardous waste. Contact your Major Professor or the department office to obtain a copy of the Hazardous Waste Disposal Guide and consult with your Major Professor regarding which biological, chemical and irradiation courses must be completed through Environmental Health and Safety before initiating laboratory work. See <https://ehs.msu.edu> for further details.

### 2.13. Graduate Student Governance

The Graduate Affairs Committee (GAC) acts as a direct line of communication between the graduate students and the department. The specific responsibilities are detailed in the Department Bylaws that are available from the Department Office in GM Trout, Room 204.

The Council of Graduate Students (COGS) serves as a communications link between graduate students and the university administration, and also provides numerous services. Representatives elect the Executive Board of COGS from the various departments and colleges that grant graduate degrees. COGS members serve on various university-wide planning and advisory committees and advise the Board of Trustees on matters of concern to graduate students. Through funding provided by a tax collected from graduate students, COGS provides a low-cost photocopy service, various financial aids, a dissertation copy service and other services. Short-term loans are available from COGS through Associated Students of MSU (ASMSU). For more information contact the COGS Office, Chittenden Hall room 120 <http://cogs.msu.edu/> or 353-9189).

### 2.14. Other Resources

*Academic Programs:* Listing of academic programs, policies and related information.  
<https://reg.msu.edu/AcademicPrograms/>

*Graduate Students Rights and Responsibilities (GSRR):* The GSRR specifically addresses student conduct, academic pursuits, keeping of records and publications.  
<https://grad.msu.edu/gsrr>

*MSU/GEU Contract:* Collective Bargaining Agreement between MSU and The Graduate Employees Union.  
<http://geuatmsu.org/>

*Guidelines for Graduate Student Advising and Mentoring Relationships:* The responsibilities of the academic unit, Chair, Director of Graduate Students, faculty advisors, guidance committee and graduate student.  
<https://grad.msu.edu/sites/default/files/content/researchintegrity/guidelines.pdf>

*Guidelines for Integrity in Research and Creative Activities:* Guidelines begin on page 7 of the Graduate School Guidelines handbook.  
<https://grad.msu.edu/sites/default/files/content/researchintegrity/guidelines.pdf>

*Policy on Relationship Violence and Sexual Misconduct:* MSU's policies and information.  
[http://www.hr.msu.edu/documents/uwidepolproc/RVSM\\_Policy.htm](http://www.hr.msu.edu/documents/uwidepolproc/RVSM_Policy.htm)

*Anti-Discrimination Policy (ADP):* Description of Policy and contact information.  
[https://hr.msu.edu/policies-procedures/university-wide/ADP\\_policy.html](https://hr.msu.edu/policies-procedures/university-wide/ADP_policy.html)

*Certification in College Teaching:* CTT helps graduate students and postdocs organize, develop and document their teaching experiences.  
<https://grad.msu.edu/CCTP>

*The Writing Center:* Promotes diverse understanding of writing and disciplines in which they are situated.  
<http://writing.msu.edu/about/our-philosophy/>

*Grad Life and Wellness:* Here you will find the tools, resources and programs to help you succeed and have a great experience as a Grad Student.  
<https://grad.msu.edu/wellness>

*Exit survey:* The contact for issues associated with the exit survey.  
[exitsurvey@grd.msu.edu](mailto:exitsurvey@grd.msu.edu)

### **3. DEPARTMENTAL POLICIES**

#### **3.1. Introduction**

It is important that the student become very familiar with this section. Although considerable detail is presented here, it is not expected that answers are provided to all questions. Unforeseen questions will arise and answers will be needed. In most cases, the student's Major Professor, the Department Office, The Graduate Director or Department Chairperson will be able to provide the required information immediately. Other, more complex issues will require the advice and action of certain Departmental Committees and/or the graduate faculty.

#### **3.2. Definition of Graduate Faculty**

Faculty eligible for graduate teaching and guidance committee positions, as defined in the FSHN Department Bylaws, constitute the Department of Food Science and Human Nutrition graduate faculty. Graduate faculty include all regular MSU faculty as defined in the University's Faculty Handbook: "*The "regular faculty" of Michigan State University shall consist of all persons appointed under the rules of tenure and holding the rank of professor, associate professor, assistant professor, or instructor, and persons appointed as librarians. In addition, the principal administrative officer of each major educational and research unit of the University shall be a member of the "regular faculty".*"

Graduate faculty may include members that are not regular MSU faculty as allowed by the Faculty Handbook for committee membership: "*An exception may be granted by the Dean of The Graduate School to allow a non-tenure stream faculty member or an academic specialist to serve on a doctoral student's guidance committee as one of the four required faculty members or as the chairperson of a doctoral student's guidance committee. With the approval of the chairperson or director of the department or school, an exception may be granted to allow an Emeritus faculty member to serve as one of the four required faculty members on a doctoral student's guidance committee; in addition, an Emeritus faculty member may continue to serve as the chairperson of a guidance committee. More than four persons may be members of the guidance committee. Persons who are not MSU regular faculty who can contribute to the student's program may serve as members of the guidance committee and assist in the work of the committee, providing that the number of such persons does not exceed the number of regular faculty on the committee.*"

The Chairperson shall make the determination of a faculty member's status within graduate faculty. This determination shall be made at the time of the initial appointment of the faculty member. A faculty member's



graduate faculty status shall continue uninterrupted for the length of his/her appointment. Changes in membership or status may be made upon request of a faculty member or the Department Chairperson.

### *3.3. Guidance Committee Member Status*

1. Guidance committees for **M.S. Plan B students** must have at least two graduate faculty members, at least one of which must be from within the department. Guidance committees for **M.S. Plan A students** must have at least three graduate faculty members, at least two of which must be from within the department. Guidance committees for **Ph. D. students** must have at least four graduate faculty members, one of which must be from outside the department. Any additional members of the Guidance Committee will be non-voting members.
2. Committee Chairperson (Major Professor) for Master's Plan A & B candidates must have experience in designing and conducting research.
3. Committee Chairperson for Ph.D. candidates must have the following:
  - a. Earned Doctorate and rank of Assistant Professor or higher.
  - b. Experience in designing and conducting independent research or directing graduate student research.
  - c.

[MSU's Guidelines for Mentoring & Advising Graduate Students](#)  
["Optimizing Mentoring,"](#)

### *3.4. Selection of the Major Professor*

Prior to admission, students are accepted by a Major Professor according to information obtained from their application for admission and the needs of the faculty member and graduate applicant. Entering students are encouraged to discuss thesis research with several faculty in the Department and to review all program areas of interest.

The Major Professor is ordinarily the student's academic and research advisor. In some cases, it may be appropriate that the student's research program is directed by another faculty member. In that case, the academic advisor will retain the designation of Major Professor and will be responsible for providing guidance for graduate course work, while the Research Advisor will direct the thesis research. The graduate student's Major Professor shall be a FSHN graduate faculty member; the Research Advisor may be a graduate faculty member from MSU.

The Roles and Responsibilities of a Major Professor, at a minimum, include the following:

- Provide information about degree requirements and policies
- Give advice about appropriate coursework
- Provide or assist in selection of a research topic
- Provide training and oversight for this research
- Mentor the development of professional skills, for example, writing, preparing publications, making and giving presentations, interviewing, etc.
- Give regular feedback - at least annually - on progress towards degree, coursework, and other activities;
- Run required written and/or oral examinations
- Read, edit, and approve the research project (Plan B M.S.), thesis (Plan A M.S.), or dissertation (Ph.D.)
- Write letters of reference for scholarships, awards, and jobs, as appropriate



### *3.5. Procedure for Changing Major Professor*

Students may change Major Professors. The Department Chairperson and the Director of Graduate Studies are available for consultation during the processes associated with Major Professor selection and change. Guidance by the Chairperson and Director of Graduate Studies will be granted during the transition period. The Department Chairperson and the Director of Graduate Studies will assist the student in identifying a new Major Professor, as long as the student is making good academic progress and has had satisfactory annual reviews. The student must discuss the change with the present Major Professor and the proposed new Major Professor before a formal request for change is forwarded to the Department Chairperson. A [Master/Doctoral Major Advisor Change Form](#) must be initiated by the student and must include a statement of the change being requested as well as a brief explanation for the change. The signatures of both the present and the proposed Major Professors must be on the request. The request for change of Major Professor will be reviewed and decided upon by the Department Chairperson. If the advisor is the Department Chairperson, the Department Associate Chairperson will work with the Director of Graduate Studies.

### *3.6. Admission Status*

Graduate students are admitted into degree programs on Regular status or Provisional status. Provisional status is granted for various reasons. When students on Provisional status complete at least twelve semester credits with a grade point average of 3.0 or better and satisfy other criteria specified on the graduate admission form, they will be considered for Regular status upon recommendation by their Major Professor. The provisional admission requirements must be met in the first year.

### *3.7. Guidance for Graduate Transfer Credits*

**Master's Students:** as many as 9 semester credits of graduate course work (excluding research and thesis credits) may be transferred into a FSHN master's degree program from other accredited institutions or international institutions of similar quality. Any combination of courses taken through lifelong education, graduate certification, or in transfer from another institution may be used. The student's guidance committee determines if courses are appropriate for the master's program and may allow fewer than 9 credits to be applied to the specific master's program. Only courses in which at least a 3.0 grade or its equivalent was received will be considered for transfer. Credits must be earned within the time limits approved for earning a Master's degree (5 years).

**Doctoral Students:** Graduate credits may be transferred from other accredited institutions or international institutions of similar quality. The student's guidance committee determines if courses are appropriate for the specific PhD program. Only courses in which at least a 3.0 grade or its equivalent was received will be considered for transfer. Credits must be earned within the time limits approved for earning a PhD degree (8 years). Transfer credits are processed via the MSU Credit Evaluation, Graduate Program form.

**Dual Major Doctoral Degrees.** University guidelines allow research-based graduate degrees across disciplines/graduate programs see "Dual Major Doctoral Degrees" in the MSU Academic Programs Guide). For current University policy go to: [Dual Major Doctoral Degrees](#)

The interdisciplinary program must be approved by the Dean of the Graduate School. The request for a dual major degree must be submitted within one semester following its development and within the first two years of enrollment at MSU. The required standards for both departments and the intent to receive a PhD in two areas

must be outlined in the guidance committee report. One program is the student's primary affiliation (and home of the principal advisor), and the other a secondary affiliation (home of a secondary advisor or collaborator). Admission requirements to the graduate school are those of the primary department. The course work must be satisfactory to both departments. The student's coursework is split 60:40 between the primary and secondary departments. All FSHN department requirements must be met to receive a PhD from FSHN. This includes coursework, research integrity requirement, teaching, research credits, and seminars (see applicable sections of this handbook). Comprehensive exams are arranged according to the guidelines of the primary department and must be passed to the satisfaction of both departments. The guidance committee must include members from both departments, with approximately 60% of its members (typically three) from the primary department and 40% of its members (typically two) from the secondary department. The dissertation proposal must be in USDA or NIH format. The guidance committee members must be satisfied that the dissertation represents a contribution meeting the usual standards in both areas. If a student decides to leave the interdisciplinary degree program, he/she can revert to the requirements of the primary affiliation.

### *3.8. Graduate Assistantships*

Research and Teaching Assistantship support is determined on an individual basis for students on regular admission, depending upon recommendations, availability of funds, fellowship and scholarship support, and grade record. Assistantships can be funded through the FSHN Department or through faculty research funds. Assistantships are reviewed annually by the Departmental Chairperson and the Director of Graduate Studies, and may be renewed if satisfactory progress is being made and funds are available. Based on university collective bargaining definitions, Teaching Assistants (TA) are formally considered "university employees". This definition does not include Research Assistants (RA), although RAs are considered employees by the payroll office. Recipients of assistantships are formally recognized by the university and must fill out proper forms (e.g. notification of intent to engage in outside work for pay) when holding off-campus jobs.

Per the Graduate School: In order for a student to begin their assistantship, they are required to be in the United States by the start date. We do not allow for students to begin assistantship appointments while out of the country.

While on an Assistantship students are not allowed to leave campus prior to their assignment end date.

From the Graduate School responsibilities <https://grad.msu.edu/assistantships>

If you need to leave campus while on your assistantship, you will need to petition the Director of Graduate Studies (DGS) by email along with the approval of your advisor or instructor for the course you are a TA for. If the DGS is not available, you can petition the Chair of the department

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### **FSHN Policy for Selecting Students to Receive Departmental Graduate Funding FINAL from GAC – March 3, 2020**

1. Applications for each funding source will be submitted by the graduate student to the Director of Graduate Studies by the Friday before Spring Break. Exceptions on the application date can be made for students who are competitive for external matching scholarships requiring earlier notification. The Director of Graduate Studies will cull any applications that do not meet requirements, and submit the remainder to GAC.

2. Content of the application will include: Student CV, list of grades in graduate courses, GPA, brief statement of research progress (if applicable), service activities, and recommendation letter(s) from advisor and/or research committee member. Students will also indicate any additional sources of funding available to support the student (e.g. advisor grant funding, etc.). For new graduate students, the original application for graduate school is sufficient.
  3. GAC will review and rank all applications per the following guidelines:
    - a. Student must meet minimum qualifications that will be specified by the faculty member for each T.A. or R.A. including any funding source requirements such as “working in food safety”.
    - b. Student performance (including presentations, papers, participation in grant-writing, leadership, training of graduate and undergraduate students in the lab, teaching), including progress in research (if applicable), GPA, and service.
    - c. Funds may be used to recruit one graduate student annually for support for one year, provided those funds are not required to support existing qualified students.
  4. GAC will recommend a list of students to receive financial support as a T.A. or as an R.A. Justification for the choice of students will be given.
  5. The FSHN Chairperson will decide the final list of students to receive financial support.
  6. The final list of students receiving financial support from the department will be sent to faculty via email. The Director of Graduate Studies will send emails to advisors of students who applied, but did not receive funding, including reasons the student was not selected.
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**Full-time status** for doctoral students is defined as a minimum of 1 credit for those students who: 1) Have successfully completed all comprehensive exams and are actively engaged in dissertation research; OR 2) Are doing department-approved off-campus fieldwork related to preparation of their dissertation (up to a maximum of three semesters).

Additional benefits to graduate students on assistantships include the following:

1. Exemption from out-of-state tuition.
2. Tuition for 9 Fall Semester, 9 Spring Semester, and 5 Summer Semester credits is exempted.
3. Eligibility to enroll in available health programs.
4. Matriculation and energy fees are waived.
5. Eligibility for campus parking permits.

The following meets University and Departmental definition for research assistantship levels:

Level 1 - First year Masters student.

Level 2 - Second year Masters student or First year Doctoral student.

Level 3 - Doctoral student with two years experience and successful completion of Comprehensive exam. The change to Level 3 becomes effective the term following the successful completion of the comprehensive exam. The Record of Comprehensive Exam must be approved by the Department Chairperson prior to the last day of finals each semester.

If for some reason the exam is taken too late or signatures cannot be obtained to meet approval by the Department Chairperson by the last day of finals, the change to Level 3 will not take effect until a semester later (i.e. two semesters - If Record of Comprehensive Examination is approved too late Fall Semester, the level change would not take place until Summer Semester).

See <http://grad.msu.edu/assistantships> for additional information on graduate assistantships.

For a list of other funding opportunities for FSHN Graduate Students, see Appendix A

TA appointments **who were required to demonstrate English proficiency as a condition for regular admission to Michigan State University** must also demonstrate that they meet a minimum standard of proficiency in spoken English before they can be assigned teaching work that involves oral communication with undergraduate students. Please see

<https://grad.msu.edu/tap/speak> or <https://grad.msu.edu/tap/first-time-tas-international> for more information.

Those international teaching assistants (ITAs) may meet this requirement in one of the following ways:

- Presenting a TOEFL IBT speaking section score of 27 or higher.
- Receiving a score of 50 or higher on the [MSU Speaking Test](#)
- Taking [AAE 451 or AAE 452](#) (ITA language support courses) and receiving a score of 50 or higher on the [ITA Oral Interaction Test \(ITAOI\)](#).

**Those ITAs who received a waiver of the TOEFL or of other accepted tests of English proficiency for admission, must also meet the requirement of proficiency in spoken English before they are assigned to teaching work that involves oral communication with undergraduate students. To meet this requirement, those ITAs may use any of three options listed above. Individual exceptions from these requirements (on a case-by-case basis in rare circumstances) will be considered by the Graduate School in consultation with the ELC upon the request of the department and with the endorsement of the Associate Dean of the College.**

### *3.9. The Research Project*

The research project for a thesis (Master's Plan A), a special problem (Master's Plan B) or a PhD. dissertation is normally selected by the student in conference with his/her Major Professor. The project is usually one that contributes to a research area for which the Major Professor has funds available to support the graduate student research project.

It is strongly recommended that the student conduct a preliminary literature review to ascertain the state of the art before in-depth laboratory or field experiments are planned.

Space for the project and use of research laboratory facilities will be arranged, when necessary, by the Major Professor.

### 3.10. Policy on Authorship and Plagiarism

Detailed information about this policy can be found at: <https://grad.msu.edu/researchintegrity/resources>

1. Authorship- A person claiming authorship of a scholarly publication must have met all of the following criteria;
  - a. Substantial participation in conception and design of the study, development of methodologies, or in analysis and interpretation of data;
  - b. Approval of the version of the manuscript to be submitted for publication;
  - c. Ability to explain and defend methodology and data pertinent to their specific contributions to the study in public or scholarly settings.
2. Acknowledgment - Contributions that do not justify authorship should be acknowledged separately in the notes to the manuscript. These may include general supervision of a research group, assistance in obtaining funding, or technical support.
3. Honorary Authorship - A claim of authorship by, or assignment of authorship to, persons who may have been associated in some way with a study but do not meet the criteria in item 1 may constitute an unethical research practice.
4. Allocation of credit and order of authorship - A senior scientist is generally defined as the person who initiates and oversees a project, supervises and advises the junior researchers, and makes intellectual contributions to the project. In the case of the graduate student thesis or dissertation research, the senior scientist is usually the student's Major Professor.

There is no general consensus on author order on scientific papers (Food Technol., 1989). A report by the National Academy of Sciences (NAS, 1995) states that "in many fields, the earlier a name appears in the list of authors, the greater the implied contribution, but conventions differ greatly among disciplines and among research groups." Sometimes the scientist with the greatest name recognition is listed first, whereas in other fields the research leader's name is always last. In some disciplines, supervisor's names rarely appear on papers, while in others the professor's name appears on almost every paper that comes out of the lab. Some research groups and journals avoid these decisions by simply listing authors alphabetically (NAS, 1995). Junior researchers may be listed as coauthors or even senior authors, depending on the work and arrangements within the research team (NAS, 1995). It is the responsibility of the senior scientist to assure that the contributions of study participants, both colleagues and students, are properly recognized.

Scientific research is a continuous, ever changing process of discovery, much larger than a single paper; as such, it is often impossible to establish a list of authors and order of authors when a project is initiated. Thus, the general publication policy of each senior scientist/faculty member should be discussed openly with all researchers (both colleagues and students) at the outset of a project. Before writing the manuscript, the faculty member should discuss author order with all authors.

5. Plagiarism - Plagiarism is the use of ideas or words of another person without giving appropriate credit (NAS, 1995). The expropriation of another author's text and the presentation of it as one's own, constitutes plagiarism. Plagiarism, in turn, constitutes misconduct in scholarship under University policies and procedures. Plagiarism in scholarly projects should be reported to one's Chairperson, dean, or the University Intellectual Integrity Officer.

6. Disputes Over Authorship and Plagiarism - Disagreements over authorship, e.g. who has a right to be an author or the order of authorship, and plagiarism should be resolved by the senior scientist in collegial consultation with the other authors. When resolution cannot be reached by this process, the person bringing forth the dispute should arrange with GAC and the Department Chairperson for arbitration by a knowledgeable and disinterested third party acceptable to all the authors. If the authors cannot agree on a mutually acceptable arbitrator, then the Vice President for Research and Graduate Studies shall appoint an arbitrator. During the arbitration process all the authors are expected to refrain from unilateral actions that may damage the authorship interests and rights of the other authors.
7. Accountability - Every author listed on a publication is presumed to have approved the final version of the manuscript. Each author is responsible for the integrity of the research being reported. Each author should denote approval of the final manuscript in writing using the departmental form: FSHN Authorship Designation. This requirement is waived if a manuscript is submitted to a journal requiring sign-off by all authors as part of the submission process.
8. Distribution - This policy should be distributed to all new faculty, graduate students and research staff in the department.
9. Student review of departmental file – Students may make a formal request to the Department Chairperson to review the accuracy of their departmental file in the presence of a graduate secretary. This request should be made in writing to the Department Chair with a copy to the Director of Graduate Studies; the letter will be entered into his/her file. All filed material must remain within the departmental office and cannot be photocopied or altered in any way.

#### References

- Holmes, Z.A. 1989. Roles and attitudes of authors regarding multiple authorship of papers in Journal of Food Science. Food Technol. 43(5): 94
- National Academy of Sciences, 1995, “*On Being a Scientist: Responsible Conduct in Research*,”
- National Academy Press, Washington, DC.

### *3.11. ProQuest: Requests for Hold/Embargo on Publication of Documents Submitted*

Students submitting a thesis/dissertation to ProQuest now can request a hold/embargo of publication by ProQuest by contacting the Graduate School at [msuetds.approval@grd.msu.edu](mailto:msuetds.approval@grd.msu.edu) or calling 517 353 3220. In response to the request, the Graduate School will send directly to the student a form that needs to be completed and turned to the Graduate School prior to the document submission to ProQuest. The form needs to be signed by the student’s major professor and by the Associate Dean of the student’s college. The request for the hold/embargo may be for six months, one year or two years. Requests for a period longer than six months must include a brief justification for the length of the requested hold/embargo.

### **2) Creating an Open Researcher and Contributor ID (ORCID) at the time of submission to ProQuest:**

At the time of submission to ProQuest, authors now have the opportunity to create an ORCID that provides researchers with a unique identifier for linking their research outputs and activities. An ORCID:

- Improves recognition of research contributions
- Reduces form-filling (enter data once, re-use it often)
- Works with many institutions, funders, and publishers
- Is a requirement of many journal manuscript submission systems and grant application forms.

To learn more about ORCID go to: <https://vimeo.com/237730655>

### 3.12. Other Degree Requirements

**Performance.** If a student's performance and/or progress does not meet departmental requirements, he/she shall be notified by the Department Chairperson. Where the deficiencies endanger the student's status in a degree program, he/she shall be promptly informed. A graduate student will be dismissed if his/her cumulative GPA falls below 3.0 for three consecutive semesters.

**Annual Review.** All graduate students are required to complete an annual review meeting with their guidance committees between October 1 and February 15 of each year. **Requirements for MS-DI students is in section 8.4.** The policy for annual reviews and annual review forms are available at: [Policy and Annual Review form](#)

**Annual Reports.** The Graduate Student Annual Report form will become a permanent record of accomplishment and will be maintained in the graduate student's departmental file. ***The Graduate Student Annual Report must be submitted to the Departmental Office each year irrespective of the type of appointment. The Annual Report is due by February 15 of each year.*** Annual report forms are available at: [Masters Plan A](#) or [Masters Plan B](#) or [Ph.D](#)

### 3.13. General Policies

**Purchases for Projects.** Many items can be obtained directly from MSU University Stores or Biochemistry Stores. List of store items can be viewed using the following links:

- MSU University Stores <https://usd.msu.edu/university-stores/>
- Biochemistry Stores <https://bmb.natsci.msu.edu/research/biochemistry-research-store/>).

Supplies from MSU University Stores and Biochemistry Stores must have the approval of the Major Professor who will indicate the account which is to be charged. A copy of the charge form must be returned to the Major Professor.

MSU University Stores may have an open account with off-campus sources for items not carried in stock. It is necessary to check with MSU Open Orders before obtaining items from such sources.

Students must have the approval of the Major Professor, and an appropriate account number, prior to ordering supplies. Supplies from off-campus which require a requisition must be obtained by filling out a form obtained from the Major Professor.

A large amount of scientific equipment is available in the Department. Such equipment is assigned to specific staff members for supervision and maintenance. Approval for its use should be initiated by the graduate student with the approval of his/her Major Professor. The staff member in charge of the equipment may request a minimum transfer of funds to cover the use of supplies and operational costs. Students using scientific equipment should be sure they know how to operate instruments before attempting to use them. The high cost of scientific equipment necessitates careful, informed use.



Computers. Proper use of computers is expected and required of all graduate students. Details of the University policy on Acceptable Use should be reviewed using information posted at <https://tech.msu.edu/about/guidelines-policies/aup/>

Statistics Consultation. The Statistical Consultation Service is a free service provided by MSU through the Department of Statistics and Probability, <https://stt.natsci.msu.edu/academics/statistics-learning-center/> the College of Agriculture and Natural Resources Biometry Group (<http://www.canr.msu.edu>), Center for Statistical Training & Consulting (<http://www.cstat.msu.edu/>), and the Computer Center. Services include assistance in designing experiments from a statistical viewpoint, choice of appropriate statistical techniques and information on available statistical programs.

University Vehicles. University vehicles are available to the graduate student for research-associated uses. Permission for use is contingent upon the approval of a properly filled out travel request. Travel request forms are available from the Department office. Graduate students may be authorized to use University vehicles to travel to a conference in another state. Approval of the Provost is required if the destination is greater than 500 miles one way from MSU. University vehicle insurance protects only the University, not the passengers. An occupant of a University vehicle injured in an accident would have to sue the University to collect damages from this insurance.

Copy and Fax Machine. Use of copy and fax machines in offices is restricted and policies vary concerning their use and page charges. Students should check with their Major Professor to determine the policy in their office. The copy and fax machine in Room 201 is for Department business only and requires permission from the Major Professor prior to use.

Telephones. No personal long distance calls may be made from Department phones. Local personal calls should be kept at a minimum as local calls are charged to the Department.

Building Access and Keys. Entrance doors to the building are open between 7:00 a.m. - 7:00 p.m. weekdays. After hours and weekends, access to the building will require an electronic keycard, which also serves as your ID. Requests for building access should be made in Room 204 Trout FSHN Building. Keys for the assigned graduate office can be checked out from the Department Office. Keys to other areas can be obtained from Room 204 Trout FSHN Building upon approval of the professor who is in charge of the room. No deposit is required for FSHN Faculty, Staff or Students. Lost keys will result in a \$75.00 charge per key.

Mailbox. You will be assigned a mailbox. It is the graduate student's responsibility to check the mailbox, frequently (daily, if possible). The mailbox should not be utilized for personal mail and is located in room 201.

Leave of Absence. Students who plan to take a leave of absence for one semester should inform the Department Chairperson in writing (with a copy to the Major Professor). A checkout sheet must be completed prior to leaving. Students taking a leave of absence for longer than three consecutive semesters, including summer, will need to follow university procedures for reinstatement.

Vacation. Students on graduate assistantships are given 10 work days vacation per year plus those official scheduled holidays given to faculty and staff. Currently there is no stated policy at the University, College or Department level regarding vacations for graduate students who are not on assistantships. Graduate students should consult with their Major Professor regarding the length and timing of vacations.



### Faculty Procedures for Applying and Admitting Graduate Students.

1. Faculty interested in a student ensures that student file on GAMS is complete.
2. Faculty sends student name to Director of Graduate Studies (DGS) and GAC Chair, requesting review.
3. GAC Chair requests GAC review of student, and recommendation on admission.
4. GAC Chair summarizes GAC comments and lets DGS know the recommendation based on majority vote.
5. DGS asks graduate secretary to draft letter of admission, and DGS works with advisor to finalize letter.
6. Letter of acceptance is sent to student.
7. Faculty interested in admitting a student should not convey acceptance/denial to the student, verbally or otherwise, until an official letter from DGS has been sent.
8. If denial is recommended, faculty may appeal denied admission directly to the Director of Graduate Studies within two weeks. The director of Graduate Studies will then present the appeal to GAC and may request that the faculty member defend the appeal at a meeting of GAC.

### *3.14. Graduate Student Conflict Resolution Policy*

Below outlines the conflict resolution policy for graduate students and advisors and/or instructors having a dispute regarding progress in graduate research, teaching assignments, or work demands. The process is as follows:

1. Student and advisor/instructor meet to discuss and attempt to resolve issues.
2. Student can also meet with guidance committee for advice before or after meeting with advisor or instructor.
3. If not resolved, the student should contact the Director of Graduate Studies (DGS) for a meeting. The DGS will also meet with the advisor or instructor. Upon hearing both sides, the DGS may call a meeting among all three parties to further discuss and attempt to come to an amicable agreement.
4. If the above actions remain unsatisfactory to either party, a meeting with the Chair of FSHN can be requested. Upon interview and review, the Chair will decide the appropriate course of action.
5. If the student/advisor/instructor is still dissatisfied with this outcome, he/she/they can contact the Assistant Dean of Graduate Studies in CANR for a review of the complaint.
6. If still not resolved, the graduate student may contact the Graduate School, Council of Graduate Students (COGS), Graduate Employees Union (GEU) for further direction.

The student can also contact the University Ombudsman for advice at any time during this process

## **4. M.S. DEGREE IN FOOD SCIENCE**

FSHN Graduate Students are encouraged to use the worksheet in Appendix D to track their progress.

### *4.1. Admission*

Admission to the M.S program is based on a detailed review of undergraduate (and, where applicable, previous graduate) performance, scores, letters of recommendation, previous research experience, and a letter of intent and research interests. Applicants should have a minimum grade-point average of 3.0, grades of 3.0 or above in science and mathematics courses, and proficiency in written and spoken English. Applicants should have taken undergraduate courses in physics, inorganic chemistry, organic chemistry, biochemistry, mathematics through

integral calculus, and microbiology. In addition, it is desirable for students to have taken upper level undergraduate courses in food processing, food chemistry, food microbiology, food engineering, and nutrition. In cases where students entering the master's program with one or more deficiencies in undergraduate coursework, appropriate collateral courses to take as a part of the degree requirement will be recommended by the Graduate Affairs Committee, Director of Graduate Studies, their advisor and guidance committee.

#### *4.1.1. Prerequisite Competencies*

The three core competencies in food science are: 1) Food Chemistry, 2) Food Microbiology, 3) Food Processing/Engineering. Competencies for each of the components can be obtained by completion of the following courses at MSU or an equivalent course at an IFT approved program with a grade of 3.0 or greater: **1) food microbiology competency:** FSC 440 Food Microbiology (3 credits), **2) food chemistry competency:** FSC 401 Food Chemistry (3credits), **3) food processing and engineering competency:** FSC 429 Food Engineering (3credits), and **one of the following processing courses:** FSC 430 Fruits and Vegetable Processing (3credits), FSC 431 Cereal Processing (3credits), FSC 432 Food Processing: Dairy Foods (3credits), FSC 433 Food Processing: Muscle Foods (3credits).

To substitute a course(s) taken outside of MSU and at non-IFT approved program for courses listed above the student must first get approval from his/her advisor and the guidance committee. This request will then be evaluated and approved by the instructor that teaches the equivalent course in the Department.

#### *4.2 Program of Study*

Set up a profile in GradPlan. All Master's (Plan A and Plan B) students will use the GradPlan located in the Student Information System at [student.msu.edu](http://student.msu.edu) . To learn more about the new SIS, please go to [sis.msu.edu/learn-more.html](http://sis.msu.edu/learn-more.html)

All aspects of the Master's program plan, including the designated major Professor and Guidance Committee, planned course work and the outcomes of examinations must be entered into GradPlan. GradPlan was developed for students to lay out a program of study, record faculty approvals, make notes on requirements as they are completed, track RCR and facilitate electronic approvals. GradPlan is also the only way final degree certification/degree audit will be conducted.

#### *4.3. Annual Review and Annual Reports*

Annual Review. All graduate students are required to complete an annual review meeting with their guidance committees at some point during their first spring semester of the program and to submit their paperwork by the final day of classes of their first spring semester of the program. The policy for annual reviews and annual review forms are available at: [Policy and Annual Review form](#)

Annual Reports: The Graduate Student Annual Report form will become a permanent record of accomplishment and will be maintained in the graduate student's departmental file. ***The Graduate Student Annual Report must be submitted to the Departmental Office each year irrespective of the type of appointment. The Annual Report is due by February 15 of each year.*** Annual Report forms are available at: [MS Plan B](#) or [MS Plan A](#)

#### *4.4. Course, Seminar, Research, and Residency Requirements*

The M.S. degree may be obtained under Plan A (with a thesis) or Plan B (without a thesis).

Student must:

1. Complete at least 30 total credits. Complete 16 credits at the 800 level or above. Two courses (6 credits) must be FSC courses excluding FSC 890, 892, 898, and 899.
2. Complete a minimum of 7 credits (Plan A) or a minimum of 12 credits (Plan B) of focused coursework in consultation with the major advisor and guidance committee.
3. Complete 1 credit of FSC 892 Food Science Seminar, in which students will present one seminar. Students may re-enroll in FSC 892 for a maximum of 2 credits towards the master's degree.

#### *Additional Requirements for Plan A*

1. Complete 6 credits in FSC 899 Master's Thesis Research. Students may not earn more than 10 credits in FSC 899.
2. Complete a thesis proposal approved by the guidance committee prior to initiation of research not related to the seminar given in FSC 892.
3. Successfully complete a written thesis, public oral thesis defense, and oral examination with the guidance committee.

#### *Additional Requirements for Plan B*

1. Complete 1 credit of FSC 898 Master's Research. Students may not earn more than 5 credits in FSC 898.
2. Complete an oral examination with the guidance committee.

A minimum of 6 credits in the degree program must be earned on campus in order to meet the University residency requirement. Full-time students, including those on 1/2-time assistantships, should expect to complete the M.S. degree in two years. University policy limits the total time for completion to five years.

Any student on Plan B wishing to transfer to Plan A or vice versa should complete a Master's Change form and write a letter to the Department Chairperson indicating the reasons for requesting the change. The request will be referred to the Department Graduate Affairs Committee for evaluation and recommendation. The Department Chairperson will then report the decision to the student.

### *4.5. Guidance Committee*

The Major Professor in consultation with the student shall select a Guidance Committee composed of: Master's **Plan A students** - at least three (3) MSU graduate faculty members as defined by the Faculty Handbook, and at least two (2) committee members must be from the FSHN department. Master's **Plan B student** - must have at least two (2) graduate faculty members, and at least one (1) must be from within the FSHN department. The major professor is responsible for ensuring that all paperwork is filed as required including the GradPlan that is required by the university. Committee members will be entered into GradPlan.

Students pursuing a Plan A Masters must prepare a thesis proposal to be approved by their Guidance Committee prior to initiation of the research. Format for proposals may vary, but should include background, justification, objectives, and protocols for the proposed studies.

#### 4.6. Examination

Examination on the thesis and related areas consists of a public seminar (Plan A) followed by a closed oral exam (Plans A and B), approximately one to two hours in length. Committee members may ask additional questions of Plan A M.S. candidates who anticipate continuing for the Ph.D. degree in FSHN at MSU to help determine the student's competence to be successful at the Ph.D. level. Fliers must be posted and email announcements must be distributed to all faculty two weeks ahead of the final examination seminar. Failure to do so will require the defense be rescheduled. See the Graduate Secretary for assistance with fliers and email announcements. Passing the oral exam requires a majority vote by the committee, and the committee will judge whether the student may continue for a Ph.D. Students failing the exam are allowed to retake the exam one time, within 3 months.

#### 4.7. Thesis Preparation

Thesis format should follow University regulations (a manual is available at <https://grad.msu.edu/etd/formatting-guide>). In consultation with the Major Professor, a leading journal in the field should be used as a format for references. All Plan A M.S. students must submit a successfully revised draft of the defended thesis to the Major Professor before the Final Certification for Graduation is approved by the Major Professor. MSU **only accepts** electronic theses submitted via ProQuest. The instructions for electronic submissions are available from <http://grad.msu.edu/etd/>. The target date for the final approval of an electronic Thesis to the Graduate School for graduating the semester of that submission is FIVE working days prior to the first day of classes for the next semester. **Be aware that a submission via ProQuest does not mean that the document has been accepted.** The review process is interactive and final approval can take anywhere from a few hours to weeks, depending upon the extent of the necessary revisions and how diligent the author is when making the necessary revisions. **Graduation on the semester of the electronic submission is only guaranteed if the document is approved on or before the target date for that semester.** The Major Professor and committee members should also receive bound copies of the thesis. All charges for preparing graphs, charts, typing, and binding of the thesis are to be paid by the student.

See section 3.11 for requesting a hold/embargo on publications of documents submitted to ProQuest.

#### 4.8. Final Semester Procedures

All students must apply to Graduate when registering for their final semester of the graduate program at MSU, this is the semester you plan to submit your thesis. If the student does not complete the work within the deadlines published in the Schedule of Courses and Calendar for that semester, but completes the requirements before the first day of classes for the next semester, no additional registration is required.

The Schedule of Courses and Calendar lists the deadlines pertaining to the thesis and/or oral exams for the graduating candidate for the semester in which graduation is expected. Students should familiarize themselves with the dates and meet the deadlines. Failure to comply with the above mentioned deadlines may delay graduation until the following semester.

The Graduate Advanced Degree Commencement Ceremonies will be on Friday of Finals week at 3:30 PM in the Breslin Center. Graduates and faculty should arrive one hour early to put on gowns and be properly ordered for the procession.

#### *4.9. Checkout and Final Certification*

A checkout sheet should be obtained by the student through the Graduate Secretary. The student must complete the form before leaving campus.

#### *4.10. Transfer from M.S. to Ph.D.*

Plan A students who wish to transfer from a M.S. to a Ph.D. may petition the Director of Graduate Studies for acceptance into a Ph.D. program. The petition should be accompanied by 1) a proof of submission of a first-author peer-reviewed journal article, 2) a letter of approval from the Major Professor, 3) transcripts, and 4) supporting letters from the guidance committee. The petition will be referred to the Graduate Affairs Committee for their evaluation and recommendation based on majority vote. The Director of Graduate Studies will then report the decision to the student.

#### *4.11. Continuation from M.S. degree into the Ph.D. program*

**Plan A students** who complete the M.S. degree in FSHN at MSU and are favorably recommended by the M.S. guidance committee to continue for Ph.D. studies should complete the “Request to Continue for a Ph.D. Degree” form. Copies of the form are available at [FSHN Graduate Forms](#). Students who complete the M.S. degree in FSHN at MSU and who are not recommended for Ph.D. studies by the M.S. guidance committee must reactivate their file to be considered for admission into the Ph.D. program. Their file will be reviewed, together with all other applicants for graduate study, as part of the regular review process by the entire faculty at the next regularly scheduled review meeting.

**Plan B candidates** cannot directly enter into the Human Nutrition Ph.D. program, but can submit an application to the department for acceptance into the Ph.D. program following the standard application procedures and timelines.

## **5. Ph.D. DEGREE IN FOOD SCIENCE**

FSHN Graduate Students are encouraged to use the worksheet in Appendix D to track their progress.

### *5.1. Admission*

Admission to the Ph.D. program is based on a detailed review of undergraduate (and, where applicable, previous graduate) performance, letters of recommendation, previous research experience, and a letter of intent and research interests. Applicants should have a minimum grade-point average of 3.0, grades of 3.0 or above in science and mathematics courses, and proficiency in written and spoken English. Applicants should have taken undergraduate courses in physics, inorganic chemistry, and organic chemistry; biochemistry; mathematics through integral calculus, and microbiology. In cases where students entering the doctoral program with one or more deficiencies in undergraduate coursework, appropriate collateral courses to take as a part of the degree requirement will be recommended by the Graduate Affairs Committee to the student, their advisor and guidance committee.

### *5.1. 1. Prerequisite Competencies*

The three core competencies in food science are: 1) Food Chemistry, 2) Food Microbiology, 3) Food Processing/Engineering. Competencies for each of the components can be obtained by completion of the following courses at MSU or an equivalent course at an IFT approved program with a grade of 3.0 or greater: **1) food microbiology competency:** FSC 440 Food Microbiology (3 credits) **2) food chemistry competency:** FSC 401 Food Chemistry (3credits) **3) food processing and engineering competency:** FSC 429 Food Engineering (3credits) **and one of the following processing courses:** FSC 430 Fruits and Vegetable Processing (3credits), FSC 431 Cereal Processing (3credits), FSC 432 Food Processing: Dairy Foods (3credits), FSC 433 Food Processing: Muscle Foods (3credits).

To substitute a course(s) taken outside of MSU and at non-IFT approved program for courses listed above the student must first get approval from his/her advisor and the guidance committee. This request will then be evaluated and approved by the instructor that teaches the equivalent course in the Department.

### *5.2. Program of Study*

Set up a profile in GradPlan. All Doctoral (PhD) students will use GradPlan located in the Student Information System at [student.msu.edu](http://student.msu.edu) . To learn more about the new SIS, please go to [sis.msu.edu/learn-more.html](http://sis.msu.edu/learn-more.html)

All aspects of the Ph.D. program plan, including the designated major Professor and Guidance Committee, planned course work and the outcomes of examinations must be entered into GradPlan. GradPlan was developed for Ph.D. students to lay out a program of study, record faculty approvals, make notes on requirements as they are completed, track RCR and facilitate electronic approvals. GradPlan is also the only way final degree certification/degree audit will be conducted.

In the course of studies for the Ph.D. degree, a student will undertake the following requirements:

1. Complete courses in the major and related fields as prescribed by his/her research guidance committee (see section 5.3.1 for details).
2. Conduct original research (see section 3.9 for details).
3. Pass the Comprehensive Examination (Dissertation Proposal Defense) (see section 5.5.1 for details).
4. Gain experience in teaching by assisting faculty in designated courses (see section 5.3.1 for details).
5. Prepare one or more first-authored, publishable manuscripts and, desirably, publish or at least submit these for publication (see section 5.5.2.1).
6. Prepare a dissertation (see section 5.8 for details).
7. Present her/his doctoral research at a public seminar and then pass a final oral examination in defense of the dissertation (see section 5.5.2 for details).

### *5.3. Annual Review and Annual Reports*

Annual Review. All graduate students are required to complete an annual review meeting with their guidance committees at some point during their first spring semester of the program and to submit their paperwork by the final day of classes of their first spring semester of the program. The policy for annual reviews and annual review forms are available at: [Policy and Annual Review form](#)

Annual Reports: The Graduate Student Annual Report form will become a permanent record of accomplishment and will be maintained in the graduate student's departmental file. ***The Graduate Student Annual Report must be submitted to the Departmental Office each year irrespective of the type of appointment. The Annual Report is due by February 15 of each year.*** Annual Report forms are available at: [Ph.D students](#)

## 5.4. Requirements

### 5.4.1. Course Requirements

The Doctor of Philosophy Degree in Food Science typically requires 20 to 36 course credits in addition to 24 research credits of FSC 999 Doctoral Dissertation Research to provide the desired breadth and depth of academic training for the student. In consultation with their major advisor, members of the research guidance committee, and the Director of Graduate Studies, additional course work may be specified that will benefit the student's research as well as courses necessary to complete the Ph.D. core requirements, especially for students who have earned a master's degree in another field. A cumulative grade-point average of 3.0 must be maintained exclusive of collateral and research credits.

Students must:

1. Complete 16 credits, with 12 credits at the 800-level or above, excluding seminar courses. Three courses (9 credits) must be FSC courses in a relevant area of research chosen in consultation with the major advisor and guidance committee. Upper-level undergraduate courses at the 400-level taken may be counted if approved in advance by the advisor, guidance committee, and Director of Graduate Studies.
2. Complete 2 credits of FSC 892 Food Science Seminar in two separate enrollments, in which students will present a seminar.
3. Complete a 1 credit course offered by the department or university on writing a research proposal.
4. Complete at least 1 credit of FSC 891 Selected Topics in Food Science with a Food Science and Human Nutrition faculty member related to graduate teaching orientation.
5. Complete a written dissertation proposal defense (comprehensive examination) and public seminar not related to requirement 2. above, followed by an oral examination with the guidance committee.
6. Completion of a final written dissertation and public oral defense, followed by an oral examination with the guidance committee.
7. Complete 24 credits of FSC 999 Doctoral Dissertation Research.

In consultation with their Major Advisor, members of the research guidance committee, and Director of Graduate Studies, additional course work may be specified that will benefit the student's research as well as courses necessary to complete the Ph.D. core requirements (especially for students who have earned the M.S. degree in another field). A typical doctoral program contains 20 to 36 course credits to provide the desired breadth and depth of academic training for the student. A cumulative GPA of 3.0 must be maintained (exclusive of collateral and research credits).

### 5.4.2. Research Requirements.

For the Ph.D. degree in Food Science, 24 research credits (FSC 999) are required beyond the M.S. degree.

Requests for overrides to exceed the maximum of 36 credits of 999 must be submitted to the Office of Registrar, through the Graduate Secretary. Should the total number of credits go above 45 the RO will confer with the Graduate School before considering the request for an override.

### *5.4.3. Seminar Requirements*

All Food Science Ph.D. students are required to present two seminars for credit (FSC 892). One of these seminars will be outside of the student's dissertation research area. The other seminar will be related to the student's dissertation research. Ph.D. candidates are also required to present a dissertation research proposal seminar and a final dissertation defense seminar (both without FSC 892 credit), both of which are open to the public.

### *5.4.4. Residency Requirements*

One year of residence (defined as enrollment in courses offered and attended on campus) is required to meet the University residence requirement. One year of residence will be made up of two consecutive semesters involving the completion of at least 6 credits of graduate work per semester.

## *5.5. Guidance Committee*

The Major Professor, in consultation with the student, shall select a Guidance Committee composed of at least four MSU graduate faculty members, three of whom must be from this Department. One of the three members from this Department, who is not the Major Professor, shall be appointed the Exam Committee Chair. The Committee Chair will serve to preside over the student's research proposal defense and final dissertation defense. The major professor is responsible for ensuring that all paperwork is filed as required including the GradPlan that is required by the university. The fourth member of the committee must be from another Department. Additional members can be from any MSU Department. Committee members will be entered into GradPlan.

Upon approval of the dissertation project outline, students should complete a research proposal for presentation and discussion at the oral comprehensive exam as outlined in Section 5.5.1. Additional meetings are to be held to consult on the student's research as deemed necessary by the Chairperson of the Guidance Committee and the student. Informal consultation between the student and individual members of the committee is encouraged.

## *5.6. Examinations*

### *5.6.1. Comprehensive Examination (Dissertation Proposal Defense)*

The purpose of the comprehensive examination (Dissertation Proposal Defense) is to evaluate the student's preparation and knowledge in his/her research emphasis area to ascertain the candidate's potential to communicate ideas, design experiments, conduct research and interpret data – qualifications necessary for successful completion of a Ph.D. dissertation. The Comprehensive Examination is overseen by the Food Science student's Guidance Committee (see section 5.5.1.2 for details) and must be in compliance with the regulations and guidelines of the MSU graduate program and the Department of FSHN.

#### *5.6.1.1. Schedule and Proposal*



By the end of the first semester of the third year, the student will prepare and defend a written research proposal. The proposal should be in the current USDA-NIFA or NIH R21 format and include the following elements: Summary/Abstract, Specific Aims/Hypothesis, Background, Rationale/Significance, Methods, Expected Results and Pitfalls, Facilities/Equipment, Biosketches, and Budget. An expanded literature review should also be included with the proposal. A hard copy of the proposal will be distributed to the student's Guidance Committee at least 14 days prior to the proposal defense. Fliers must be posted and email announcements must be distributed to all faculty two weeks ahead of the final examination seminar. Failure to do so will require the proposal defense be rescheduled. See the Graduate Secretary for assistance with fliers and email announcements. All sources of information ordinarily available to research workers may be utilized in the preparation of the proposal, including any of the major professor's own grant proposal(s) that he/she may wish to make available to the student. Prior to undertaking the writing, the student should engage in dialogue with the major professor(s) and guidance committee members regarding the feasibility of particular experiments. However, the spirit of the examination is that the written proposal must reflect the student's own ideas and thinking. While it is impossible (and inappropriate) to remove the influence of the major professor from the conception and definition of the student's project, the background and impetus for the research, the rationale of approach, the hypotheses to be tested, the experimental designs, and the anticipated results and significance of the work, should all be a product of the student's imagination and effort. Furthermore, it is the student's responsibility to meet accepted standards of original writing, attribution of source material, spelling and grammar.

#### *5.6.1.2. Format and Guidelines for Closed Questioning*

The student will present his/her dissertation proposal defense (comprehensive exam) in the form of an open seminar. The seminar is open to the members of the department and all those that wish to attend. Immediately following the presentation, the Ph.D. candidate will meet with the committee to defend the proposed research in private. The student will be evaluated on his/her ability to defend the proposed research, design experiments, interpret data, and communicate in related areas of food science research. The criteria used by the committee to render a decision include an assessment of the candidate's ability to identify an important research problem, knowledge in the chosen area of interest and related areas, and his/her ability to design experiments for the solution of the problem and to effectively communicate these ideas both orally and in writing. In addition, questions relating the proposal to pertinent coursework and the broader area of Food Science will be asked. The student's Major Professor will attend the proposal defense. However, the Major Professor will not ask questions, but will be available for clarification of technical points should the need arise. The Major Professor will participate in the discussions following the defense and will vote.

#### *5.6.1.3. Outcomes of Oral Comprehensive Examination*

In arriving at a decision, the oral comprehensive examination committee will evaluate the student's performance on the written proposal, seminar presentation and closed questioning. Three outcomes are possible:

1. **PASS** – all but one committee member required to pass. If all but one pass is not reached, student has six months to reschedule examination. At the retake meeting if, all but one vote is not reached the student is dismissed from the program.
2. **FAIL** – requires a unanimous vote of the examination committee. If this decision is reached, no remediation is available and the student will be recommended for dismissal from the doctoral program. The student may continue toward an M.S. degree if the major professor(s) concurs. Upon completion of the M.S., the student may reapply

to the Ph.D. program. At this time, the M.S. guidance committee will evaluate the student's potential for a doctoral degree and decide whether to recommend the student for acceptance into the Food Science doctoral program.

3. **DELAY** - If the examination committee chooses neither of the above options and can identify a deficiency in the student's performance that is believed to be correctable within a reasonably short period of time, it will detail, both verbally and in a letter to the student, the nature of the problem(s) and the requirements for successful remediation. A time limit, not to exceed three months, will be set. If, in the opinion of the committee, the student fails to adequately remediate the deficiency in the specified time frame, he/she will be recommended for dismissal from the doctoral program. If the student is judged to have remediated it successfully, she/he will then have passed the exam. Situations that may warrant a "DELAY" include: (i) a serious pitfall in an otherwise satisfactory proposal that can be remedied by revision of an experimental design or method of analysis; (ii) the failure to recognize, deal with or interpret a likely alternative outcome(s) of an experiment and its implication; (iii) a poorly written or poorly documented section of the proposal requiring substantial revision; and (iv) the lack of sufficient understanding of a method of data acquisition (e.g. an assay procedure) or analysis (e.g. appropriate statistical method) viewed as a critical component of the research. The "DELAY" should not be used to remedy a serious deficiency in fundamental knowledge that should have been attained by the student through required coursework. A remediation timeframe exceeding three months must be approved by the GAC.

## *5.6.2. Final Examination*

### *5.6.2.1. Manuscript Requirement*

All Ph.D. candidates are required to prepare one or more publishable manuscript based on the dissertation and provide them to the Major Professor prior to scheduling the final examination.

### *5.6.2.2. Scheduling*

A HARD COPY draft of the dissertation approved by the Major Professor must be provided to the members of the Guidance Committee at least 14 days prior to the scheduled final exam. The candidate must be registered during the semester in which the final examination is taken. An announcement is prepared two weeks ahead of the final examination by the student and distributed by the Graduate Secretary to faculty in FSHN and other relevant departments.

### *5.6.2.3. Seminar and Exam*

As part of the examination, the student presents an open seminar. Immediately after the public presentation and open discussion, the oral examination on the dissertation will be conducted by the research guidance committee. The student's Major Professor will preside at the dissertation defense and ensure it is conducted in an appropriate and equitable fashion that is consistent with departmental standards. The student's Major Professor will participate in questioning as well as post-exam discussions and will vote. When the Ph.D. final examination is passed, the MSU form (Record of Completion of Requirements for Doctoral Degree) <http://www.fshn.msu.edu/uploads/files/RecordOralExamDissertation102011.doc> should be completed and signed by the Major Professor and members of the Guidance Committee and distributed.

#### 5.6.2.4. *Outcomes of the Final Examination*

In arriving at a decision, the final examination committee will evaluate the student's performance on the written dissertation, seminar presentation and closed questioning. Three outcomes are possible:

1. **PASS** – requires a unanimous vote of the examination committee.
2. **FAIL** – requires a unanimous vote of the examination committee. If this decision is reached, no remediation is available and the student will be recommended for dismissal from the doctoral program. The student may continue toward an M.S. degree if the major professor(s) concurs.
3. **DELAY** - If the examination committee chooses neither of the above options and can identify a deficiency in the student's performance that is believed to be correctable within a reasonably short period of time, it will detail, both verbally and in a letter to the student, the nature of the problem(s) and the requirements for successful remediation. A time limit, not to exceed three months, will be set. A remediation timeframe exceeding three months must be approved by the GAC.

#### 5.7. *Time Limit*

According to the university requirements, the comprehensive exam must be completed within 5 years, and all requirements for the Ph.D. degree must be completed within 8 years of a student's first enrollment for doctoral degree credit. Any exceptions must be approved by the Chairperson, Dean of the relevant College and the Dean of The Graduate School.

#### 5.8. *Final Semester Procedures*

The student must apply for graduation when registering for the final semester of the graduate program at MSU. If the student does not complete the doctoral degree requirements within the deadlines published in the Schedule of Courses and Calendar for that semester, but completes the requirements before the first day of classes for the next semester, no additional registration is required.

The Graduate Advanced Degree Commencement Ceremonies will be on Friday of Finals week at 3:30 PM in the Breslin Center. Graduates and faculty should arrive one hour early to put on gowns and be properly ordered for the procession.

#### 5.9. *Dissertation Preparation*

Dissertation format should follow University regulations (a manual is available at the Graduate School Office). A major journal in the field might be used as a format (i.e., J. Food Science, J. Nutrition). All charges for preparing graphs, charts, typing and binding of the dissertation are paid by the student.

MSU **only accepts** electronic dissertations submitted via ProQuest. The instructions for electronic submissions are available from <http://grad.msu.edu/etd/>. The target date for the final approval of an electronic Dissertation to the Graduate School for graduating the semester of that submission is FIVE working days prior to the first day of classes for the next semester. **Be aware that a submission via ProQuest does not mean that the document has been accepted.** The review process is interactive and final approval can take anywhere from a few hours to

weeks, depending upon the extent of the necessary revisions and how diligent the author is when making the necessary revisions. **Graduation on the semester of the electronic submission is only guaranteed if the document is approved on or before the target date for that semester.** In addition, one bound copy of the abstract and dissertation shall be presented to the Major Professor and committee members. See section 3.11 for requesting a hold/embargo on publications of documents submitted to ProQuest.

### *5.10. Checkout*

A Doctoral Program Requirements Checklist and Graduate Student Checkout Form should be obtained by the student through the Graduate Secretary or under Ph.D Graduate Forms. The student should complete the form before leaving campus.

## **6. M.S. DEGREE IN HUMAN NUTRITION**

FSHN Graduate Students are encouraged to use the worksheet in Appendix B to track their progress.

### *6.1. Admission*

Admission to the M.S program is based on a detailed review of undergraduate (and, where applicable, previous graduate) performance, letters of recommendation, previous research experience, and a letter of intent and research interests. Applicants should have a minimum grade-point average of 3.0, grades of 3.0 or above in science and mathematics courses, and proficiency in written and spoken English. Applicants should have taken undergraduate courses in nutrition, chemistry, biology, upper-level physiology and biochemistry, statistics, organic chemistry, and a social science. In addition, it is desirable for students to have taken upper-level undergraduate courses in macronutrients, micronutrients, nutrition and human development, and community nutrition. In cases where students enter the master's program with one or more deficiencies in undergraduate coursework, appropriate collateral courses to take as a part of the degree requirement will be recommended by the Graduate Admissions Committee to the student, their advisor and guidance committee.

#### *6.1.1. Prerequisite Competencies*

The three core competencies in human nutrition are: 1) Carbohydrates, Lipids, and Proteins, 2) Vitamins and Minerals and 3) Applied Nutrition. Competencies for each of the components can be obtained by completion of the following courses at MSU with a grade of 3.0 or greater: **1) Advanced Human Nutrition: Carbohydrates, Lipids, and Proteins:** HNF 461 (3 credits), **2) Advanced Human Nutrition: Vitamins and Minerals:** HNF 462 (3 credits) and **3) one of the following courses:** Community Nutrition HNF 375 (2 credits) or Applied Community Nutrition HNF 377 (4 credits) or Nutrition and Human Development HNF 453 (3 credits)

To substitute a course(s) taken outside of MSU for courses listed above, the student must first get approval from his/her advisor and the guidance committee. This request will then be evaluated and approved by the instructor that teaches the equivalent course in the Department.

### *6.2. Program of Study*

Set up a profile in GradPlan. All Master's (Plan A and Plan B) students who will use the GradPlan located in the Student Information System at [student.msu.edu](http://student.msu.edu) . To learn more about the new SIS, please go to [sis.msu.edu/learn-more.html](http://sis.msu.edu/learn-more.html)

All aspects of the Master’s program plan, including the designated major Professor and Guidance Committee, planned course work and the outcomes of examinations must be entered into GradPlan. GradPlan was developed for students to lay out a program of study, record faculty approvals, make notes on requirements as they are completed, track RCR and facilitate electronic approvals. GradPlan is also the only way final degree certification/degree audit will be conducted.

### 6.3. Annual Review and Annual Reports

Annual Review. All graduate students are required to complete an annual review meeting with their guidance committees at some point during their first spring semester of the program and to submit their paperwork by the final day of classes of their first spring semester of the program. The policy for annual reviews and annual review forms are available at: [Policy and Annual Review form](#)

Annual Reports: The Graduate Student Annual Report form will become a permanent record of accomplishment and will be maintained in the graduate student’s departmental file. ***The Graduate Student Annual Report must be submitted to the Departmental Office each year irrespective of the type of appointment. The Annual Report is due by February 15 of each year.*** Annual Report forms are available at: [MS Plan B](#) or [MS Plan A](#)

### 6.4. Course, Seminar, Research and Residency Requirements

The M.S. degree may be obtained under Plan A (with a thesis) or Plan B (without a thesis). Either program consists of at least 30 total credits.

The student must complete:

1. All of the following courses (10 credits):

HNF	820	Advanced Biochemical Nutrition	3
HNF	821	Advanced Vitamins and Minerals	3
HNF	823	Research Methods in Human Nutrition	3
HNF	892	Nutrition Seminar	1
  
2. One of the following courses (3 credits):

HNF	840	Human Nutrition and Chronic Disease	3
HNF	891	Topics in Human Nutrition	3
  
3. One of the following courses (1 or 3 credits):

HNF	824	Nutrition Policies and Programs	1
Alternative public health or community nutrition course approved by guidance committee			3
  
4. A 3-credit graduate level statistics course chosen in consultation with advisor and guidance committee.
  
5. A minimum of 5 credits (Plan A) or 11 credits (Plan B) in course work in one or more focus areas selected in consultation with the student’s guidance committee.

#### *Additional Requirements for Plan A*

1. The following course (6 credits):

2. Successfully complete a proposal defense and defend the oral and written thesis.

#### *Additional Requirements for Plan B*

1. The following course (1-5 credits):  
HNF 898 Master's Project 1 to 5  
Students may not earn more than 5 credits in HNF 898.
2. Successfully pass a qualifying examination and complete a final examination or evaluation.

A minimum of 6 credits in the degree program must be earned on campus in order to meet the University residency requirement. Full-time students, including those on 1/2-time assistantships, should expect to complete the M.S. degree in two years. University policy limits the total time for completion to five years.

Any student on Plan B wishing to transfer to Plan A or vice versa should complete a Change of Status form and write a letter to the Department Chairperson indicating the reasons for requesting the change. The request will be referred to the Department Graduate Affairs Committee for evaluation and recommendation. The Department Chairperson will then report the decision to the student.

### *6.5. Guidance Committee*

The Major Professor in consultation with the student shall select a Guidance Committee composed of: Master's **Plan A students** - at least three (3) MSU graduate faculty members as defined by the Faculty Handbook, and at least two (2) committee members must be from the FSHN department. Master's **Plan B student** - must have at least two (2) graduate faculty members, and at least one (1) must be from within the FSHN department. The major professor is responsible for ensuring that all paperwork is filed as required including the GradPlan that is required by the university. Committee members will be entered into GradPlan.

Students pursuing a Plan A Masters must prepare a thesis proposal to be approved by their Guidance Committee prior to initiation of the research. Format for proposals may vary, but should include background, justification, objectives, and protocols for the proposed studies.

### *6.6. Examination*

Examination on the thesis and related areas consists of a public seminar (Plan A) followed by a closed oral exam (Plans A and B), approximately one to two hours in length. Committee members may ask additional questions of Plan A M.S. candidates who anticipate continuing for the Ph.D. degree in FSHN at MSU to help determine the student's competence to be successful at the Ph.D. level. Fliers must be posted and email announcements must be distributed to all faculty two weeks ahead of the final examination. Failure to do so will require the defense be rescheduled. See the Graduate Secretary for assistance with fliers and email announcements. Passing the oral exam requires a majority vote by the committee, and the committee will judge whether the student may continue for a Ph.D. Students failing the exam are allowed to retake the exam one time, within 3 months.

## 6.7. Thesis Preparation

Thesis format should follow University regulations (a manual is available at <http://grad.msu.edu/format.htm>). In consultation with the Major Professor, a leading journal in the field should be used as a format for references. All Plan A M.S. students must submit a successfully revised draft of the defended thesis to the Major Professor before the Final Certification for Graduation is approved by the Major Professor. MSU **only accepts** electronic theses submitted via ProQuest. The instructions for electronic submissions are available from <https://grad.msu.edu/etd/formatting-guide>. The target date for the final approval of an electronic Thesis to the Graduate School for graduating the semester of that submission is FIVE working days prior to the first day of classes for the next semester. **Be aware that a submission via ProQuest does not mean that the document has been accepted.** The review process is interactive and final approval can take anywhere from a few hours to weeks, depending upon the extent of the necessary revisions and how diligent the author is when making the necessary revisions. **Graduation on the semester of the electronic submission is only guaranteed if the document is approved on or before the target date for that semester.** The Major Professor and committee members should also receive bound copies of the thesis. All charges for preparing graphs, charts, typing, and binding of the thesis are to be paid by the student.

See section 3.11 for requesting a hold/embargo on publications of documents submitted to ProQuest.

## 6.8. Final Semester Procedures

All students must apply to Graduate when registering for their final semester of the graduate program at MSU, this is the semester you plan to submit your thesis. If the student does not complete the work within the deadlines published in the Schedule of Courses and Calendar for that semester, but completes the requirements before the first day of classes for the next semester, no additional registration is required.

The Schedule of Courses and Calendar lists the deadlines pertaining to the thesis and/or oral exams for the graduating candidate for the semester in which graduation is expected. Students should familiarize themselves with the dates and meet the deadlines. Failure to comply with the above mentioned deadlines may delay graduation until the following semester.

The Graduate Advanced Degree Commencement Ceremonies will be on Friday of Finals week at 3:30 PM in the Breslin Center. Graduates and faculty should arrive one hour early to put on gowns and be properly ordered for the procession.

## 6.9. Checkout and Final Certification

A checkout sheet should be obtained by the student through the Graduate Secretary. The student must complete the form before leaving campus.

## 6.10. Transfer from M.S. to Ph.D.

Plan A students who wish to transfer from a M.S. to a Ph.D. may petition the Director of Graduate Studies for acceptance into a Ph.D. program. The petition should be accompanied by 1) a proof of submission of a first-author peer-reviewed journal article, 2) a letter of approval from the Major Professor, 3) transcripts, and 4) supporting letters from the guidance committee. The petition will be referred to the Graduate Affairs Committee



for their evaluation and recommendation based on majority vote. The Director of Graduate Studies will then report the decision to the student.

### *6.11. Continuation from M.S. degree into the Ph.D. program*

**Plan A students** who complete the M.S. degree in FSHN at MSU and are favorably recommended by the M.S. guidance committee to continue for Ph.D. studies should complete the “Request to Continue for a Ph.D. Degree” form. Copies of the form are available at [FSHN Graduate Forms](#). Students who complete the M.S. degree in FSHN at MSU and who are not recommended for Ph.D. studies by the M.S. guidance committee must reactivate their file to be considered for admission into the Ph.D. program. Their file will be reviewed, together with all other applicants for graduate study, as part of the regular review process by the entire faculty at the next regularly scheduled review meeting.

**Plan B candidates** cannot directly enter into the Human Nutrition Ph.D. program, but can submit an application to the department for acceptance into the Ph.D. program following the standard application procedures and timelines.

## **7. Ph.D. DEGREE IN HUMAN NUTRITION**

FSHN Graduate Students are encouraged to use the worksheet in Appendix D to track their progress.

### *7.1. Admission*

Admission to the Ph.D. program is based on a detailed review of undergraduate (and, where applicable, previous graduate) performance, letters of recommendation, previous research experience, and a letter of intent and research interests. Applicants should have a minimum grade-point average of 3.0, grades of 3.0 or above in science and mathematics courses, and proficiency in written and spoken English. Applicants should have taken undergraduate courses in nutrition, chemistry, biology, upper-level physiology and biochemistry, statistics, organic chemistry, and a social science. In cases where students entering the doctoral program with one or more deficiencies in undergraduate coursework, appropriate collateral courses to take as a part of the degree requirement will be recommended by the Graduate Admissions Committee to the student, their advisor and guidance committee.

#### *7.1.1. Prerequisite Competencies*

The three core competencies in human nutrition are: 1) Carbohydrates, Lipids, and Proteins, 2) Vitamins and Minerals and 3) Applied Nutrition. Competencies for each of the components can be obtained by completion of the following courses at MSU with a grade of 3.0 or greater: (1) **Advanced Human Nutrition: Carbohydrates, Lipids and Proteins:** HNF 461 (3 credits), 2) **Advanced Human Nutrition: Vitamins and Minerals:** HNF 462 (3 credits), and 3) **one of the following courses:** Community Nutrition: HNF 375 (2 credits), Applied Community Nutrition: HNF 377 (4 credits) or Nutrition and Human Development: HNF 453 (3 credits).

To substitute a course(s) taken outside of MSU for courses listed above, the student must first get approval from his/her advisor and the guidance committee. This request will then be evaluated and approved by the instructor that teaches the equivalent course in the Department.



## 7.2. Program of Study

Set up a profile in GradPlan. All Doctoral (PhD) students will use the GradPlan located in the Student Information System at [student.msu.edu](http://student.msu.edu). To learn more about the new SIS, please go to [sis.msu.edu/learn-more.html](http://sis.msu.edu/learn-more.html)

All aspects of the Ph.D. program plan, including the designated major Professor and Guidance Committee, planned course work and the outcomes of examinations must be entered into GradPlan. GradPlan was developed for Ph.D. students to lay out a program of study, record faculty approvals, make notes on requirements as they are completed, track RCR and facilitate electronic approvals. GradPlan is also the only way final degree certification/degree audit will be conducted.

In the course of studies for the Ph.D. degree, a student will undertake the following requirements:

1. Complete courses requirements as described in section 7.3.1.
2. Conduct original research (section 3.9).
3. Pass the Doctoral Comprehensive Examination (Dissertation Proposal Defense) (section 7.5.1).
4. Gain experience in teaching by assisting faculty in designated courses (section 7.3.1).
5. Prepare one or more first-authored, publishable manuscripts and, desirably, publish or at least submit these for publication (section 7.5.2.1).
6. Prepare a dissertation (section 7.8).
7. Present her/his doctoral research at a public seminar and then pass a final oral examination in defense of the dissertation (section 7.5.2).

## 7.3. Annual Review and Annual Reports

Annual Review. All graduate students are required to complete an annual review meeting with their guidance committees at some point during their first spring semester of the program and to submit their paperwork by the final day of classes of their first spring semester of the program. The policy for annual reviews and annual review forms are available at: [Policy and Annual Review form](#)

Annual Reports: The Graduate Student Annual Report form will become a permanent record of accomplishment and will be maintained in the graduate student's departmental file. ***The Graduate Student Annual Report must be submitted to the Departmental Office each year irrespective of the type of appointment. The Annual Report is due by February 15 of each year.*** Annual Report forms are available at: [Ph.D students](#)

## 7.4. Requirements

### 7.4.1. Course Requirements.

The student must:

1. Complete all of the following courses (11 credits):

HNF	820	Advanced Biochemical Nutrition	3
HNF	821	Advanced Vitamins and Minerals	3
HNF	823	Research Methods in Human Nutrition	3
HNF	892	Nutrition Seminar	2

2. One of the following courses (3 credits):
 

HNF	840	Human Nutrition and Chronic Diseases	3
HNF	891	Topics in Human Nutrition	3
3. One of the following courses (1 or 3 credits):
 

HNF	824	Nutrition Policies and Programs	1
Alternative public health or community nutrition course approved by guidance Committee.			3
4. A 3-credit graduate-level statistics course chosen in consultation with advisor and guidance committee.
5. Complete a mentored teaching experience through one of the following courses (1 or 2 credits):
 

HNF	894	Human Nutrition Practicum	1
ISE	870	Teaching College Science	2
6. Complete additional course work approved selected in consultation with the student's guidance committee based on the student's prior academic background in relation to the selected area of study and research.
7. Complete 24 credits of course work in HNF 999 Doctoral Dissertation Research.
8. Successfully complete a proposal defense and defend the oral and written dissertation.

#### *7.4.2. Research Requirements.*

For the Ph.D. degree in Human Nutrition, 24 research credits (HNF 999) are required beyond the M.S. degree.

Requests for overrides to exceed the maximum of 36 credits of 999 must be submitted to the Office of the Registrar through the Graduate Secretary. Should the total number of credits go above 45 the RO will confer with the Graduate School before considering the request for an override.

#### *7.4.3. Seminar Requirements*

All Human Nutrition Ph.D. students are required to present two seminars for credit (HNF 892). One of these seminars will be outside of the student's dissertation research area. The other seminar will be related to the student's dissertation research. Ph.D. candidates are also required to present a dissertation research proposal seminar and a final dissertation defense seminar (both without HNF 892 credit), both of which are open to the public.

#### *7.4.4. Residency Requirements*

One year of residence (defined as enrollment in courses offered and attended on campus) is required to meet the University residence requirement. One year of residence will be made up of two consecutive semesters involving the completion of at least 6 credits of graduate work per semester.

#### *7.5. Guidance Committee*

The Major Professor, in consultation with the student, shall select a Guidance Committee composed of at least four (4) MSU graduate faculty members, three (3) of whom must be from the FSHN department. One of the three (3) members from the FSHN department, who is not the Major Professor, shall be appointed the Exam Committee Chair. The Committee Chair will serve to preside over the student's research proposal defense and final dissertation defense. The major professor is responsible for ensuring that all paperwork is filed as required including the GradPlan that is required by the university. The fourth member of the committee must be from another Department. Additional members can be from any MSU Department. Committee members will be entered into GradPlan.

Upon approval of the dissertation research project outline, students should complete a research proposal for discussion by the oral comprehensive exam as outlined in Section 7.5.1. Additional meetings are to be held to consult on the student's research as deemed necessary by the Chairperson of the Guidance Committee and the student. Informal consultations between the student and individual members of the committee are encouraged.

## *7.6. Examinations*

### *7.6.1. Comprehensive Examination (Dissertation Proposal Defense)*

The purpose of the comprehensive examination (Dissertation Proposal Defense) is to evaluate the student's preparation and knowledge in his/her research emphasis area to ascertain the candidate's potential to communicate ideas, design experiments, conduct research and interpret data -- qualifications necessary for successful completion of a Ph.D. dissertation. The Comprehensive Examination is overseen by the Human Nutrition student's Guidance Committee (see section 7.5.1.2) and must be in compliance with the regulations and guidelines of the MSU Graduate Program and the Department of FSHN.

#### *7.6.1.1. Schedule and Proposal*

By the end of the first semester of the third year, the student will prepare and defend a written research proposal. The proposal should be in the current USDA- NIFA or NIH R21 or RO1 format and include the following elements: Summary/Abstract, Specific Aims/Hypothesis, Background, Rationale/Significance, Methods, Expected Results and Pitfalls, Facilities/Equipment, Biosketches, and Budget. And expanded literature review should also be included in the proposal. This HARD COPY of the proposal will be distributed to the student's Guidance Committee at least 14 days prior to the proposal defense. Fliers must be posted and email announcements must be distributed to all faculty two weeks ahead of the final examination. Failure to do so will require that the proposal defense be rescheduled. See the Graduate Secretary for assistance with fliers and email announcements. All sources of information ordinarily available to research workers may be utilized in the preparation of the proposal, including any of the major professor's own grant proposal(s) that he/she may wish to make available to the student. Prior to undertaking the writing, the student should engage in dialogue with the major professor(s) and guidance committee members regarding the feasibility of particular experiments. However, the spirit of the examination is that the written proposal must reflect the student's own ideas and thinking. While it is impossible (and inappropriate) to remove the influence of the major professor from the conception and definition of the student's project, the background and impetus for the research, the rationale of approach, the hypotheses to be tested, the experimental designs, and the anticipated results and significance of the work, should all be a product of the student's imagination and effort. Furthermore, it is the student's responsibility to meet accepted standards of original writing, attribution of source material, spelling and grammar.

### *7.6.1.2. Format and Guidelines for Closed Questioning*

The student will present their dissertation proposal defense (comprehensive exam) in the form of an open seminar. The seminar is open to the members of the department and those that wish to attend. Immediately following the presentation, the Ph.D. candidate will meet with the committee to defend the proposed research in private. The student will be evaluated on his/her ability to defend the proposed research, design experiments, interpret data, and communicate in related areas of human nutrition research. The criteria used by the committee to render a decision include an assessment of the candidate's ability to identify an important research problem, knowledge in the chosen area of interest and related areas, and his/her ability to design experiments for the solution of the problem and to effectively communicate these ideas both orally and in writing. In addition, questions relating the proposal to pertinent coursework and the broader area of Human Nutrition will be asked. The student's Major Professor will attend the proposal defense. However, the Major Professor will not ask questions, but will be available for clarification of technical points should the need arise. The Major Professor will participate in the discussions following the defense and will vote.

### *7.6.1.3. Outcomes of Oral Comprehensive Examination*

In arriving at a decision, the oral comprehensive examination committee will evaluate the student's performance on the written proposal, seminar presentation and closed questioning. Three outcomes are possible:

1. **PASS** – all but one committee member required to pass. If all but one pass is not reached, student has six months to reschedule examination. At the retake meeting if, all but one vote is not reached the student is dismissed from the program.
2. **FAIL** – requires a unanimous vote of the examination committee. If this decision is reached, no remediation is available and the student will be recommended for dismissal from the doctoral program. The student may continue toward an M.S. degree if the major professor(s) concurs. Upon completion of the M.S., the student may reapply to the Ph.D. program. At this time, the M.S. guidance committee will evaluate the student's potential for a doctoral degree and decide whether to recommend the student for acceptance into the Human Nutrition doctoral program.
3. **DELAY** - If the examination committee chooses neither of the above options and can identify a deficiency in the student's performance that is believed to be correctable within a reasonably short period of time, it will detail, both verbally and in a letter to the student, the nature of the problem(s) and the requirements for successful remediation. A time limit, not to exceed three months, will be set. If, in the opinion of the committee, the student fails to adequately remediate the deficiency in the specified time frame, he/she will be recommended for dismissal from the doctoral program. If the student is judged to have remediated it successfully, she/he will then have passed the exam. Situations that may warrant a "DELAY" include: (i) a serious pitfall in an otherwise satisfactory proposal that can be remedied by revision of an experimental design or method of analysis; (ii) the failure to recognize, deal with or interpret a likely alternative outcome(s) of an experiment and its implication; (iii) a poorly written or poorly documented section of the proposal requiring substantial revision; and (iv) the lack of sufficient understanding of a method of data acquisition (e.g. an assay procedure) or analysis (e.g. appropriate statistical method) viewed as a critical component of the research. The "DELAY" should not be used to remedy a serious deficiency in fundamental knowledge that should have been attained by the student through required coursework. A remediation timeframe exceeding three months must be approved by the GAC.

## *7.6.2. Final Examination*

### *7.6.2.1. Manuscript Requirement*

All Ph.D. candidates are required to prepare one or more publishable manuscript based on the dissertation and provide them to the Major Professor prior to scheduling the final examination.

### *7.6.2.2. Scheduling*

A HARD COPY draft of the dissertation approved by the Major Professor must be provided to the members of the Guidance Committee at least 14 days prior to the scheduled final exam. The candidate must be registered during the semester in which the final examination is taken. An announcement is prepared two weeks ahead of the final examination by the student and distributed by the Graduate Secretary to faculty in FSHN and other relevant departments.

### *7.6.2.3. Seminar and Exam*

As part of the examination, the student presents an open seminar. Immediately after the public presentation and open discussion, the oral examination on the dissertation will be conducted by the research guidance committee. The student's Major Professor will preside at the dissertation defense and ensure it is conducted in an appropriate and equitable fashion that is consistent with departmental standards. The student's Major Professor will participate in questioning as well as post-exam discussions and will vote. When the Ph.D. final examination is passed, the MSU form (Record of Completion of Requirements for Doctoral Degree) [FSHN Graduate Forms](#) should be completed and signed by the Major Professor and members of the Guidance Committee and distributed.

### *7.6.2.4. Outcomes of the Final Examination*

In arriving at a decision, the final examination committee will evaluate the student's performance on the written dissertation, seminar presentation and closed questioning. Three outcomes are possible:

1. **PASS** – all but one committee member required to pass. If all but one pass is not reached, student has six months to reschedule examination. At the retake meeting if a, all but one vote is not reached the student is dismissed from the program.
2. **FAIL** – requires a unanimous vote of the examination committee. If this decision is reached, no remediation is available and the student will be recommended for dismissal from the doctoral program. The student may continue toward an M.S. degree if the major professor(s) concurs.
3. **DELAY** - If the examination committee chooses neither of the above options and can identify a deficiency in the student's performance that is believed to be correctable within a reasonably short period of time, it will detail, both verbally and in a letter to the student, the nature of the problem(s) and the requirements for successful remediation. A time limit, not to exceed three months, will be set. A remediation timeframe exceeding three months must be approved by the GAC.

## 7.7. Time Limit

According to the university requirements, the comprehensive exam must be completed within 5 years, and all requirements for the Ph.D. degree must be completed within 8 years of a student's first enrollment for doctoral degree credit. Any exceptions must be approved by the Chairperson, Dean of the relevant College and the Dean of The Graduate School.

## 7.8. Final Semester Procedures

The student must fill out a diploma card when registering for the final semester of the graduate program at MSU. If the student does not complete the doctoral degree requirements within the deadlines published in the Schedule of Courses and Calendar for that semester, but completes the requirements before the first day of classes for the next semester, no additional registration is required.

The Graduate Advanced Degree Commencement Ceremonies will be on Friday of Finals week at 3:30 PM in the Breslin Center. Graduates and faculty should arrive one hour early to put on gowns and be properly ordered for the procession.

## 7.9. Dissertation Preparation

Dissertation format should follow University regulations (a manual is available at the Graduate School Office). A major journal in the field might be used as a format (i.e., J. Food Science, J. Nutrition). All charges for preparing graphs, charts, typing and binding of the dissertation are paid by the student.

MSU **only accepts** electronic dissertations submitted via ProQuest. The instructions for electronic submissions are available from <http://grad.msu.edu/etd/>. The target date for the final approval of an electronic Dissertation to the Graduate School for graduating the semester of that submission is FIVE working days prior to the first day of classes for the next semester. **Be aware that a submission via ProQuest does not mean that the document has been accepted.** The review process is interactive and final approval can take anywhere from a few hours to weeks, depending upon the extent of the necessary revisions and how diligent the author is when making the necessary revisions. **Graduation on the semester of the electronic submission is only guaranteed if the document is approved on or before the target date for that semester.** In addition, one bound copy of the abstract and dissertation shall be presented to the Major Professor and committee members. See section 3.11 for requesting a hold/embargo on publications of documents submitted to ProQuest.

## 7.10. Checkout

A Doctoral Program Requirements Checklist and Graduate Student Checkout Form should be obtained by the student through the Graduate Secretary or under Ph.D Graduate Forms. The student should complete the form before leaving campus.

## 8. M.S. DEGREE IN NUTRITION AND DIETETICS

### 8.1. Admission

The MSU Dietetic Internship participates in an online Dietetic Internship Centralized Application System (DICAS). An admissions committee of MSU faculty and preceptors reviews applications and prepares a ranked list of approved applicants. An independent matching process is used to fill slots in internships nationwide based on the priority rankings of both applicants and internships.

The applicants matched to the MSU internship then apply to the MSU graduate program.

To be considered for admission to the Master of Science degree in Nutrition and Dietetics, an applicant must:

1. have a Verification Statement from an ACEND-accredited Didactic Program in Dietetics (DPD);
2. complete a dietetic internship application through the Dietetic Internship Central Application Service (DICAS), which includes a personal statement, resume, three letters of reference, and transcripts from all colleges and universities attended;
3. have a prior DPD and overall grade point average of 3.0 or higher;
4. complete the MSU application for graduate studies.

### 8.2 Program of Study

Set up a profile in GradPlan. All Master's (Plan A and Plan B) students will use the GradPlan located in the Student Information System at [student.msu.edu](http://student.msu.edu). To learn more about the new SIS, please go to [sis.msu.edu/learn-more.html](http://sis.msu.edu/learn-more.html)

All aspects of the Master's program plan, including the designated major Professor and Guidance Committee, planned course work and the outcomes of examinations must be entered into GradPlan. GradPlan was developed for students to lay out a program of study, record faculty approvals, make notes on requirements as they are completed, track RCR and facilitate electronic approvals. GradPlan is also the only way final degree certification/degree audit will be conducted.

### 8.3 Course, Seminar and Research Requirements

The program is available under Plan B (without thesis). The student must complete a total of 30 credits distributed as follows:

1. All of the following courses (18 credits):

HNF	823	Research Methods in Human Nutrition	3
HNF	832	Advanced Clinical Nutrition	3
HNF	892	Nutrition Seminar	2
HNF	894	Human Nutrition Practicum	6
HNF	898	Master's Project	1
NUR	804	Statistics for the Healthcare Professional	3
2. A minimum of 12 credits in one or more focus areas selected in consultation with the student's faculty advisor.

3. Additional requirement: Completion of a final case study project and evaluation. This will include a formal presentation by the student on a topic determined by the student and the academic advisor.

#### *8.4. Guidance Committee*

The Major Professor in consultation with the student shall select a Guidance Committee composed of: The Major Professor and at least one (1) more graduate faculty member from within the FSHN department or a faculty member from any department approved by the Graduate School to be on graduate committees. The major professor is responsible for ensuring that all paperwork is filed as required including the GradPlan that is required by the university. Committee members will be entered into GradPlan.

Prior to the completion of 14 credits towards the M.S. degree, students must submit an approved Nutrition and Dietetics - Master of Science Degree Academic Program Form signed by all members of the Guidance Committee to the graduate secretary. Copies of the form are available at [FSHN Graduate Forms](#). The Guidance Committee will meet to approve the program plan and should meet as often as necessary to review the student's research progress.

#### *8.5. Annual Review and Annual Reports*

Annual Review. All graduate students are required to complete an annual review meeting with their guidance committees at some point during their first spring semester of the program and to submit their paperwork by the final day of classes of their first spring semester of the program. The policy for annual reviews and annual review forms are available at: [Policy and Annual Review form](#)

Annual Reports: The Graduate Student Annual Report form will become a permanent record of accomplishment and will be maintained in the graduate student's departmental file. ***The Graduate Student Annual Report must be submitted to the Departmental Office each year irrespective of the type of appointment. The Annual Report is due by February 15 of each year.*** Annual Report forms are available at: [MS Pan B](#)

#### *8.6. Examination*

The final examination consists of completion of an extended final case study or other project as determined by the advisor and student and an evaluation. Students will have a closed oral exam, approximately one to two hours in length with the committee. Students failing the exam are allowed to retake the exam one time, within 3 months.

Students can elect to have a public seminar, which will be followed by a closed oral exam, approximately one to two hours in length. Fliers need to be posted and email announcements requesting two weeks ahead of the final examination. See the Graduate Secretary for assistance with fliers and email announcements

#### *8.7. Final Semester Procedures*



All students must apply to Graduate when registering for their final semester of the graduate program at MSU. If the student does not complete the work within the deadlines published in the [Schedule of Courses and Calendar](#) for that semester, but completes the requirements before the first day of classes for the next semester, no additional registration is required.

### 8.8. Checkout and Final Certification

The Final Certification form will come directly to the Department from the Registrar's Office for completion. A checkout sheet should be obtained by the student through the Graduate Secretary. The student must complete the form before leaving campus.

## 9. APPENDIX

### Appendix A: Specific Responsibilities

Certain duties and responsibilities are provided in this section of the handbook for quick reference. These are referenced from the “Guidelines for Graduate Student Advising and Mentoring Relationships” found at [The Graduate School Guidelines](#).

#### **The responsibilities of the academic unit include:**

- Preparing and maintaining a graduate handbook that includes the information outlined in the Graduate Handbook, as well as academic unit and college requirements for degree completion
- Providing opportunities for graduate students to interact with a wide array of colleagues from within and outside the University through such activities as speaker series, colloquia, and other formal and informal events
- Creating opportunities for graduate students to become familiar with the various forms of scholarship in the field
- Sharing responsibility with guidance committees and faculty advisors in fostering the professional and career development of graduate students, for example, by providing venues for honing professional writing and presentation skills and organizing seminars on such issues as ethics, professional integrity and grantsmanship

#### **The responsibilities of the chair or director of the academic unit and/or director of graduate studies include:**

- Knowing University and academic unit rules, procedures and policies applicable to graduate study, research, and creative activities (including those in *Academic Programs*<sup>2</sup>, *Graduate Student Rights and Responsibilities*<sup>3</sup> or *Medical Student Rights and Responsibilities*<sup>4</sup> and *Academic Freedom for Students at*

*Michigan State University*<sup>5</sup>) and ensuring that they are followed in the academic unit

- Distributing to incoming graduate students the academic unit's Graduate Handbook
- Organizing orientation sessions for incoming graduate students
- Ensuring that required courses and examinations are scheduled on a regular basis, thereby enabling graduate students to make timely progress in their degree programs
- Providing advice on matters such as course selection until a permanent faculty advisor and guidance committee are selected, or appointing a committee or temporary advisor to assume that role
- Facilitating selection of a faculty advisor and guidance committee and facilitating changes of faculty advisor and/or guidance committee should this become necessary
- Monitoring at least annually the progress of students in the graduate program and the quality of their research or creative activity, as well as the standards and fairness of examinations
- Monitoring the performance of faculty advisors and guidance committees to ensure that graduate students are receiving appropriate mentoring
- Working toward fair resolution of conflicts between graduate students and faculty

### **The responsibilities of the faculty advisor include:**

- Ensuring that graduate students receive information about requirements and policies of the graduate program
- Advising graduate students on developing a program plan, including appropriate course work, research or creative activity, and on available resources
- Advising graduate students on the selection of a thesis or dissertation topic with realistic prospects for successful completion within an appropriate time frame and on the formation of a guidance committee
- Providing training and oversight in creative activities, research rigor, theoretical and technical aspects of the thesis or dissertation research, and in professional integrity
- Encouraging graduate students to stay abreast of the literature and cutting-edge ideas in the field
- Helping graduate students to develop professional skills in writing reports, papers, and grant proposals, making professional presentations, establishing professional networks, interviewing, and evaluating manuscripts and papers
- Providing regular feedback on the progress of graduate students toward degree completion, including feedback on research or creative activities, course work, and teaching, and constructive criticism if the progress does not meet expectations
- Helping graduate students develop into successful professionals and colleagues, including encouraging students to participate and disseminate results of research or creative activities in the appropriate scholarly or public forums
- Facilitating career development, including advising graduate students on appropriate job and career options, as well as on the preparation of application materials for appropriate fellowship, scholarship, and other relevant opportunities
- Writing letters of reference for appropriate fellowship, scholarship, award, and job opportunities
- Providing for supervision and advising of graduate students when the faculty advisor is on leave or extended absence

### **The responsibilities of the guidance committee include:**

- Advising graduate students on course work, research, or creative activities
- Providing at least annually feedback and guidance concerning progress toward the degree

- Administering exams in a fair and professional manner
- Reviewing the thesis or dissertation in a timely, constructive and critical manner

### **The responsibilities of the graduate student include:**

- Learning and adhering to University and academic unit rules, procedures, and policies applicable to graduate study and research or creative activities, including those outlined in *Academic Programs*<sup>2</sup>, *Graduate Student Rights and Responsibilities*<sup>3</sup> or *Medical Student Rights and Responsibilities*<sup>4</sup>, and *Academic Freedom for Students at MSU*<sup>5</sup>
- Meeting University and academic unit requirements for degree completion
- Forming a guidance committee that meets University requirements<sup>2,3</sup>, as well as requirements that are outlined in the Graduate Handbook of the academic unit
- Following disciplinary and scholarly codes of ethics in course work, thesis or dissertation research, and in creative activities
- Practicing uncompromising honesty and integrity according to University and federal guidelines in collecting and maintaining data
- Seeking regulatory approval for research in the early stages of thesis or dissertation work where applicable
- Keeping the faculty advisor and guidance committee apprised on a regular basis of the progress toward completion of the thesis or dissertation.

## *Appendix B: Forms and Letters*

### **B.1. Forms or Letters Needed For Masters in Food Science**

Annual Report Form  
Annual Review Form  
Masters Degree Report of Oral or Written Examination  
Check-Out Sheet

### **B.2. Forms or Letters Needed for Masters in Human Nutrition**

Annual Report Form  
Annual Review Form  
Masters Degree Report of Oral or Written Examination  
Check-Out Sheet

### **B.3. Forms or Letters Needed for Ph.D. in Food Science**

Annual Report Form  
Annual Review Form  
Doctoral Change of Advisor Form  
Record of Comprehensive Examination  
Doctoral Degree Record of Dissertation and Oral Exam  
Graduate Student Checkout Form

### **B.4. Forms or Letters Needed for Ph.D. in Human Nutrition**

Annual Report Form  
Annual Review Form  
Doctoral Change of Advisor Form  
Record of Comprehensive Examination  
Doctoral Degree Record of Dissertation and Oral Exam  
Graduate Student Checkout Form

## *Appendix C: Graduate Student Funding Opportunities*

### **A. Department Scholarships/Fellowships Available Annually (Spring)**

Information on department scholarships/fellowships will be distributed via email.

### **B. Graduate School Funding Opportunities**

1) **Dissertation Completion Fellowships** - Limited fellowships are available annually to allow students to devote full time to writing the dissertation with the goal that the dissertation will be completed during the tenure of the fellowship. Selection of fellowship winners will be made by a student's college.

2) **Graduate Office Fellowship Funds** - Graduate Office Fellowship (GOF) funds are available through the thirteen colleges with graduate programs. The Associate Dean for Graduate Education of each college decides how these funds are dispersed to departments/units.

3) **Emergency/Discretionary Fellowship Funding** - The Graduate School has limited funding available for graduate students for unusual or unforeseen emergency/discretionary expenses. This funding is only for graduate students pursuing a degree program. Please be aware that emergency/discretionary funds are provided on a one-time only basis. Awards are contingent upon eligibility, endorsements, availability of funds, and, in most cases, cost-sharing by the student's college and department.

4) See [https://grad.msu.edu/search/node/graduate student funding opportunities](https://grad.msu.edu/search/node/graduate%20student%20funding%20opportunities) for more information on funding opportunities.

### **C. Other Funding Opportunities**

1) **Institute of Food Technologists** - IFT supports and encourages outstanding research in food science and technology through more than 30 graduate scholarships totaling over \$80,500. Deadline in February. Additional information at <http://www.ift.org/community/students/scholarships.aspx>

2) **Institute of Food Technologists Great Lakes Section** – M.S. and Ph.D. Achievement Awards, Diversity Scholarship and Active Student Member Scholarship available to eligible students. Deadline in January. Additional information at <http://greatlakesift.org/students/> .

3) **The Academy of Nutrition and Dietetics** - Scholarships awarded by the Academy of Nutrition and Dietetics Foundation (ANDF) are generally for Academy members enrolled in internship, undergraduate and graduate programs. One application form is used for all ANDF scholarships. The number of scholarships available and their dollar amounts vary from year to year. Information is normally posted in September. Additional information at <http://www.eatright.org/foundation/scholarships/> .

4) **International Studies and Programs** – Award information at <http://www.isp.msu.edu/international-centers-units/student-scholar-programs/>

5) **Women and International Development Program (WID)** – Award information at <http://staff.lib.msu.edu/harris23/grants/2wid.htm>

#### **D. Travel Funding Opportunities**

- 1) FSHN has limited funding available for travel to professional meetings. Email funding requests to the Graduate Secretary, including the meeting name, dates and location, and whether you are attending or presenting.
- 2) Travel funding may also be available through the Graduate School. Consult the website at <http://grad.msu.edu/travel> . Give completed form to the Graduate Secretary, who will then process it.
- 3) **The MSU College of Agriculture & Natural Resources** - Submit application plus letter from Major Professor to 121 Agriculture Hall.
- 4) **The Institute of Food Technologists Great Lakes Section** - GLS-IFT will be providing travel funds to students involved in activities related with IFT (quiz bowl, product development, meetings, etc). Applications available in 204 Trout FSHN. Additional information at <http://greatlakesift.org/students/>
- 5) **Graduate Student International Travel Grant (GSITG)** - International Studies and Programs (ISP) offers small travel grants to graduate students at MSU who are engaged in research which deals with international issues. All applications must be processed through the Graduate School. Additional information at [https://www.acronymatic.com/Graduate-Student-International-Travel-Grant-\(GSITG\).html](https://www.acronymatic.com/Graduate-Student-International-Travel-Grant-(GSITG).html)

*Appendix D: Graduate Student Worksheets*

**M.S. DEGREE IN HUMAN NUTRITION  
GRADUATE STUDENT WORKSHEET  
(page 1 of 2)**

This worksheet is intended to help monitor your graduate program. It is not intended as a comprehensive record of your program, rather it is to ensure meeting the minimum requirements as outlined in the Food Science and Human Nutrition Graduate Program Handbook. It does not substitute for a thorough reading and understanding of the Graduate Student Handbook or the MSU Graduate Studies Catalog.

The following are required of all M.S. students:

- \_\_\_\_\_ a. Obtain a Graduate Program Handbook.
- \_\_\_\_\_ b. Select courses in consultation with Major Professor.
- \_\_\_\_\_ c. Register for at least 1 credit hour per semester (6 credits/semester is required if on 1/4 –1/2 time assistantship).
- \_\_\_\_\_ d. Maintain at least a 3.0 grade point average.
- \_\_\_\_\_ e. Set up a profile in GradPlan within the first year.
- \_\_\_\_\_ f. File an annual report and annual review, due October 1 – February 15 of each year.
- \_\_\_\_\_ g. Annual Responsible Conduct of Research (RCR) reporting enter into GradPlan.

International Students (before the first term):

- \_\_\_\_\_ a. Complete English Proficiency Exams.
- \_\_\_\_\_ b. Obtain clearance from the International Students Office.
- \_\_\_\_\_ c. Obtain health insurance.

Guidance Committee Requirements:

**Plan A Students:** at least three MSU graduate faculty members; minimum of two from FSHN; third member may be from FSHN or another department.

**Plan B Students:** at least two MSU graduate faculty, one of which must be from FSHN.

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

- \_\_\_\_\_ Thesis proposal submitted to Guidance Committee before starting research.
- \_\_\_\_\_ Appropriate approvals received from the University Committee on Research Involving Animals and Human Subjects prior to starting research as specified in Graduate Studies Catalog.

**M.S. DEGREE IN HUMAN NUTRITION  
GRADUATE STUDENT WORKSHEET  
(page 2 of 2)**

Course Program:

Prerequisite/Collateral Courses (See section 6.1)

- HNF 461: Advanced Human Nutrition: Carbohydrates, Lipids, & Proteins
- HNF 462: Advanced Human Nutrition: Vitamins & Minerals
- Community Nutrition: At least one of the following courses:
  - HNF 375: Community Nutrition
  - HNF 377: Applied Community Nutrition
  - HNF 453: Nutrition & Human Development
- Chemistry
- Biology
- Upper-level physiology
- Upper-level biochemistry
- Statistics
- Organic chemistry
- Social science

Course Requirements (See section 6.2)

- HNF 820 Advanced Biochemical Nutrition (3 credits)
- HNF 821 Advanced Vitamins and Minerals (3 credits)
- HNF 823 Research Methods in Human Nutrition (3 credits)
- HNF 840 HN & Chronic Disease **OR** HNF 891 Topics in HN (3 credits ea)
- HNF 824 Nutrition Policies & Programs (1 credit) **OR** Alternative public health or community nutrition course (3 credits)
- HNF 892 Nutrition Seminar (1 credit)
- A 3-credit graduate level statistics course

Total # of credits (A minimum of 30 credits must be completed, with at least 16 at 800 level or above. Plan A masters includes 6-10 research credits. Plan B masters includes 1-5 Masters Project credits)

- 400 level
- 800 level or above (must be 16 credits or greater)
- HNF 899 (6-10 credits) or HNF 898 (1-5 credits)
- =  Total # of credits

Final Term/Graduation:

- Check Schedule of Courses and Calendar to determine deadlines for graduation.
- Obtain departmental check out sheet for information on thesis distribution requirements, etc.
- Follow university regulations for thesis format.
- Prepare manuscript(s) based on thesis.
- Schedule final oral examination (must distribute email/flyer announcements two weeks ahead).
- Prepare abstract for thesis (150 words or less).
- Electronically submit thesis to the Graduate School and distribute copies of thesis to Major Professor and committee members.
- Complete degree within five years.

Continue on at MSU for Ph.D.:

- Option A: Approval of committee members at final oral exam.
  - Complete and submit the "Request to Continue for a PhD in Food Science and Human Nutrition" form.
- Option B: Reapplication to program.
  - Submit an application to the department for acceptance into the PhD program following the standard application procedures and timelines.

**PH.D. DEGREE IN HUMAN NUTRITION  
GRADUATE STUDENT WORKSHEET  
(page 1 of 2)**

This worksheet is intended to help monitor your graduate program. It is not intended as a comprehensive record of your program, rather it is to ensure meeting the minimum requirements as outlined in the Food Science and Human Nutrition Graduate Program Handbook. It does not substitute for a thorough reading and understanding of the Graduate Student Handbook and the MSU Graduate Studies Catalog.

The following are required of all Ph.D. students:

- \_\_\_\_\_ a. Select a Major Professor.
- \_\_\_\_\_ b. Obtain Graduate Program Handbook.
- \_\_\_\_\_ c. Select guidance committee.
- \_\_\_\_\_ c. Select courses in consultation with Major Professor.
- \_\_\_\_\_ d. Set up a profile in GradPlan within the first year.
- \_\_\_\_\_ e. Register for at least 1 credit hour per semester (6 credits/term is required if on an assistantship).
- \_\_\_\_\_ f. Maintain at least a 3.0 grade point average.
- \_\_\_\_\_ g. File an annual report and annual review, due October 1 – February 15 of each year.
- \_\_\_\_\_ h. Annual Responsible Conduct of Research (RCR) Reporting, add to GradPlan each year.

International Students (before the first semester):

- \_\_\_\_\_ a. Complete English Proficiency Exams.
- \_\_\_\_\_ b. Obtain approval from the International Students Office.
- \_\_\_\_\_ c. Obtain health insurance.

Guidance Committee Requirements:

At least four MSU graduate faculty members; minimum of three from FSHN; minimum of one from another department.

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

4. \_\_\_\_\_ 5. \_\_\_\_\_

- \_\_\_\_\_ Appropriate approvals received from the University Committee on Research Involving Human Subjects prior to starting research as specified in Graduate Studies Catalogue.
- \_\_\_\_\_ Dissertation Proposal submitted to Guidance Committee before starting research.



**PH.D. DEGREE IN HUMAN NUTRITION  
GRADUATE STUDENT WORKSHEET  
(page 2 of 2)**

Course Program:

Prerequisite/Collateral Courses (See section 7.1)

- HNF 461: Advanced Human Nutrition: Carbohydrates, Lipids, & Proteins
- HNF 462: Advanced Human Nutrition: Vitamins & Minerals
- Community Nutrition: At least one of the following courses:
  - HNF 375: Community Nutrition
  - HNF 377: Applied Community Nutrition
  - HNF 453: Nutrition & Human Development
- Chemistry     Biology     Social Science     Organic Chemistry
- Upper-level physiology     Upper-level biochemistry     Statistics

Course Requirements (See section 7.3)

1. Complete all of the following courses (11 credits):
  - HNF 820 Advanced Biochemical Nutrition 3
  - HNF 821 Advanced Vitamins and Minerals 3
  - HNF 823 Research Methods in Human Nutrition 3
  - HNF 892 Nutrition Seminar 2
2. One of the following courses (3 credits):
  - HNF 840 Human Nutrition and Chronic Diseases 3
  - HNF 891 Topics in Human Nutrition 3
3. One of the following courses (1 or 3 credits):
  - HNF 824 Nutrition Policies and Programs 1
  - Alternative public health or community nutrition course approved by guidance committee 3
4. A 3-credit graduate-level statistics course chosen in consultation with advisor and guidance committee.
5. Complete a mentored teaching experience through one the following courses (1 or 2 credits):
  - HNF 894 Human Nutrition Practicum 1
  - ISE 870 Teaching College Science 2
6. Complete additional course work approved selected in consultation with the student's guidance committee based on the student's prior academic background in relation to the selected area of study and research.
7. Complete 24 credits of course work in HNF 999 Doctoral Dissertation Research.
8. Successfully complete a proposal defense and defend the oral and written dissertation.

Comprehensive Exam (See section 7.5):

- Pass the doctoral comprehensive examination
- Record of Completion of Comprehensive Exams filed by Major Professor

Final Term/Graduation:

- Students should check Schedule of Courses to determine deadlines for graduation.
- Obtain department check out sheet.
- Submit draft of dissertation to committee prior to scheduling final exam.
- Prepared manuscript(s) based on dissertation.
- Schedule dissertation final defense, including department seminar (must distribute email/flyer announcements two weeks ahead) and committee exam.
- Dissertation format follows university regulations.
- Abstract of dissertation prepared following university guidelines.
- Electronically submit dissertation to the Graduate School. Distribute copies of the dissertation and abstract to Major Professor and committee members.
- Time limit specified in Graduate Studies Catalog has been met.

**M.S. DEGREE IN FOOD SCIENCE  
GRADUATE STUDENT WORKSHEET  
(page 1 of 2)**

This work sheet is intended to help monitor your graduate program. It is not intended as a comprehensive record of your program, rather it is to ensure meeting the minimum requirements as outlined in the Food Science and Human Nutrition Graduate Program Handbook. It does not substitute for a thorough reading and understanding of the Graduate Program Handbook or the MSU Graduate Studies Catalog.

The following are required of all M.S. students:

- \_\_\_\_\_ a. Obtain Graduate Program Handbook.
- \_\_\_\_\_ b. Select courses in consultation with Major Professor.
- \_\_\_\_\_ c. Register for a minimum of 1 credit hour per semester (6 credits/semester is required if on assistantship).
- \_\_\_\_\_ d. Maintain at least a 3.0 grade point average.
- \_\_\_\_\_ e. Set up a profile in GradPlan within the first year.
- \_\_\_\_\_ f. File an annual report and annual review, due October 1 – February 15 of each year.
- \_\_\_\_\_ g. Annual Responsible Conduct of Research (RCR) Reporting, add to GradPlan each year.

International Students (before the first term):

- \_\_\_\_\_ a. Complete English Proficiency Exams.
- \_\_\_\_\_ b. Obtain clearance from the International Students Office.
- \_\_\_\_\_ c. Obtain health insurance.

Guidance Committee Requirements:

Plan A Students: at least three MSU graduate faculty members; minimum of two from FSHN; third member may be from FSHN or another department.

Plan B Students: at least two MSU graduate faculty, one of which must be from FSHN.

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

- \_\_\_\_\_ Thesis proposal submitted to Guidance Committee before starting research.
- \_\_\_\_\_ Appropriate approvals received from the University Committee on Research Involving Animals and Human Subjects prior to starting research as specified in Graduate Studies Catalog.

**M.S. DEGREE IN FOOD SCIENCE  
GRADUATE STUDENT WORKSHEET  
(page 2 of 2)**

Course Program:

Prerequisite/Collateral Courses (See section 4.1)

- Physics
- Inorganic Chemistry
- Organic Chemistry
- Biochemistry
- Mathematics (through integral calculus)
- Microbiology

Upper level courses

- Food processing: At least one of the following courses:
  - FSC 430: Fruits and Vegetable Processing
  - FSC 431: Cereal Processing
  - FSC 432: Food Processing: Dairy Foods
  - FSC 433: Food Processing: Muscle Foods
- FSC 401: Food Chemistry
- FSC 440: Food Microbiology
- FSC 429: Food Engineering

Course Requirements (See section 4.2)

- FSC 892 Nutrition Seminar (1 credit)

Total # of credits (A minimum of 30 credits must be completed, more than half of the total must be at the 800 level or higher. Plan A masters 6 FSC 899 research credits, no more than 10 credits in FSC 899. Plan B masters 1 FSC 898 Master's Project credit, no more than 5 credits in FSC 898)

- 400 level
- 800 level more than half of total of credits. At least 6 credits must be FSC courses
- FSC 899 (6-10 credits) or FSC 898 (1-5 credits)
- =  Total # of credits

Final Term/Graduation:

- Students should check Schedule of Courses and Calendar to determine deadlines for graduation.
- Obtain departmental check out sheet for information on thesis distribution requirements, etc.
- Thesis format follows university regulations.
- Schedule final oral examination (must distribute email/flyer announcements two weeks ahead).
- Abstract for thesis prepared (150 words or less).
- Electronically submit thesis to the Graduate School. Distribute copies of thesis to the Major Professor and committee members.
- Prepare manuscript(s) from thesis for publication.
- Degree completed within five years.

Continue on at MSU for Ph.D.:

Option A: Approval of committee members at final oral exam.

- Complete and submit the "Request to Continue for a PhD in Food Science and Human Nutrition" form.

Option B: Reapplication to program.

- Submit an application to the department for acceptance into the PhD program following the standard application procedures and timelines.

**PH.D. DEGREE IN FOOD SCIENCE  
GRADUATE STUDENT WORKSHEET  
(page 1 of 2)**

This work sheet is intended to help monitor your graduate program. It is not intended as a comprehensive record of your program, rather it is to ensure meeting the minimum requirements as outlined in the Food Science and Human Nutrition Graduate Program Handbook. It does not substitute for a thorough reading and understanding of the Graduate Program Handbook and the MSU Graduate Studies Catalog.

The following are required of all Ph.D. students:

- \_\_\_\_\_ a. Select a Major Professor.
- \_\_\_\_\_ b. Obtain Graduate Program Handbook.
- \_\_\_\_\_ c. Select courses in consultation with Major Professor.
- \_\_\_\_\_ d. Set up a profile in GradPlan within the first year.
- \_\_\_\_\_ e. Register for at least 1 credit hour per semester (6 credits/semester is required if on assistantship).
- \_\_\_\_\_ f. Maintain at least a 3.0 grade point average.
- \_\_\_\_\_ g. File an annual report and annual review, due October 1 – February 15 of each year.
- \_\_\_\_\_ h. Annual Responsible Conduct of Research (RCR) Reporting, add to GradPlan each year.

International Students (before the first term):

- \_\_\_\_\_ a. Complete English Proficiency Exams.
- \_\_\_\_\_ b. Obtain clearance from the International Students Office.
- \_\_\_\_\_ c. Obtain health insurance.

Guidance Committee Requirements:

At least four MSU graduate faculty members; minimum of three from FSHN; minimum of one from a department other than FSHN

1. \_\_\_\_\_      2. \_\_\_\_\_      3. \_\_\_\_\_  
4. \_\_\_\_\_      5. \_\_\_\_\_

- \_\_\_\_\_ Appropriate approvals received from the University Committee on Research Involving Human Subjects prior to starting research as specified in Graduate Studies Catalogue.
- \_\_\_\_\_ Dissertation Proposal submitted to Guidance Committee before starting research.

**PH.D. DEGREE IN FOOD SCIENCE**  
**GRADUATE STUDENT WORKSHEET (page 2 of 2)**

Course Program:

Prerequisite/Collateral Courses (See section 5.1)

- Physics
- Inorganic Chemistry
- Organic Chemistry
- Biochemistry
- Mathematics (through integral calculus)
- Microbiology

Upper level courses

- Food processing: At least one of the following courses:
  - FSC 430: Fruits and Vegetable Processing
  - FSC 431: Cereal Processing
  - FSC 432: Food Processing: Dairy Foods
  - FSC 433: Food Processing: Muscle Foods
- FSC 401: Food Chemistry
- FSC 440: Food Microbiology
- FSC 429: Food Engineering

Course Requirements (See section 5.3)

- Four 800 level or above lecture courses (3 must be FSC)
- FSC 892 Food Science Seminar (2 credits)
- Course on writing a research proposal (at least 1 credit)
- Participation in a graduate teaching orientation and at least 1 credit internship with an FSHN faculty on teaching, FSC 894 section 002

A minimum of 24 research credits must be completed.

Comprehensive Exam (See section 5.5):

- Pass the doctoral comprehensive examination
- Record of Completion of Comprehensive Exams filed by Major Professor

Final Term/Graduation:

- Students should check Schedule of Courses to determine deadlines for graduation.
- Obtain departmental check out sheet for information on dissertation distribution requirements, etc.
- Submit draft of dissertation to committee prior to scheduling final exam.
- Prepared manuscript(s) based on dissertation.
- Schedule dissertation final defense, including department seminar (must distribute email/flyer announcements two weeks ahead) and committee exam.
- Dissertation format follows university regulations.
- Abstract of dissertation prepared following university guidelines.
- Electronically submit dissertation to the Graduate School. Distribute copies of the abstract and dissertation to Major Professor and committee members.
- Time limit specified in Graduate Studies Catalog has been met.