

**FOOD SCIENCE & TECHNOLOGY
PROGRAM
GRADUATE HANDBOOK
FOR GRADUATE STUDENTS AND FACULTY**



Fall 2021

TABLE OF CONTENTS

<u>Introduction</u>	page	2
<u>FSHN Department Policies and Procedures</u>	page	2
<u>Letter of Intent</u>	page	2
<u>Registration Procedures</u>	page	2
<u>ISU ID</u>	page	2
<u>Adds and Drops</u>	page	2
<u>Departmental Communication</u>	page	2
<u>Electronic mail</u>	page	3
<u>Department Staff Assistance</u>	page	3
<u>Fees and Payment Schedules</u>	page	3
<u>General Graduate Student Information</u>	page	3
<u>Graduate and Professional Student Senate</u>	page	3
<u>Scholarship & Fellowship Applications</u>	page	3
<u>Department Travel Grants</u>	page	4
<u>Employment Opportunities</u>	page	4
<u>Department Academic Policies</u>	page	4
<u>Assistantships</u>	page	4
<u>Graduate Student without ISU Assistantship</u>	page	4
<u>Selection of Major Professor</u>	page	5
<u>Seminar Attendance</u>	page	5
<u>The Research Problem</u>	page	6
<u>Admission to FST Doctoral Program</u>	page	6
<u>Food Science & Technology Major Requirements</u>	page	7
<u>Program of Study Committee</u>	page	7
<u>Graduate Major Curriculum</u>	page	9
<u>Training on discrimination and harassment prevention</u>	page	12
<u>Final Exam</u>	page	12
<u>Final Oral Exam for M.S. and Ph.D. Students</u>	page	12
<u>FSHN Thesis and Dissertation Assessment Form</u>	page	13
<u>Minors</u>	page	14
<u>Food Safety Certificate</u>	page	14
<u>Grades</u>	page	14
<u>Defense Seminar</u>	page	14
<u>Interdepartmental Majors & Co-majors</u>	page	15
<u>Graduate Student Evaluation</u>	page	15
<u>Graduate Program Outcomes and Assessment</u>	page	15
<u>Vacation and Sick Leave</u>	page	16
<u>Procedure for Changing Major Professor</u>	page	16
<u>Dismissal Criteria and Procedures</u>	page	17
<u>Teaching Requirement</u>	page	19
<u>Graduate College Requirements</u>	page	21
<u>Thesis Deposit and Copies</u>	page	21
<u>Academic Regulations and Responsibilities</u>	page	22
<u>Specific Responsibilities</u>	page	22

<u>Department Chair and/or DOGE</u>	page	22
<u>Major Professor</u>	page	23
<u>POS Committee</u>	page	23
<u>Graduate Program Assistant</u>	page	23
<u>FST Graduate Students</u>	page	23
<u>Professional Ethics</u>	page	24
<u>Professional Development</u>	page	24
<u>Maintaining a Laboratory Notebook</u>	page	24
<u>Authorship</u>	page	25
<u>Ownership of Intellectual Property</u>	page	25
<u>Discrimination and Harassment Policy</u>	page	26
<u>Diversity at Iowa State University</u>	page	26
<u>Graduate Faculty in Food Science and Human Nutrition</u>	page	26
<u>Graduate Students in Food Science and Human Nutrition</u>	page	29
<u>Appendix</u>	page	31

Abbreviations used:

CCUR, Center for Crops Utilization Research
CHS, College of Human Sciences
DOGE, Director of Graduate Education
FSB, Food Sciences Building
FSHN, Food Science and Human Nutrition
FST, Food Science and Technology
GPSS, Graduate and Professional Student Senate
HNSB, Human Nutritional Sciences Building
IFT, Institute of Food Technologists
ISU, Iowa State University
POSC, Program of Study Committee
RA, Research Assistant
TA, Teaching Assistant

INTRODUCTION

This graduate handbook presents important information to students enrolled in the MS and PhD programs of the Food Science & Technology (FST) and to faculty of the Food Science and Human Nutrition (FSHN) Department.

This handbook is intended to serve as a guide as you navigate through your graduate program. **Each graduate student must assume full responsibility for knowledge of the requirements of the Graduate College (<http://www.grad-college.iastate.edu/publications/gchandbook/>) and the departmental requirements for their chosen program.**

FSHN DEPARTMENT POLICIES AND PROCEDURES

Letter of Intent

A Graduate Assistantship Letter of Intent is processed through Workday at the beginning of the appointment and describes the position offered as well as the stipend and length of appointment (you are usually appointed for 1 year or less, with renewals based on funding availability). Letter of Intent will be renewed annually. Payment will be directly deposited in your bank account. Payment is on the last working day of the month. If you change your address during the year, you must make changes on Access Plus.

Registration Procedures

After consultation with your major professor about courses to take, you will handle your initial registration online through Access Plus. You can view the Schedule of Classes online via the Iowa State University (ISU) homepage at <http://www.public.iastate.edu/~catalog/schedule/>. Additional information regarding this subject can be found in: *Graduate College Handbook*, Ch. 2 (<http://www.grad-college.iastate.edu/publications/gchandbook/>).

ISU I.D.

ISU IDs (ISU Card) are available at 0530 Beardshear (4-2727). Before obtaining an ISUCard, the hiring department must start the Onboarding process through Workday and the new employee must complete payroll paperwork with Human Resources. A photo ID is required in order to obtain an ISUCard. Driver's license or passport are the preferred documents. The University ID Number (UID) is also required in order to look up the employee's record. The first ISUCard is free.

Adds and Drops

Information on the procedures for adds and drops can be found under Registration Changes in *Graduate College Handbook*. Your major professor may have to sign off on any changes depending on the period for adding/dropping.

Department Communication

Graduate students will receive many written and electronic communications from many individuals; thus, check your mailbox and email often. Your prompt response is the professional response.

Electronic Mail

Graduate students can be addressed through fshngradstudents@iastate.edu for messages of interest to graduate students. FSHN faculty or FSHN staff can be reached at fshnfaculty@iastate.edu or fshnstaff@iastate.edu, respectively.

Department Staff Assistance

The departmental staff are available for assistance through your major professor. The staff does not assist in preparation of coursework materials (except for teaching assistants which should be handled through the instructor), thesis typing or other non-research work. If you are in doubt, ask your major professor. Procedures for ordering supplies, travel, etc. can be found on the department website at <http://www.fshn.hs.iastate.edu/faculty-staff/procedures-forms/>

Fees and payment schedules

Bill payment is always a concern for new graduate students. The fee payment schedule is available at the Accounts Receivable website: <http://www.ubill.iastate.edu/>. Tuition and fees are posted on the student's U-bill online through Access Plus.

General Graduate Student Information is available on the Graduate College website under **Current Students, New Student Orientation**. www.grad-college.iastate.edu/

The Graduate and Professional Student Senate

Graduate students do have a channel for concerns via the Graduate and Professional Student Senate (GPSS). Each department elects one to five representatives. If a graduate student experiences any problems in their classes or their studies at ISU, they should contact their Graduate Student Representative. The GPSS can also be contacted at their office, West Student Office Space C in the Memorial Union. The GPSS office also has a variety of information on various grants available to graduate students.

Information on the Graduate and Professional Student Senate is located at: <http://www.grad-college.iastate.edu/gpss/>.

SCHOLARSHIP & FELLOWSHIP APPLICATIONS

Scholarships and/or Fellowships are available from a number of sources to qualified applicants. In addition to the information below, students should contact faculty, student representatives, professional societies and publications, Department resources, and relevant websites. Beardshear Hall has financial aid and scholarship office where students can check for possible scholarships and forms.

Department and College

Scholarships are administered annually by the College of Human Sciences, College of Agriculture and Life Sciences and Food Science and Human Nutrition. Due dates and availability of forms will be announced via department email listserv. Guidelines and forms are available online at the appropriate websites as well.

Professional Advancement Grant

Forms are available on the Graduate and Professional Student Senate website. Be sure to complete all sections of the form. You are encouraged to apply for these grants as soon as possible.

Professional Societies

A number of professional societies (e.g., Institute of Food Technologists, IFT; American Cereal Science Society, American Oil Chemists' Society, Phi Tau Sigma) provide scholarships and/ or fellowships for qualified graduate students to support their research and travel to professional meetings. Announcements of these opportunities and relevant forms can be found on the society website. They are often announced by the Department via department email listservs. Please see the professional journals or check with your major professor or other faculty for other scholarship opportunities.

Department Travel Grants

The Department offers travel scholarship for students attending professional meetings. An application is available at <https://fshn.hs.iastate.edu/procedures-and-forms/>. Many professional societies sponsor competitive travel grant funds as well.

Employment Opportunities

There are a number of offices around the campus where graduating students can explore job opportunities.

Placement Office

College of Agriculture
141 Curtiss Hall
Phone: 4-4725

College of Human Sciences

131 MacKay Hall
Phone: 4-0626

Student Employment Center

Office of Student Financial Aid
12 Beardshear Hall
Phone: 4-2223

In addition, a number of companies advertise for job openings in leading food science and nutrition journals and magazines. Parks Library has computer advertisements for jobs and company profiles. Your major professor may be one of your primary sources of information on job and postdoctoral positions.

DEPARTMENT ACADEMIC POLICIES

This section will introduce you to specific departmental policies with which you should become familiar. Many of the items discussed here can also be found in the *Graduate College Handbook*. Note however, that some of the departmental policies and requirements may differ to some extent compared to those of the Graduate College.

Assistantships

Upon your acceptance into the graduate program you should have received information about funding that is available. The FSHN Department does have a limited number of Research Assistantships available (the number will vary from year to year). Most students are supported by research grants from their major professors. Usually this will be arranged between the student and the professor prior to arrival here at ISU. Additional information about funding can be found in the Scholarships/Fellowships section of this manual. Almost all assistantships in this department are RAs, meaning that you are being paid for the research you conduct. The assistantship qualifies you as a **C-base employee**. Other benefits include payment of your tuition (in-state status with 50% tuition paid for MS student and 100% tuition paid for PhD by the major professor), and enrollment in the student health insurance plan. The assistantship is considered a half-time position and you are required to do laboratory work for 20 hours a week (you are a full-time student; most students spend more than 40 hours on research and class per week), maintain a 3.0 grade point average, take a minimum of 9 credits in both the Fall and Spring semester, and 1 credit during the summer (refer to Graduate College Handbook for current policy and various options). You may work far more hours on a weekly basis in order to complete both your research and your degree. The maximum time limit for graduate students (meeting the degree requirements above) to receive the graduate tuition scholarships is 3 years for a MS student, and 4 years for a PhD student starting with a MS degree, and 7 years for

a PhD student starting with a bachelor degree.

Graduate student without ISU assistantship

Students intending to pursue a graduate degree in the Department of FSHN at Iowa State University (ISU) without the financial support of a graduate assistantship from ISU must be approved by the graduate admission committee. **A signed contract** between the major professor and the student outlining the exact terms of the graduate program of study is required. The contract is required to include:

- Statement noting that all graduate handbook guidelines remain in effect.
- Major professor's expectations relative to research project.
- Major professor's expectations relative to work hours including holidays and vacations.
- Documentation of financial support that will/will not be provided (specifically if faculty will financially support tuition and laboratory supplies/expenses).

This contract needs to be **signed by the DOGE of the FST graduate program and the chair of the department**. The student's signature on the contract is confirmation that the student understands that the exact same expectations and requirements as outlined in the graduate handbook apply to all of our graduate students, even if not financially sponsored by ISU. Seeking a different faculty advisor with the intent of acquiring funding is strictly prohibited.

Selection of Major Professor:

This is an important decision, as the Major Professor will be your advisor and mentor for your graduate career here at ISU. Several factors enter into this decision. The most important factor is the research that is conducted in the professor's laboratory. Other things you may want to consider: the work philosophy and ethics, structure of laboratory, number of students in laboratory, and amount of time that your mentor will be able to commit to you. It is suggested that you speak with a number of professors in the department before making your decision. In addition, talk with the graduate students to gain insight into the working relationship with their major professor.

Seminar courses and attendance

The department of FSHN requires four different seminar classes of graduate students: FS HN 580, 581, 681 and 682.

FS HN 580 is offered in the fall semester and should be taken by all new graduate students (first or second semester). FSHN 581 is only offered in the spring; it is designed for graduate students early in their time at ISU. Every semester that you are enrolled at ISU, **even if you are enrolled in FSHN 681** (described below), you are required to enroll in FS HN 682 **(See conditions for waiver, below)**.

There will be at least 40 seminars presented during your tenure as a graduate student in FSHN, as part of FS HN 682. It is the expectation of the faculty that you will take advantage of this educational opportunity and attend several seminars that are "not in your area". You will learn valuable information that you would not normally be exposed to should you only attend seminars in your specific field. We consider this a strength of our graduate program. Seminars are an easy way to expand your knowledge in areas unrelated to your research. Please try to schedule your research work so it does not conflict with seminar times.

Seminar attendance is part of your professional development and it is an expectation that you will be able to attend all of them. However, **at least 80% attendance in seminar is required and monitored by the instructors, for example, via submission of synthesis/ summary report on presentation.** Your participation in seminar is part of your annual evaluation. If you know in advance that you cannot attend a given seminar, or must miss a seminar,

contact your major professor and the faculty member in charge of FS HN 682. FSHN students are required to register for FS HN 682 in all Fall and Spring semesters. They are also required to register for FS HN 681 the semester they give their thesis research seminar.

Seminars will be recorded and made available to the students through Canvas. Students receiving the waiver will view the videos and complete all the work required of them for FS HN 682 (mostly reflection). Recorded seminars will also be accessible to all other graduate students, but availability of these recordings will not, in any case, relieve students who have not been granted a waiver from their responsibility to physically attend seminar. We hope that this waiver, and the flexibility that it is intended to provide, will enable graduate students to take courses that are important for their research, while still fully benefitting from the seminar experience.

FSHN 682: Conditions for Waiver

A student can request for a waiver to be excused from enrolling and/ or attending FS HN 682 **for extenuating circumstances**. Such requests will be **for one semester only** and approved by the DoGE upon major advisor's recommendation.

- **Conflict with other registered courses:** if a student **IS** on-campus but must miss attending the seminars due to conflict with other ISU courses, student can fulfil the course requirements independently/ remotely (by watching recorded video). This is waiver for attendance only, not for enrollment.
- **CPT/ internship situations:** if a student is off-campus on CPT/ internship activities for a semester other than summer, student can be waived from registering FS HN 682.
- **Other unforeseen situations and emergencies:** waiver could be for attendance only, OR for enrollment itself based on situations

The student must make this request with justification **no later than one week before the start of classes** in order to facilitate review by the FST DOGE and instructor(s) of the class and arrange suitable accommodation with the instructor.

FS HN 681:

Every graduate student will present one **20-minute (MS degree)** or **40-minute (PhD degree)** seminar during the department seminar series as part of their degree program at ISU. **The student will be granted one credit for the seminar as part of FS HN 681, typically during their final semester.** This seminar is not the thesis defense. The FS HN 681 seminar may encompass just a *portion* of your graduate research, but only **COMPLETED RESEARCH** should be presented. It is essential that you have *some* completed work prior to registering for the course. Discuss your plans to take FS HN 681 with your advisor. Do NOT register for FS HN 681 if you are unsure if you will be ready; scheduling is very tight, so cancellations are extremely disruptive. To ensure that all faculty, staff and students have the opportunity to hear about your research, we expect all FSHN graduate students to present FS HN 681 seminars in the spring and fall (NOT summer). *It is important to speak to your advisor about the best time to take FS HN 681.*

It is your responsibility, in consultation with your POS committee, to:

- 1) list all seminar courses on your Program of Study (POS).
- 2) enroll in all seminars in the appropriate semesters.
- 3) complete enough research and analysis and discuss readiness to present research (with advisor) *prior to* enrollment in FS HN 681.
- 4) conduct appropriate statistical analysis *prior to* FS HN 681 seminar presentation, and only present completed research.
- 5) review the FSHN 681 presentation with your advisor *prior to* AND *after* meeting with FS HN 681 seminar instructors.

Failure to do these things will not exempt you from seminar requirements and will likely extend your time at ISU.

The Research Problem

The research you conduct while in graduate school is the most important part of your program and your future endeavors will be based on this work. Thus, great time and thought should be taken before choosing your topic. If you are funded on a research grant from your major professor, there is a high probability that you have already discussed your plan with your advisor and the decision has been made. Others may not have any idea what they would like to accomplish. A good place to start is with your major professor; he/she may have many research ideas. After generating a list of a few topics together, use the ISU library resources and do a search on the topics. This will allow you to read about the current work being conducted. Discuss your ideas with other graduate students doing similar work. If you are working on your master's degree, your major professor will guide you through this process and help in choosing a topic, which can be completed in approximately 2 years. PhD students will play a much larger role in this decision. Most advisors will expect PhD students to generate the ideas themselves, but will offer advice and help in further defining the topic. Other things to consider are your career objectives: do you want to work in industry or stay in academia? What is the current state of the job market for your field?

Admission to FST Doctoral Program

Four ways are possible for admission to the doctoral programs:

1. Students who have completed a MS degree from a program other than FST at ISU or in FST from another university may be admitted into the doctoral programs. Students in this category need to submit their application through the ISU graduate admission website.
2. A student may be admitted to the FST doctoral program *after completion of the MS degree in FST at ISU*. The following two steps must be taken as part of the application process.
 - a. After a student completes the MS degree in FST, the major professor reports to the DOGE the student's request to continue for a PhD in FST major. A letter signed by the major professor and the Program of Study (POS) committee must be submitted to the DOGE. The best time to have this discussion is at the MS thesis defense.
 - b. The student completes a ***Pursuit of Master's and Ph.D. in the Same Department*** form and submits it to the Graduate Student Services Specialist in 220 MacKay. No fees are collected, as this is strictly an internal application process. After the Admissions Committee makes a decision, the DOGE will then submit a letter to the Graduate College to indicate that the student will continue as a doctoral student.
3. A student who starts a MS degree program in FST at ISU can request to change to a doctoral program with the recommendation of the major professor and the POS committee. The major professor reports to the DOGE the MS student's request to switch to a PhD program and the recommendation of the student's POS committee. Typically, the student will have demonstrated the ability to conduct research comparable to a MS thesis and/or prepare a peer-reviewed journal submission.
4. Bachelor to PhD Option: Criteria and Procedure: The committee does recognize the high standard and financial commitment for a direct PhD admission and the challenges a BS student faces. Therefore, the committee would like to establish a set of criteria for a direct PhD admission:

1. The applicant demonstrates independent research experience (can provide scientific report, poster or oral presentation at the scientific meeting);
2. An overall exceptional application package, demonstrating motivation and all desirable characteristics for success.

If these two criteria are met, along with admission committee's unanimous approval, the candidate will be allowed for admission to FST PhD program, providing the major professor agrees to provide financial support.

Special note: Applications with personal or government financial support alone is not a condition for this special consideration.

It is required that the student will process a *Request to Transfer from One Major/Program/Department/Certificate to Another* form via the Graduate College website. After completing Section I of the form, the student will give the form to the FSHN Graduate Student Services Specialist in 220 MacKay. This student will not be granted a MS degree, only a PhD degree.

FOOD SCIENCE & TECHNOLOGY MAJOR REQUIREMENTS

The department offers the Food Science and Technology major for MS and PhD degrees. There are thesis and non-thesis options for the MS degree. There are specific minimum course work requirements for each degree and option. Your POS committee may determine you need additional coursework. **Each student is required to consult with their major professor every term prior to registration for course work. The minimum requirements for the degree programs are listed below, but approval of the course work for the degree program requires approval of the POS committee, the FST DOGE, and the Graduate College as filed with the POS plan.**

The Program of Study Committee (POSC)

This committee is constituted through the mutual discussion between the graduate student and the major professor, and is approved by the DOGE. This committee directs the type and number of courses to be taken. The agreed contract is called the Program of Study (POS). This process is available through AccessPlus and it will allow the committee member appointment and course selection at the same time. The student and the POS committee should have the first POS meeting to discuss research and coursework as soon as possible. Then, the student will route the POSC form for approval by all POSC members and the DOGE. **This should be done no later than 1st half of the 2nd semester.**

Master's POS committee makeup

Thesis option: The MS POS committee consists of at least **three members** of the graduate faculty. It must include two members, including the major professor, from the major or program. The committee must include one member from different major or department to ensure diversity and *to provide perspective and as an advocate for the student*. An Associate Graduate Faculty (for example, term faculty, adjunct faculty who have been approved by Graduate College as a associate member) may participate in the direction of a student's MS research as a member. If a member of the FST graduate faculty serves as a co-major professor and jointly accepts the responsibility for the direction of a program of study, the associate member of the graduate faculty can serve as a co-major professor.

Non-Thesis Option: For admission to non-thesis MS program, students must apply for admission as graduate students to the Food Science & Technology (FST) program. The graduate admissions committee will evaluate

the academic credentials of applicants. The applicant will be advised if they are academically qualified for our program, but full admission will not be given until a major professor is identified. Applications of academically eligible students will be made available to the FST faculty for review. No research assistantship commitment need be made for non-thesis option MS students.

POS committee composition: A minimum of **four committee members** is required. Since the non-thesis option trains the student in the 3 major areas of food science & technology, food microbiology, food chemistry and food engineering/processing, the POS committee must include 3 faculty members who represent each of the areas. Additionally, a faculty member from outside the FST program must be a member of the POS committee, per Graduate College regulations. The student will have to perform a seminar as part of FS HN 681 requirement, on the topic of his/her creative component.

Transfer to thesis option: A student in the non-thesis option may transfer to the thesis option, with or without a research assistantship. The approval of the non-thesis POS committee is required, and rationale should be summarized in a letter to the FST DOGE.

Transfer from thesis option to non-thesis option: To transfer to the non-thesis option, the composition of the student's POS committee must be evaluated and revised to conform with that required for non-thesis POS committees. The POS itself must also be revised to conform with the requirements of the non-thesis course requirements and be approved by the new POSC.

Doctoral POS committee makeup

The POS committee for a FST doctoral program consists of **at least five members** of the graduate faculty. It must include at least three members, including the major professor, from within FST. The committee must include members from different majors or different departments so as to ensure diversity of perspectives. *One member of the committee must be from outside of the FSHN department to provide perspective, and as an advocate for the doctoral student.* A term member of the graduate faculty may participate in the direction of a student's dissertation research as a co-major professor if a member of the FST graduate faculty serves as a co-major professor and jointly accepts responsibility for direction of the dissertation.

Graduate Major Curriculum

Minimum credit and course requirements:

	MS - Thesis	MS - Non- Thesis	PhD
Coursework- total	20	30	35
FSHN 511 [#]	3	3	3
FSHN 600-level courses (from 2 different competencies)	5-6	6	6
Additional FS Graduate level courses	0-1	3	3
FSHN 580 - Orientation to FSN Research	1	1	1
FSHN 581 Seminar	1	1	1
FSHN 681 (graduating semester only)	1	1	1
FSHN 682 (every spring and fall)	0	0	0
BBMB 404 or BBMB 405 or BBMB 420	3	3	6
STAT 571 OR STAT 587***	3	3	3
Nutrition (FSHN 360, 517, 575; NUTRS 501, 503, 619) [@]	2-4	2-4	2-4
FSHN 590C	1	1	1
Seminar Experience ^{\$}			1
Grant Writing Experience**			1
Electives		5	5
Creative Component/Research			
FSHN 599		2	
FSHN 699	3		3
Total Credits	30	36	72

[#] See Table on next page for clarity

^{\$}AgEds 514, Journal Club (FSHN 590)

** FSHN 695 or equivalent

***Prereq for STAT 571: STAT 301 or STAT 326 or STAT 401 or STAT 587; Prereq for STAT 587: STAT 101, 104, 105, 201, or 226

[@] 1 course in nutrition: Food Science majors should have a basic understanding of nutrition evidenced by course work in a nutrition course as an undergraduate Food Science major or credit in one of the following courses. Acceptable courses on the POS include: FSHN 360, 517, 575, NUTRS 501, 503, 619 or another upper-level nutrition course taken as an undergraduate student with satisfactory grade (approved by POSC). For FSHN 517, 575, a note should be added to the POS form to specify if the course is taken as the nutrition requirement. For FSHN 360, because this course is a FSHN undergraduate course, the 3 credits will not count in the total graduate coursework.

Most non-thesis students must present substantial evidence of individual accomplishment (e.g., a special report, integrated field experience, annotated bibliography, research project, or other creative endeavor). A minimum of two credits (FSHN 599) of such independent work is required by the graduate college, however, your POSC may require more credits. The element of creative independent study must be explicitly identified on the POSC. As with a thesis, a creative component should be submitted to members of the POSC **two weeks before the final oral examination**. Final submission of a creative component is needed for the Thesis Office or Graduate College.

If students are writing thesis/dissertation and completed required course credits, minimum number of credits to register varies:

- If a student is on assistantship (RA) in a semester, department sets the policy as to the minimum number of credits to register; Graduate College requires at least 1 credit, but the tuition and fees are assessed per full time student in RA as usual.
- For summer, Graduate college requires at least 1 credit, but the tuition and fees are assessed **per enrolled credits**

All FST graduate students will take two 600-level courses in two different competency areas. Three competency areas and courses therein are listed in the Table below:

Learning Outcomes/Core Competency	Food chemistry/quality	Food safety/ Microbiology	Food processing
Fundamentals and critical thinking and knowledge integration	<u>FSHN 511 Integrated Food Science</u> (3 cr, every fall) Required for incoming students without a BS degree in Food Science from an IFT-accredited Program; Optional for other incoming students upon approval by the advisor. <i>If 511 is waived for a student, equivalent FSHN or non-FSHN graduate credits, upon POSC approval are required.</i>		
Advanced knowledge and professional skills	<u>FSHN 612 Advanced Food Chem</u> (3 cr, alt S, even years) <u>FSHN 606 Advanced Food Analysis and Instrumentation</u> (3 cr, alt F, even years)	<u>FSHN 626 Advanced Food Micro</u> (3 cr, alt S, odd years) <u>FSHN 627 Rapid Methods in Food Micro</u> (2 cr, alt F, even years)	<u>FSHN 611 Advanced Food Processing</u> (3 cr, every fall)

Note: The ISU Graduate College requires a minimum of 30 graduate credit hours with 22 of those earned at ISU for a MS degree. For a PhD degree, a minimum of 72 graduate credits is required with at least 36 credits earned at ISU. A thesis must be prepared and defended at the final examination.

Use of Undergraduate Courses on Program of Study:

Please note that according to the Graduate College Handbook, students who entered degree programs in spring semester of 2018 and thereafter may use as graduate credits up to 9 credits from 300- and 400-level ISU courses taken as elective with a maximum of 3 credits at 300-level. **Undergraduate courses from other institutions are not eligible.** For graduate students who entered degree programs prior to spring semester of 2018, up to 15

credits from 300- and 400-level courses may be used on a POSC form, with a maximum of 6 credits at the 300 level. However, these undergraduate courses cannot be listed on the POSC, if they were counted toward the undergraduate degree at ISU.

Any credit from 300-level courses must be from outside the major. Selection of such undergraduate courses will be determined and approved by your major professor and your POS committee. Only enter the courses and credits that count toward your degree on the POS.

Seminar Attendance: For both MS and PhD students, satisfactory attendance of FSHN seminars through enrollment in FS HN 682 every Fall and Spring semester. See above on the procedure to obtain a one semester waiver when physical presence is not possible due to schedule conflict.

Training on discrimination and harassment prevention

All students joining FST program are required to take the Discrimination and Harassment Prevention Training. [The Office of Equal Opportunity will provide you with the link to the training through your Access Plus account in August.](#) It is recommended students take this training during their first semester.

Exams

PhD preliminary written and oral examination: For the FST program, the POSC administers both the written and oral portions of the Preliminary Examination. The examination rigorously tests the knowledge of the major, minor, and supporting academic areas. In FST Program, the preliminary examination will cover the core knowledge in food chemistry, food engineering/processing, and food microbiology that is expected of a doctoral candidate and professional.

The format of both the written and oral Preliminary Examination for the Doctorate student is at the discretion of the major professor and the POSC. In general, two form of examinations (a **research proposal based, Or closed/open exam based**) could be employed for written portion. Oral portion of exam will test the candidate's core knowledge in FST and their **ability to analyze, organize, and present** subject matter relevant to FST. **The major professor will coordinate the exam and communicate with other POSC members on the format, scope and coverage from each member to ensure the rigor of the exam.**

*Note A **Request for Preliminary Examination** Form must be submitted to the Graduate College **two weeks prior** to the date of the examination. The Graduate College requires at least six months between an unconditional or conditional pass on the preliminary oral examination and date of the final oral examination*

POSC evaluation and report (to be sent to Graduate Student Services Specialist in 220 MacKay) for the preliminary oral examination: One physical form as below should be filled by each of the POSC members, and handwritten comments placed in the appropriate spots in the table. After the committee discussion, a set of agreed-upon marks of Excellence, Good, and Poor should be placed under each of the three required competence areas.

POSC member	Food chem/analysis	Safety/quality/micro	Processing	Other notes

Final synthesis, and Excellent/ Good/ Poor				

Final Exam

Final Oral Exam for MS and PhD students: The final oral exam will consist of the candidate presenting a summary of their research project to the POSC and satisfactorily defending their research. Other general and fundamental knowledge related to your research and degree training will be tested as well. **This is for the candidate and the POSC only.**

Thesis option (MS and PhD): The final oral exam will consist of the master's candidate presenting a summary of their research project to the POSC, and an oral examination of the candidate's competency in food science subjects including food microbiology, food chemistry and food processing/engineering, as well as, coursework outside of food sciences.

Non-thesis option MS: The final oral exam will consist of the master's candidate presenting a summary of their creative component project to the POSC, and an oral examination of the candidate's competency in food science subjects including food microbiology, food chemistry and food processing/engineering (not related to the creative component) as well as general knowledge related to food sciences.

All members of the POSC should be in attendance in the final oral exam for both MS and PhD students. If a conflict is unavoidable and remote attendance is needed, the student needs to follow graduate college rules to schedule such event.

Food Science & Technology Graduate Minor Curriculum

9 to 15 credits required*

9 credits of graduate level food science course work as approved by the POSC, with a maximum of 3 credits at the 400 level.

*In addition, students without a background in food chemistry, food engineering/processing, and/or food microbiology are required to take FSHN 511 and two 600-level courses in two different competency areas..

Food Safety Certificate

The Food Safety & Defense Graduate Certificate program is designed to prepare students to help with protecting the human food supply. This certificate can complement a graduate degree, or provide working professionals in the food industry the tools needed to advance their career. Course topics include: Food microbiology, Foodborne toxicants, HACCP, Food safety and security overview, Food laws and regulations, Risk assessment, Food biotechnology and food fermentations.

In order to be eligible for enrollment, prospective Graduate Certificate program students must meet admissions requirements for the master of science degree in food science or equivalent degree at their respective

universities. International applicants seeking admission to the food safety and defense graduate certificate program must apply at Iowa State University, the University of Missouri or the University of Nebraska-Lincoln.

A complete listing of courses recommended for the Food Safety & Defense Certificate can be found here: <https://www.agonline.iastate.edu/programs/food-safety-and-defense-graduate-certificate/recommended-courses>.

For questions about the Food Safety & Defense Graduate Certificate program, please contact Casey Smith, AgOnline Student Services: agonlineservices@iastate.edu; 1-800-747-4478 or Dr. Byron Brehm-Stecher, Director of Graduate Education, Great Plains Idea Food Safety & Defense Certificate, Iowa State: byron@iastate.edu; 515-360-4210.

Grades

As noted in the Graduate College Handbook, a student is required to maintain a **cumulative GPA ≥ 3.0** ; failure to do so will result in the loss of tuition support by the College and the Department or major professor. There is currently a one-semester grace period for students during their first term as a new graduate student before the enforcement of this policy. It should also be noted that the FSHN Department policy stipulates graduate students must earn a **grade of B- or better in all courses within the major** (i.e., Food Science & Technology or Nutrition), regardless of GPA. This issue of grades and GPA is discussed further at the end of the Handbook.

Interdepartmental Majors and Co-majors

For students that are in an interdepartmental program (i.e., Biorenewable Resources & Technology; Microbiology; Toxicology; Genetics; Molecular, Cellular, and Developmental Biology, etc.) and declare FSHN as their home department, are required to meet the academic requirements of his or her major, not those of his or her home department unless those additional requirements are associated with a co-major program of study (Refer Grad College handbook 4.1.3)

Graduate applications of students in interdepartmental programs that declared FSHN as home will be reviewed by the FST Admissions Committee. Students are highly encouraged to attend at least one seminar per week, either in the FSHN Department or as part of their interdepartmental program. Each Interdepartmental major will be evaluated yearly based on these accomplishments.

Students that are co-majors must fulfill all of the requirements of both majors. Both interdepartmental students and co-majors are eligible for relevant scholarships, awards and other forms of support, such as travel grants.

GRADUATE STUDENT EVALUATION

Graduate students will be asked to submit an annual evaluation. **Each student will need to schedule a meeting with their major professor to discuss general expectations based on current status, professional development opportunities, and goals for the upcoming year.** Reports are to be signed by the student and major professor and submitted to the Graduate Student Services Specialist by May 15. Failure to turn in the report will result in a hold on all your academic and financial activities. The evaluation form is available on the FSHN website under [Faculty & Staff → FSHN documents → Student Related → GRADUATE STUDENT FORMS → FSHN Graduate Student Annual Report Form](#)

The annual review of graduate students will be completed by the end of May. Each student will receive a letter from the committee that summarizes the results of the review and the student's progress during the preceding

year. A copy of the letter will be sent to the student's major professor and a copy placed in the student's file. The committee will report the results of all students' reviews to the Department Chair and make recommendations for sanctions where appropriate.

GRADUATE PROGRAM OUTCOMES AND ASSESSMENT

The FSHN Graduate program requires all students admitted to the program to display satisfactory progress towards fulfilling their degree (MS and/or PhD) requirements. This includes completing the required coursework for the degree; attending departmental seminars; conducting original research; presenting research findings both orally and written; serving as a departmental TA for each degree; and satisfactory defense of research to the student's POS committee.

Learning Outcomes

- Apply scientific thinking in the analysis, synthesis and evaluation of knowledge within the discipline of food science, nutritional sciences or dietetics.
- Apply ethical reasoning within the discipline of food science, nutritional sciences or dietetics.
- Effectively communicate discipline-specific information in written and oral forms to scientific audiences.
- Effectively interact within scientific teams.

Outcomes Assessment: A successful completion of graduate program in FST (MS or PhD degree) would constitute the following:

- Satisfactory completion of degree course requirements with a minimum cumulative GPA ≥ 3.0 , including a grade of B- or better for courses within the major.
- Satisfactory seminar attendance
- Student-developed POSC assigned to ensure satisfactory program of study
- Successful defense of original thesis research to POSC
- For PhD students, satisfactory completion of written and oral preliminary examination
- Professional presentation of thesis research at a departmental seminar
- At least one paper (for MS) or two papers (for PhD) submitted for publication in a peer-reviewed journal before final exam (dissertation defense)
- Formal evaluation of teaching efforts
- Annual review of student progress by a committee of faculty

To facilitate the outcomes assessment for the graduate programs, each graduate student will be required to perform an exit interview with the Department Chair prior to graduation (see "Graduate Education Exit Interview" available on FSHN webpage under Forms).

VACATION & SICK LEAVE

During each academic year, students will be allowed two weeks of vacation (20 h/week) plus University holidays with approval from the major professor. Time off must be discussed with your major professor. University holidays are listed at <http://www.registrar.iastate.edu/calendar/>. These dates change each year. The university

holidays are Labor Day, Thanksgiving Day and the day after, Christmas Day, New Year's Day, Martin Luther King Day, Memorial Day and July Fourth. Other days must be taken as vacation.

Students need to **submit a signed (by student and major professor) vacation card** to the Graduate Student Services Specialist in 220 MacKay prior to their vacation. Note that because RAs are considered a half-time (50%) position, one week of vacation is equivalent to 20 hours of work, a day of vacation is equivalent to 4 hours. It is the student's responsibility to notify their major professor when sick and fill out the sick leave card. Failure to notify the major professor of absences could lead to leave without pay or termination. Vacation/Sick Leave cards are available in 220 MacKay and 2312 FSB.

PROCEDURE FOR CHANGING MAJOR PROFESSORS

If there are difficulties between the major professor and the student, the conflict(s) can be taken to the Ombuds Office <http://www.iastate.edu/~ombuds/> to aid resolution in an impartial manner. The Ombuds process is confidential and focused on conflict resolution before things escalate into grievances.

Changing major professors **is highly discouraged**, but there are situations where you find it necessary to switch major professors to complete your program. You should first discuss this matter with your present major professor, second with your POSC (if one has been appointed) and third the FST DOGE and department chair. Any research work and/or intellectual properties generated by the graduate student prior to changing the major professor must be acknowledged in future publications or presentations. Identification of a new major professor must be accomplished within 5 months (or one semester). Once you have terminated your relationship with the major professor you are leaving, you will not have research assistantship support. During the period you are trying to identify a new major professor, the FST DOGE will serve as a temporary advisor. You will need to communicate regularly on your progress to the DOGE. When a new major professor and you have agreed to work together, you and the major professor must notify the FST DOGE and FSHN chair. If you are unable to find a major professor within 5 months, you may be subject to the Dismissal Policy (1.b.)

Student without assistantship: If you join the department without an RA, you need to follow the guidelines stated in the Contract.

Students with assistantship: Because your RA is paid by your major professor, the decision to change includes termination of your current RA. You might select a faculty member who does not have funding to support you. In that case, you might elect to fund yourself. In such case, please refer to the section "Student without departmental research assistantship". You might try to find a major professor who is able to support you on a RA. You will need to talk with potential major professors. Identification of a new major professor with RA funding must be accomplished within 5 months (or one semester). Once you have terminated your relationship with the major professor you are leaving, you will not have research assistantship support.

DISMISSAL CRITERIA AND PROCEDURES

Continuing registration as a graduate student at Iowa State University is contingent on maintaining good standing in a graduate major. FSHN expects that its students will complete their degrees in a satisfactory and timely manner. However, there are several situations that may require severing the relationship between FSHN and a student.

1. Dismissal Criteria

A student may be dismissed, that is, removed from their degree program and not permitted to register as a FST student, for the following reasons:

a. Failure to progress satisfactorily in his/her degree program

This may be evidenced by a lack of research progress, a lack of aptitude for food science, or a failure to maintain a satisfactory academic standing, as defined by the Iowa State University Graduate College Handbook and in core Food Science and Technology requirements.

b. Lack of a major professor

Because graduate degrees in FST at Iowa State are centered around a mentored research project, it is impossible to complete a degree without a research mentor [major professor]. To maintain good standing and earn a degree in FST, a student must have a FST faculty member serving as his or her major professor.

Occasionally, a faculty member who has previously agreed to serve as a major professor becomes unable to serve. Faculty desiring to terminate their service as major professor must do so by notifying the student and the FSHN Chair and FST DOGE in writing. A student who has lost his or her major professor has up to five months after the date the FSHN Chair is notified to identify another FST faculty member willing to serve. The FSHN Chair and FST DOGE will help the student search for a new major professor, if the student desires.

c. Academic dishonesty

The proper conduct of science requires the highest standards of personal integrity. Because of this, dishonesty in the classroom or in the conduct of research is considered a serious offense by FSHN and by the University. Students accused of academic dishonesty will be dealt with according to the procedures outlined in the University Catalog and the Faculty Handbook. Possible punishments can include dismissal from the program and expulsion from the University, depending on the severity of the offense.

2. Dismissal Procedures

A student's POSC, or if the student has no POSC, the student's major professor, Graduate Program Committee or FST DOGE can recommend the dismissal of a student for any of the reasons listed above. Recommendations for dismissal are made to and are acted upon by the FSHN Chair.

Procedures for dismissal are as described in the Iowa State University Graduate College Handbook. Before a dismissal is decided, the FSHN Chair must give the student a written justification for why dismissal is being considered. The FSHN Chair must also discuss the situation with the student, as well as his or her POSC, major professor, temporary advisor, and/or Graduate Program Committee, in an attempt to find a satisfactory resolution. This discussion constitutes the "informal conference" as described in the Graduate College Handbook. If a satisfactory resolution cannot be reached and the FSHN Chair decides to dismiss the student, either party may bring the issue to the attention of the Associate Dean of the Graduate College for a decision. The student may appeal the decision of the Associate Dean, as described in the Graduate College Handbook.

Your major professor will officially notify the office personnel of the dismissal and your assistantship payment will be stopped on the official day of dismissal. Also, students should officially withdraw from the university unless they transfer to another department.

3. Responsibilities of FSHN and the Major Professor

It is the responsibility of the FST program to counsel students who are having academic difficulties, to help students search for an acceptable major professor, or if students are unable to overcome these difficulties, to help the students identify and apply to other appropriate degree programs. It is the responsibility of the major professor

and his/her department to seek funds for a student's assistantship and for the conduct of research. Where necessary, graduate students need to be informed and/or updated if the major professor foresees assistantship funding problems.

4. Relationship between Status in FSHN and Termination of Financial Support

Although students in FST are normally supported on graduate assistantships, this is not a requirement for continued participation in FST. Students not on assistantship will continue to have regular status in the major so long as they remain in good standing and are registered.

However, because assistantship support at Iowa State requires that a student be a member of a graduate program, dismissal from FST requires that assistantship support be terminated, unless the student is able to transfer to another graduate program at ISU that the RA support can go through.

Assistantship appointments are made fiscal year by fiscal year. Because of this, each appointment is made for one year or less. Appointments may be terminated for two reasons only: 1) for cause, or 2) loss of funding. The satisfactory completion of one appointment, plus satisfactory academic performance, will ordinarily make a student eligible for reappointment. FSHN faculty have the discretion not to reappoint. Failure to reappoint is not termination of the student's graduate degree program and is not subject to formal appeal. FSHN faculty have an obligation to provide reasonable notice if reappointment is not to be made. At least 30 days' notice is recommended. The policies on termination given here apply only to graduate assistantship appointments that have been formalized by a letter of intent and not to longer term commitments that may have been made. FSHN follows the Graduate College Handbook's policies regarding early termination of research assistantship for cause or for loss of funding, including the appeal processes. For more information, please see Section 9.9 Termination of Assistantship Appointments, <https://www.grad-college.iastate.edu/handbook/chapter.php?id=9#9.5>.

FSHN faculty may make commitments to support students for periods longer than one year. Such commitments are not formally treated as appointments. Students should obtain the terms of such commitments in writing. Assistantship support for more than seven or eight years is strongly discouraged, and departments may set limits on the number of years a student is eligible for assistantship support.

Students with any doubt about their assistantship status should discuss their situation with their major professor, the FSHN Chair, the FST DOGE and/or the department or program providing their assistantship support. For further information on termination of assistantship appointments, see the Graduate College Handbook.

5. Appeal Process

The University has established appeal processes for student grievances. These vary depending on the nature of the grievance and are described in the Graduate Handbook. Generally, these procedures begin with the FST DOGE or the FSHN Chair. It is usually best for all parties if a satisfactory resolution can be reached without initiating a formal appeal process. The Associate Dean of the Graduate College is available to informally consult with students and faculty.

TEACHING REQUIREMENT Teaching Assistant (TA) Policies

All graduate students in FSHN, including those enrolled in interdepartmental programs, and regardless of funding source or status, are required to serve as TAs. Part-time students who work off campus may have to make arrangements to fulfill this requirement. The Graduate Program Committee must approve the arrangements.

A. TA Assignments

TA assignments are made near the middle of the preceding Spring semester for the following academic year. Both graduate students and instructors are asked for their preference in the assignment procedure. Graduate students should be flexible to serve as TAs in the assigned course regardless of their preference.

B. All Students

1. The minimum requirement is to be a TA for one class per degree. *The TA is required to enroll in FSHN 590C for 1 credit (Special Topics, Teaching). FSHN 590C is graded on A-F basis.*
2. Graduate student TAs are expected to be of assistance to faculty for approximately 8-10 hours per week.
 - The duties of TAs may include setting up laboratories/experiments, proctoring examinations, attending class (if required by the instructor), leading labs, grading lab reports, copying class/laboratory material, holding review sessions, etc. In addition to these duties, TA's are expected to be actively involved in some of the teaching activities.
 - Faculty members are expected to provide a teaching experience for their graduate TAs. Examples of teaching activities include: presenting lectures, develop exams, lead laboratory recitations, grade and discuss laboratory reports and oral presentations, one-on-one teaching, involvement in the development of new experiments or modification of the existing ones, conducting review sessions, and others.
3. In assigning TAs to classes, priority will be given to laboratory classes that require significant amounts of preparation over lecture-only classes. Faculty may be asked to justify their request for a TA.
4. The use of undergraduate TAs is encouraged, as a means of providing excellent experience for our upper-class students and as a way to spare the assignment of graduate student TAs. In particular, undergraduate TAs should participate in 100- and 200-level classes. They may also be involved in upper division classes where appropriate.

C. Part-time Students

In some instances, part-time students may not be able to complete the teaching requirement in the usual manner by serving as a TA in one of the FSHN Department courses. A part-time graduate student can make alternative arrangements to fulfill this requirement. The student's POS Committee must approve the alternative arrangement. Then the student must appeal in writing to the FSHN Graduate Education Committee via the DOGE.

The appeal should include the following items:

1. A letter from the student should be submitted to the DOGE, which explains why it is not feasible for the student to fulfill this requirement in the usual manner. The letter should be co-signed by the student's major professor.
2. In lieu of student teaching in FSHN as a TA, the student can obtain pre-approval for teaching or supervising interns in the student's workplace. Goals and objectives for this activity should be stated and approved by the student's POS Committee. Another possible alternative is for the student to provide expertise as a guest lecturer in a FSHN course at least once per year during the student's graduate career. The student could also meet the teaching requirement by providing a series of lectures in the student's

area of expertise in a course or courses within the FSHN Department.

3. The student will be required to complete a written report of the alternate teaching experience, such as fulfillment of the goals and objectives for teaching or supervising interns or a synopsis of the experience as a guest lecturer. This report will be submitted to the major professor with a copy sent to the DOGE.

D. Oral English Certification Test

All non-native English speakers are required to take the Oral English Certification Test (OECT) test given by the Graduate College. International students with a degree from the U.S. are required to take the test prior to being given a teaching assignment. Therefore, the OECT test should be taken in the second semester of residence. Students cannot fulfill their teaching requirement until they have taken and passed the OECT test. In some cases, a low passing score will need to be supplemented with an additional course in teaching communications suggested by the Graduate College. Check the OECT website (<http://cce.grad-college.iastate.edu/ita>) to find out dates the tests will be offered.

E. Evaluation of TAs

FSHN course instructors are to submit a written evaluation of the graduate student's teaching performance at the completion of the student's assignment including evaluation by students in the course. This report is submitted to the Graduate Program Coordinator. Copies will be sent to the department chair, student, the student's major professor, and the DOGE. A copy will be placed in the student's file. *In addition, the instructor is required to submit a grade for FSHN 590C (Special Topics, Teaching).*

GRADUATE COLLEGE REQUIREMENTS

The Graduate College has requirements for requesting final oral examination (thesis defense) and thesis preparation and format. The **Request for Final Examination form** will be required to be submitted to the Graduate College at least **3 weeks before the examination date**. These must be submitted electronically to the Graduate College. Absolute thesis format requirements are described at the Graduate College's thesis homepage and deal with margins, font, text spacing, page numbering, title page and signature page format. The Graduate College maintains the expectation that every thesis will reflect professionalism and scholarship, and expects POS committee members to take greater responsibility for the professional appearance of each thesis (<http://www.grad-college.iastate.edu/current/thesis>).

The thesis/dissertation title page includes the names of all committee members. The Graduate College does not require a signature line for each POSC member. However, the FSHN department does require a signature page for all POSC members with thesis/dissertation abstract. A template for the signature page is available on the FSHN website under Graduate Program. First submission of a thesis will no longer be required (however, a preliminary format check is strongly advised).

THESIS DEPOSIT AND COPIES

The Graduate College Office (1137 Pearson Hall) publishes a notice, available by the beginning of each semester, which lists the specific dates for final deposit of the thesis to be eligible for graduation in that semester. This notice is also available on the Graduate College web site.

Instructions for electronic submission of the thesis/dissertation are available at <http://www.grad-college.iastate.edu/current/thesis/>. Although a first deposit of the thesis is no longer required, a preliminary format check is strongly advised. A checklist is available, which can be used for the preliminary format check of

the thesis. The thesis/dissertation copies are given to the POSC members (electronic or paper depending on POSC member's preference) **at least two weeks prior** to the final examination. When final corrections have been made, the thesis is submitted electronically. All signatures (major professor, the POSC members, and the department chair), are obtained for the FSHN thesis/dissertation abstract & signature page and submitted to the Graduate Program Assistant.

Abstract and Title Page

The FSHN Department requires that the major professor, all members of the POSC, and the Department Chair sign the thesis title page. A template is available on the FSHN Website under Graduate Program. The FSHN Department also requires an abstract for the entire thesis/dissertation.

Copies

Copies (final paper or electronic version) of thesis/dissertation for POSC members and major professors should be made available upon request of your POSC members.

ACADEMIC REGULATIONS AND RESPONSIBILITIES

Regulations and guidelines allow ISU to operate smoothly and under control. There are a number of guidelines, which graduate students must follow to insure no problems arise in obtaining either the MS or PhD degree. Please keep in mind that these regulations are promulgated and under the jurisdiction of the Graduate College, not at the Department level. If you have any questions regarding any of these guidelines, please see your major professor, the FST DOGE or call the Graduate College at (294-4531).

One of the first concerns of new graduate students is the number of credits needed and any grade requirements involved. For any classes listed on the POSC, the lowest grade acceptable is a C. However, the department has adopted a policy that for courses within the major (i.e., FST), the lowest acceptable grade is a B-. Classes must be repeated when a grade does not meet either of these requirements. For classes not on the POSC, a D is the lowest grade acceptable. Research credit grades are not used in computing GPA's. **If the student's GPA drops below 3.0, the Graduate College will place that student on academic probation and the student will not receive tuition support.** Likewise, the Department and/or major professor will not provide tuition support when a student's cumulative GPA < 3.0, except during the first semester grace period for new students. For specific problems or if situations arise, the Graduate College will handle these on a case-by-case basis. A good reference for further questions is the Graduate College Handbook.

As a graduate student, certain responsibilities apply and must not be overlooked. These responsibilities allow for a good academic environment, which in turn allows for expression of various opinions and maintains intellectual honesty. It is the responsibility of teaching assistants to maintain confidential student-instructor relationship at all times. Graduate students have certain rights in the university system such as free expression in the classroom and freedom from prejudiced evaluations. The Board of Regents Uniform Rules of Personal Conduct, and the University General Rules govern the rights and responsibilities of all graduate students. These are printed in the Iowa State University General Catalog, as well as the Graduate College Student Handbook.

SPECIFIC RESPONSIBILITIES

Responsibilities of Department Chair and/or DOGE:

- General supervision, counseling, and coordination of graduate student programs

- Recommendation of graduate candidates for admission
- Allocation of assistantships
- Process official forms
- Maintain Graduate Student Handbook on department website
- Provide an orientation session for all incoming graduate students, at the beginning of both the Fall and Spring semesters
- Development of a scholarly spirit among the graduate students and graduate faculty
- Inform major professors about necessary procedures
- Review the academic standing of all graduate students at the end of each semester
- Assure that POSC members are appointed by the end of the first semester in residence and a POSC is filed by the end of the second semester
- Confirm that there is a balance of members on the POSC
- Assure that the preliminary examination is taken in a timely matter
- Encourage active participation by all POSC members
- Assure that PhD preliminary examinations and MS and PhD final examinations dates and locations are announced department-wide in a timely manner for graduate faculty
- Encourage active departmental seminar participation

Responsibilities of Major Professor:

- Responsibility for the program, guidance, training, supervision, arrangements, welfare, and ethics awareness of each graduate student assigned to him or her
- The conduct of regular scheduled conferences with the student each semester
- Acquainting the students with department policies and providing personal counseling to help the student develop
- Arranging for space for the graduate student research project
- Checking and approving all necessary graduate forms and requests for materials, travel and services
- Suggesting members of the POSC
- Suggesting courses appropriate for the individual graduate student's POSC
- Checking the academic standing of the student at the end of each semester including written requests for full graduate status to the Graduate College and evaluating GPA; GPA < 3.0 or a grade of C+ or lower needs immediate attention of the POSC and department chair or DOGE
- Making initial acceptance of the thesis or dissertation, deciding when it is satisfactory for POSC members to review
- Seeing that manuscripts based on the graduate thesis or dissertation is prepared and submitted for publication
- Confirming that graduate student has fulfilled teaching responsibility
- Assuring graduate student is an active participant in departmental seminars
- Assuring that graduate student develops the ability to present scientific papers to departmental and at scientific meetings through participation in training seminar, national, and regional meeting attendance and presentation

Responsibilities of Program of Study Committee:

- Primary responsibility for academic preparation of the student and development of the POSC
- Attendance of student's seminar is expected
- Evaluating PhD student's readiness to be advanced to PhD candidacy through written and oral examinations

- Evaluating the student’s thesis or dissertation

Responsibilities of Graduate Student Services Specialist:

- Maintenance of a master file on all graduate students, an up-to-date collection of all official papers for each student in individual files
- Assign office space and desks to graduate students
- Documentation of the teaching requirement fulfilled prior to graduation

Responsibilities and General Expectations for FST Graduate Students:

- 1. Taking charge in your graduate education:** It is your responsibility in selecting courses and POSC members according to the requirements and guidelines, and in setting up timelines for your research and other activities. Discuss with your major professor and agree on these and other important matters.
- 2. Work ethics:** Even though your RA is based on 20-hr work/week, most students work for more than 40 hours/week on their research projects and course work. Much more than 20 hours/week in the lab is needed to obtain results, demonstrate research productivity, and produce high quality thesis/dissertation and peer-reviewed manuscripts. Research is hard but can be rewarding—do not expect easy answers and do not give up quickly. Try to stretch yourself, think forward and “outside the box”, and be creative on your research (which can only be done with a thorough understanding of the state of the science in your specific area. Read and search scientific publications at all times).
- 3. Publication:** Typically, two papers from MS thesis and 3 from PhD dissertation are expected for FST students.
- 4. Use of University resources:** It is not appropriate to use ISU resources for personal use or gain. This includes office and lab equipment, including your research computer.
- 5. Individual meetings:** You should consider scheduling weekly research meetings with your major professor for updating results and discussing plans for the following weeks. Discuss if weekly written reports are required of you.
- 6. Discussing all general and specific expectations with your major professor:** Plan to do this at the start of your program and discuss periodically (do not wait until your annual review) if your performance is as expected. Examples of items to consider are as follows:
 - a. Best mode of communication
 - b. Weekly report format
 - c. Lab notebook recording and inspection
 - d. Annual professional meeting attendance and financial support
 - e. Scholarship opportunities (on and off-campus sources)
 - f. Membership and affiliation of professional organizations
 - g. Industry exposure and connections
 - h. Proposal writing experience
 - i. Opportunities for leadership development and community service

PROFESSIONAL ETHICS

During Orientation activities in August and in FSHN 580, you will be introduced to the concepts of ethical behavior and good practice in science. Included will be a discussion of proper research methods, ways to avoid self-deception in the practice of science, and scientific misconduct.

Graduate students are expected to comply with the Faculty Statement on Professional Ethics (see [Faculty Handbook, Section 7.2](#)).

PROFESSIONAL DEVELOPMENT

During the course of your degree program, you will be required to maintain a laboratory notebook, present your research data in the form of a poster or as a seminar, and write at least one manuscript for publication in a scientific journal. Following is information for each of these activities, and resources for additional information.

Standard Operating Procedure for Maintaining a Laboratory Notebook

Every graduate student within the program will likely be expected to maintain a laboratory notebook to keep a dated record of experimental procedures, results, analyses and conclusions. Ideally, entries should be made directly into the notebook to avoid loss of key information on miscellaneous scraps of paper. Many professors now maintain folders on the R-drive for storage of electronic data as a back-up for laboratory notebooks. Consult your major professor for your lab's policy.

Your laboratory notebook is a legal document

When we contact the Office of Intellectual Property and Technology about one of our inventions, the first question we have to answer is: where is this work written down? Which lab notebook? No kidding, if your project works, it is entirely possible that it is worth a great deal. But a patent, when it is filed, will be filed on the basis of the work you have written down in your notebook. They want page numbers, and they want pages in real notebooks with the dates written on the pages. When the patent lawyers show up, they are going to ask to see your notebook. If the description of the experiments are clear, and the results well documented, we are doing well. These pages should be dated because someone else may be doing the same research and dating their pages earlier than ours. Notebooks are cheap, don't worry about the writing space.

Your laboratory notebook must remain in the laboratory

Because your notebook is a legal document, it is also the property of the University. This sets some real constraints on both you and the university. The notebook has to stay within the laboratory, or at least within the university. It will be stored at the university for at least 5 years after you have left. If you need to take notes in the greenhouse, take your notebook. If you are doing experiments in another laboratory, take your notebook. But when you move on, as we all do at some point, the notebook has to stay in the lab. You are welcome to photocopy all of the note book, take pictures, scan documents, do whatever it takes, to make sure that you have all of your notes for the next projects you undertake somewhere else. But the original notebook has to stay in the lab.

Authorship

From time to time, the issue of authorship arises. Who should be listed as an author of the paper? In what order? One of the deciding factors of authorship concerns the notebook. If you have a notebook full of pivotal experiments, you are likely an author. However, do not expect to be listed as an author if you do not contribute to writing the manuscript. Do not expect authorship based on chats over coffee and ideas suggested at lab meeting, with no lab notebook pages devoted to any of the work. Standards are set in the field for what constitutes authorship, including the following:

1. Substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data
2. Drafting the article or revising it critically for important intellectual content
3. Final approval of the version to be published

See: <https://www.policy.iastate.edu/authorship> for more details on ISU policies.

Ownership of Intellectual Property and Data

ISU subscribes to the general principle that the intellectual property created by a student is generally owned by that student. However, student work often owes much to faculty initiative. In addition, the provisions of sponsored research grants funding research appointments may affect the ownership of intellectual property derived from work on grants. Students must be aware of these restrictions on ownership of intellectual property as provided by university policies on patents and copyrights. Graduate students will be given a fair opportunity to use data resulting from sponsored research grants; however, that opportunity is subject to the University's obligations with respect to those grants. The university has a general obligation to publish the results of scientific investigation. Consequently, the student's right to control data collected under sponsorship is not exclusive. If you wish to continue your research at another location, materials or other university resources may only be transferred with the permission of your major professor and may require completion of a Materials Transfer Agreement.

DISCRIMINATION AND HARASSMENT POLICY

Selections from Iowa State University Discrimination and Harassment Policy follow:

(<https://www.eoc.iastate.edu>)

University Non-discrimination Statement

"Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran. Inquiries regarding non-discrimination policies may be directed to Office of Equal Opportunity, 3410 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, Tel. 515 294-7612, Hotline 515-294-1222, email eooffice@iastate.edu"

DIVERSITY AND INCLUSION AT IOWA STATE UNIVERSITY

The Office of Vice President for Diversity and Inclusion is located at 2680 Beardshear Hall.

On-line training for courses such as Diversity, Harassment and Discrimination and Drug Free Workplace are now available through ACCESS PLUS.

GRADUATE FACULTY IN FOOD SCIENCE AND TECHNOLOGY PROGRAM

N. Acevedo, Associate Professor, 2543 FSB, 4-5962, nacevedo@iastate.edu

PhD, University of Buenos Aires, Argentina, 2006. Physicochemical and structural properties of foods, Lipids, Food nanotechnology, Material Science in foods.

T. Boylston, Associate Professor, 2547 FSB, 4-0077, tboylsto@iastate.edu

PhD, Michigan State University, 1988. The effects of processing and storage on the lipid and flavor composition of foods, mechanisms of conjugated linoleic acid formation in dairy products.

- B. Brehm-Stecher**, Associate Professor, 3344 Food Science Building, 515-294-6469, byron@iastate.edu
PhD, University of Wisconsin-Madison, 2002. Food safety and biosecurity. Biodefense and emerging infectious diseases in relation to foods. Rapid molecular detection of foodborne pathogens and food spoilage organisms. Flow cytometry and other single cell analytical methods. Biomimetics. Multicomponent antimicrobial systems for use in foods, on food contact surfaces or in environmental applications. Novel methods and reagents for pre-analytical sample preparation.
- P. Clark**, Assistant Professor, 224B MacKay Hall, pjclark@iastate.edu
PhD, University of Illinois at Urbana-Champaign, 2011. Field of behavioral neuroscience with specific focus on the contributions of exercise and diet to cognitive function and mental health.
- S. Clark**, Professor, 2563 Food Sciences Building, milkmade@iastate.edu
PhD, Cornell University, 1997. Applies food microbiology and chemistry approaches, as well as, product development and sensory evaluation skills to enhance dairy product quality and consumption. Collaborates with human nutrition colleagues to understand the role of dairy foods in human health.
- S. Coleman**, Assistant Professor, 2545 Food Sciences Building, 515-294-9011, scoleman@iastate.edu
Ph.D., Colorado State University, 2015. Coleman's Extension and Outreach work include developing and disseminating food safety curriculum and resources for emerging, very small, and small food manufacturers in Iowa. Her research evaluates food manufacturers' attitudes, intentions, and behaviors towards following food safety practices using various evaluation theories. Coleman has expanded her outreach and research from farm-to-table to focus on filling gaps in improving food safety and the local food system, including developing curriculum and resources for gardeners, 4-H youth & judges.
- G. Curtzwiler**, Assistant Professor, 1555 Food Sciences Building, gregc@iastate.edu
PhD, University of Southern Mississippi, 2017. Polymer Recycling and Food Packaging. High performance coatings. Nanoparticles and nanocomposites.
- N. Delchier**, Adjunct Assistant Professor, 1339 Food Science Building, 515-294-1374, delchier@iastate.edu
PhD, University of Avignon, France, 2012. Understanding the reactivity of vitamins and nutrients during food processing.
- J. Dickson**, Professor, 207 Science I, 4-4733, jdickson@iastate.edu
PhD, University of Nebraska – Lincoln, 1984. Developed a predictive model to estimate the growth of salmonellae during the cooling of beef carcasses. Dr. Dickson's studies of bacterial attachment, carcass washing and sanitizing have been applied to animal processing environments, resulting in the development of an inexpensive, technology neutral process which is very effective in controlling enteric pathogens on animal carcasses.
- P. Fortes-Da-Silva**, Adjunct Assistant Professor, 1436 Food Science Building, 515-294-2074, paulo@iastate.edu
- B. Lamsal**, Associate Professor, 2553 FSB, 4-3250, lamsal@iastate.edu
PhD, University of Wisconsin – Madison, 2004. Enzyme application in grain/food processing. Biomass pretreatment and processing for energy and materials. Biorenewable energy and biobased products, fermentation, food ingredient properties – proteins, polysaccharides. Food rheology. Agricultural crops utilization for industrial value-added products.
- M. Mellata**, Assistant Professor, 3346 Food Sciences Building, mmellata@iastate.edu

PhD, University of Montreal, 2004. Advancing the understanding of the multidrug resistant and zoonotic risk of bacteria. Novel vaccine and probiotic treatments that will prevent infections from Enterobacteriaceae, e.g. *E. coli*, *Salmonella* and mitigate antibiotic resistance. Understanding the effects of treatments and environment on gut microbiota and general health of food-producing animals, e.g chickens.

- A.F. Mendonça**, Associate Professor, 3399 Food Science Building, 515-294-2950, amendon@iastate.edu
PhD, Iowa State University, 1992. Survival, injury, and destruction of foodborne enteric pathogens following application of natural antimicrobials, atmospheric cold plasma, high pressure or irradiation to foods. Improved methods for recovery of foodborne pathogens sub-lethally injured by food processing treatments. Use of plant extracts for controlling food spoilage microorganisms and shelf-life extension of food and beverage products.
- K. Prusa**, Professor, 1123 HNSB, 4-4323, kprusa@iastate.edu
PhD, Kansas State University, 1983. Preharvest treatment of pigs for the improvement of pork quality and safety.
- A. Shaw**, Associate Professor, 2577 FSB, 4-0868, angelaml@iastate.edu
PhD, Texas Tech University, 2010. Create innovative intervention strategies against *E. coli* O157:H7, non-O157 STEC, *Salmonella*, *Campylobacter* spp., and *L. monocytogenes* in a variety of commodity groups (i.e. vegetable, fruits, beverage, etc.). Extension: Establish training workshops and literature to aid small and large food producers on how to provide safe food to consumers.
- X. Shi**, Adjunct Assistant Professor, 3997 Food Sciences Building, 515-294-1776, xshi@iastate.edu
- J. Talbert**, Assistant Professor, 1547 FSB, 294-7015, jotalber@iastate.edu
PhD, Cornell University, 2009. Understanding and application of enzyme technology as a means to improve the production, safety & quality, and nutrition of food products.
- C. Venkitasamy**, Adjunct Assistant Professor, 1581, Food Sciences Building, 515-294-2342, vcsekar@iastate.edu, PhD. Tamil Nadu Agricultural University, Coimbatore, India, 2006.
Infrared and microwave processing of agricultural and food products, sustainable processing of food wastes and agricultural byproducts for value addition and product development. Liaison with Food and bioprocessing industries for technology transfer.
- K. Vorst**, Associate Professor, 1541 FSB, 294-6957, kvorst@iastate.edu
PhD, Michigan State University, 2005. Retail and transport studies for fresh cut produce. Develop biodegradable food packaging for use in fresh-cut produce markets, and to evaluate recycled food packaging.
- A. Watrelot**, Assistant Professor, 2567 FSB,
PhD, University of Avignon, FR, 2013. Enology. Improve the understanding of the polyphenolic chemical composition and behavior with cell wall material in grapes, fruits and alcoholic/non-alcoholic beverages. Extension: Establish workshops, webinars and other tools to aid grape growers and winemakers from Iowa and the Midwest region on how to improve wine quality.
- Z. Wen**, Professor, 1041 FSB, 4-0426, wenz@iastate.edu
PhD, The University of Hong Kong, 2001. Bioprocess engineering; fermentation for functional foods and non-food products. Algal culture development. Biofuels and value-added products from microalgae. Anaerobic digestion of food and animal wastes.

Courtesy Faculty

- D. Grewell**, Professor of ABE, 4356 Elings Hall, 515-294-2036, dgrewell@iastate.edu
PhD, The Ohio State University, 2005. Bio-renewable biodegradable polymers. Nano-composites. Bio-renewable fuel sources. High-power ultrasonics. Ethanol and biodiesel.
- M. Hojilla-Evangelista**, Research Chemist, Plant Polymer Research, National Center for Agricultural Utilization Research, USDA/ ARS Peoria, IL, mila.hojillaevangelista@usda.gov
- C. R. Hurburgh Jr.**, Professor of ABE, 3167 NSRIC, 515-294-8629, tatry@iastate.edu
PhD, Iowa State University, 1981. Grain quality. Marketing and distribution. Physical and chemical properties of biological materials. Chemical and electronic instrumentation. Chemometrics. Metrology. Lead Instructor, Food Safety Modernization Act, Hazard Analysis and Risk-based Preventive Controls for Animal Food.
- J. Koziel**, Professor of Agricultural and Biosystems Engineering; Environmental Science, Toxicology, CCEE. 4350 Elings Hall, 515-294-4206, koziel@iastate.edu, Ph.D., University of Texas at Austin, 1998. Aroma and smell of food and beverages. Chemical and sensory analyses of food and beverages. Solid-phase microextraction. Gas chromatography – mass spectrometry. Olfactometry. Biochar. Biowaste and biomass valorization. Value-added chemicals. Biosecurity. Treatment of pathogens with UV photolysis, photocatalysis, ozonation, and advanced oxidation. Google Scholar [profile](#).
- D.C. Lee**, Associate Professor of Kinesiology, 251 Forker Building, 515-294-8042, dcllee@iastate.edu;
PhD, Seoul National University, 2007
Physical activity epidemiology, especially on the independent and combined effects of aerobic and resistance exercise on various health outcomes in adults and older adults.
- L. Liu**, Adjunct Assistant Professor, Agricultural and Biosystems Engineering, 4333 Elings Hall, 515-294-3939, lingling@iastate.edu
PhD, University of Georgia, 2018. Transformation of agricultural and food byproducts into value-added nano-biomaterials; simulated in vitro digestion; biobased food coating; detection and disinfection of foodborne viruses.’.
- D. Maier**, Professor, 3325 Elings, 294-0140, dmaier@iastate.edu
PhD, Michigan State University, 1992. Post-harvest engineering and value-added processing of agricultural crops and biological products including ecosystem modeling. Post-harvest loss prevention. Food security. Stored products protection. Alternative crop storage systems. Dehydration of biological products. Bulk material handling and segregation. Facilities design and simulation. Feed manufacturing.
- K. A. Rosentrater**, Associate Professor, 3327 Elings, 294-4019, karosent@iastate.edu
PhD, Iowa State University, 2001. Food, feed, fuel, fermentation and bioproducts engineering. Techno-economic analysis and life cycle assessment. Facility design and construction.
- E. Shirtcliff**, Associate Professor, 2361C Palmer, 294-3677, birdie@iastate.edu
Biobehavioral mechanisms that illustrate the profound impact that a child’s early environment exerts on their physiology. Researchers in my Stress Physiology Investigative Team (SPIT) Laboratory collect biomarkers noninvasively in humans. We examine stress-biomarkers like cortisol, bonding-biomarkers like oxytocin, development-biomarkers like testosterone, or immune-biomarkers like herpes simplex virus.
- R. Valentine**, Assistant Professor, 243 Forker, 294-3867, rvalenti@iastate.edu

PhD, University of Illinois at Urbana-Champaign, 2010. Expertise in adiposity, insulin resistant obesity and exercise training.

J. Sebranek, University Professor, 215 Meat Lab, 4-1091, sebranek@iastate.edu

PhD, 1974. Meat processing and preservation. Influence of additives, new technology and processing techniques on quality.

T. Wang, Professor

PhD, Iowa State University, 1998. Lipid chemistry and functionality. Processing and value-added utilization of soybeans, corn, egg, and other agricultural products or by-products, primarily for their lipid components.

S. Wohlsdorf-Arendt, Professor, 9E MacKay Hall, 294-7575, sarendt@iastate.edu

PhD, Iowa State University, 2004. Food safety in retail foodservice operations including human resource management and operational policies and procedures.

C. Yu, Associate Professor, 3344 Elings, 294-4554, chenxuyu@iastate.edu

PhD, University of Wisconsin-Madison, 2003. Spectroscopic biosensing and bio-related nanotechnology, and their applications in food quality and safety monitoring. Biomedical diagnosis. Environmental risk factor/contamination evaluations and disease prevention. Vaccine development.

GRADUATE STUDENTS IN FOOD SCIENCE & TECHNOLOGY

Fall 2020

<u>NAME</u>	<u>MAJOR</u>	<u>DEGREE</u>	<u>BACKGROUND</u>	<u>HOME</u>
Ali, Elsadig	Micro	PhD		
Barry, Kia	Micro	PhD		
Boyd, Abigail	FST	PhD	BS-Northwestern University	Illinois
Byanju, Bibek	FST	PhD	BT-Kathmandu University	Nepal
Chen, Hong	ABE	PhD		
Chen, Si	FST	PhD	BE-Nanchang University	China
Cheng, Yiliang	FST	PhD	BS-North Carolina State University-Raleigh	China
Cho, Karin	FST	M.S.	B.A.-Grinnell College	Illinois
Durand, Tonia	Micro	PhD	BS-Iowa State University	Dominica
Ghosh, Baidini	FST	M.S.	BTech- SRM Institute of Science and Technology	India
Hartanto, Verilyn	FST	M.S.	BS-Iowa State University	Indonesia
Jochum, Jared	Micro	PhD		
Kuo, Chih-Chun	FST	M.S.	BS-Taipei Medical University	Taiwan
Li, Tianqi (Tim)	Genetics and Genomics	PhD		
Nabwiire, Lillian	FST	PhD	BS-Makerere University	Uganda
Norton, Erin	FST	PhD	BS-University of Waterloo MS-University of Windsor	Canada
Nutter, Julia	FST	M.S.	BS-Universidad Nacional de Mar del Plata	Argentina
Ott, Logan	MICRO	Ph.D.	BS-Iowa State University	Iowa
Ozoh, Chinwendu	FST	PhD	BS-Obafemi Awolowo University MS – Iowa State University	Nigeria
Perry, Bridget	FST	Ph.D.	BS – Fort Valley State University MS – Tuskegee University	Georgia
Rahman, Md. Mahfuzur	FST	Ph.D.	BS-Shahjalal Univ of Sci & Tech MS-North Dakota State University	Bangladesh
Raman, Sharan	FST	Ph.D.	B.S. - Iowa State University M. Eng – Iowa State University	Illinois
Saffold, Ariana	FST	Ph.D.	University of Wisconsin-Madison	Wisconsin

Sanfins Cecon, Victor	FST	PhD	BE-Federal University of Sao Carlos	Brazil
Schweiger, Derek	FST	M.S.	BS-Iowa State University	Wisconsin
Thomas-Popo, Emalie	FST	Ph.D.	BS - Midwestern State University, Texas	Dominica
Wijeratne, Shalini	FST	Ph.D.	BS-California State University-Long Beach	California
Xie, Jiahui	FST	M.S.	BA-Iowa State University	China

Handbook Updates

This document was originally developed with the assistance of an *ad hoc* committee of graduate student volunteers and the graduate coordinator to assist graduate students and major professors. We have tried to address the major questions but we invite your comments and suggestions in order to make this a better working document for everyone in Food Science and Human Nutrition.

First Edition: Dirk Beekman, Julie Goldman, Teresa Harper, Makuba Lihono, Peeyush Maheshwari, Inke Paetau, Jill Rehberger & Pat Murphy, Graduate Coordinator.

Revised 2003 - 2011: Graduate Program Committee

Revised 2012 - 2013: FS Graduate Program Committee

Revised 2014 - 2018: FST Advisory Committee

Revised 2019: FST Advisory Committee

Revised 2020: FST Advisory Committee

APPENDIX

[FSHN Graduate Student Annual Report Form](#)

[FSHN Thesis and Dissertation Assessment Form](#)

[Thesis Signature Page](#)

[Graduate Education Exit Interview](#)