Graduate Student Handbook

2023-2024

Department of Food Science
Herbert College of Agriculture
The University of Tennessee, Knoxville

July 24, 2023

The policies in the present handbook have been approved by the faculty of Department of Food Science, The University of Tennessee, Knoxville and are effective immediately after publication.

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Acronyms

BS	Bachelor of Science
CGE	Center for Global Engagement
DoGS	Director of Graduate Studies
FDSC	Food Science
FSB	Food Science Building
FSPB	Food Safety and Processing Building
GAC	Graduate advisory committee
GPA	Grade Point Average
GRE	Graduate Record Examination
GS	Graduate School
HCA	Herbert College of Agriculture
IACUC	Institutional Animal Care and Use Committee
IELTS	International English Language Testing System
IRB	Institutional Review Board
ITA	International Teaching Assistant
LOA	Leave of Absence
MS	Master of Science
PhD	Doctor of Philosophy
TOEFL	Test of English as a Foreign Language
UT	University of Tennessee
UTIA	University of Tennessee Institute of Agriculture
UTK	University of Tennessee, Knoxville

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EQUAL EMPLOYMENT OPPORTUNITY (EEO) AND AFFIRMATIVE ACTION (AA) STATEMENT/NON-DISCRIMINATION STATEMENT

The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services.

The University of Tennessee does not discriminate on the basis of race, sex, color, religion, national origin, age, disability, or veteran status in provision of educational programs and services or employment opportunities and benefits. This policy extends to both employment by and admission to the University.

The University does not discriminate on the basis of race, sex or disability in its education programs and activities pursuant to the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990.

Inquiries and charges of violation concerning Title VI, Title IX, Section 504, ADA or the Age Discrimination in Employment Act (ADEA) or any of the other above referenced policies should be directed to the Office of Equity and Diversity (OED), 2110 Terrace Avenue, Knoxville, TN 37996-3560, telephone 865.974.2498 (V/TTY available) or 974.2440. Requests for accommodation of a disability should be directed to the ADA Coordinator at the UT Office of Human Resources, 600 Henley Street, Knoxville, TN 37996-4125.

INTRODUCTION

About This Handbook

In order to serve the mission and vision of the Graduate School (GS) and preserve the integrity of graduate programs at the University of Tennessee (UT), Knoxville (UTK), information related to the process of graduate education in each department is to be provided for all graduate students. Based on Best Practices offered by the Council of Graduate Schools, it is important that detailed articulation of the information specific to graduate degrees offered in each department/program be disseminated.

The Graduate Student Handbook of the Department of Food Science (FDSC) is provided to help prospective graduate students to learn opportunities offered in FDSC and conditions of receiving admissions to our graduate programs and facilitate current students to understand expectations from their graduate programs and achieve their educational goals. The Departmental Graduate Student Handbook does not deviate from the established GS policies noted in the Graduate Catalog (https://tiny.utk.edu/grad-policies), but rather provides specific ways in which these policies are carried out. As we constantly strive to improve our graduate education, the Departmental policies are subject to change, and the accuracy and implementation of these policies are subject to approvals by the Herbert College of Agriculture (HCA), the GS, and the UTK Faculty Senate committees. Please contact the FDSC Director of Graduate Studies (DoGS) for any questions. Whenever there is a conflict, the current Graduate Catalog (https://tiny.utk.edu/grad-catalog) is the official source of information used to resolve a conflict.

Graduate students are expected to be aware of and satisfy all regulations governing their work and study at UTK. The purpose of this handbook is to inform graduate students about their rights and responsibilities and describe additional departmental policies that may not be covered by the GS. Since it is a graduate student's responsibility to know and follow the rules and policies that apply to graduate students, be sure to familiarize yourself with this handbook, the Graduate Catalog (https://tiny.utk.edu/grad-catalog), the Students Appeals Procedures (https://tiny.utk.edu/rights-obligations) and the *Hilltopics* Student Handbook (https://hilltopics.utk.edu/). The *Hilltopics* covers general campus policies and procedures, standards of conduct, academic policies and procedures, and information about student support, services, and organizations.

It is important to keep in mind that unlike undergraduate students that follow the catalog of the academic year they started their program, graduate students must follow requirements of the current Graduate Catalog. Thus, be sure to attend Departmental orientation for graduate students and to obtain the latest FDSC Graduate Student Handbook (typically published at the beginning of Fall semester) available at https://foodscience.tennessee.edu/graduate-program.

To assist you in finding important information related to your graduate education, several important websites are listed in **Appendix A**.

Administrative Structures and Contacts

The FDSC Department is part of the University of Tennessee Institute of Agriculture (UTIA). The faculty and staff in the Department have appointments in the HCA, Tennessee Agricultural Experiment Station, and UT Extension to fulfill the land-grant mission of the University. The

Department offers educational and research opportunities with concentration areas of food chemistry, food microbiology and safety, food processing and engineering, and sensory sciences. The laboratories for research in these areas are located in the Food Science Building (FSB) and Food Safety and Processing Building (FSPB). Common research facilities provided to UTIA faculty, including Research and Education Centers (RECs) across the State of Tennessee, may also be available upon request and approval.

The administrative structure relevant to FDSC graduate programs is presented in **Figure 1**. The Department reports to the HCA and GS. The Department Head oversees FDSC graduate programs. The DoGS is appointed by the Department Head. After approvals by the HCA and GS, the DoGS coordinates all activities related to graduate programs. The DoGS usually chairs the FDSC Graduate Committee (**Appendix B**) that evaluates applications to FDSC graduate programs, monitors graduate curriculum, determines Departmental policies related to graduate programs, coordinates assessments of graduate programs, and, in conjunction with the Department Head, engages in budgetary planning regarding assistantships and graduate program needs.

Each graduate student is assigned with a major professor that chairs the student's graduate advisory committee (**GAC**). Details of appointing a GAC and the GAC's responsibilities are provided in later sections. The major professor is the primary contact of a graduate student. Questions and concerns related to FDSC graduate programs, Departmental policies, and the Graduate Student Handbook can be answered by members of the FDSC Graduate Committee.

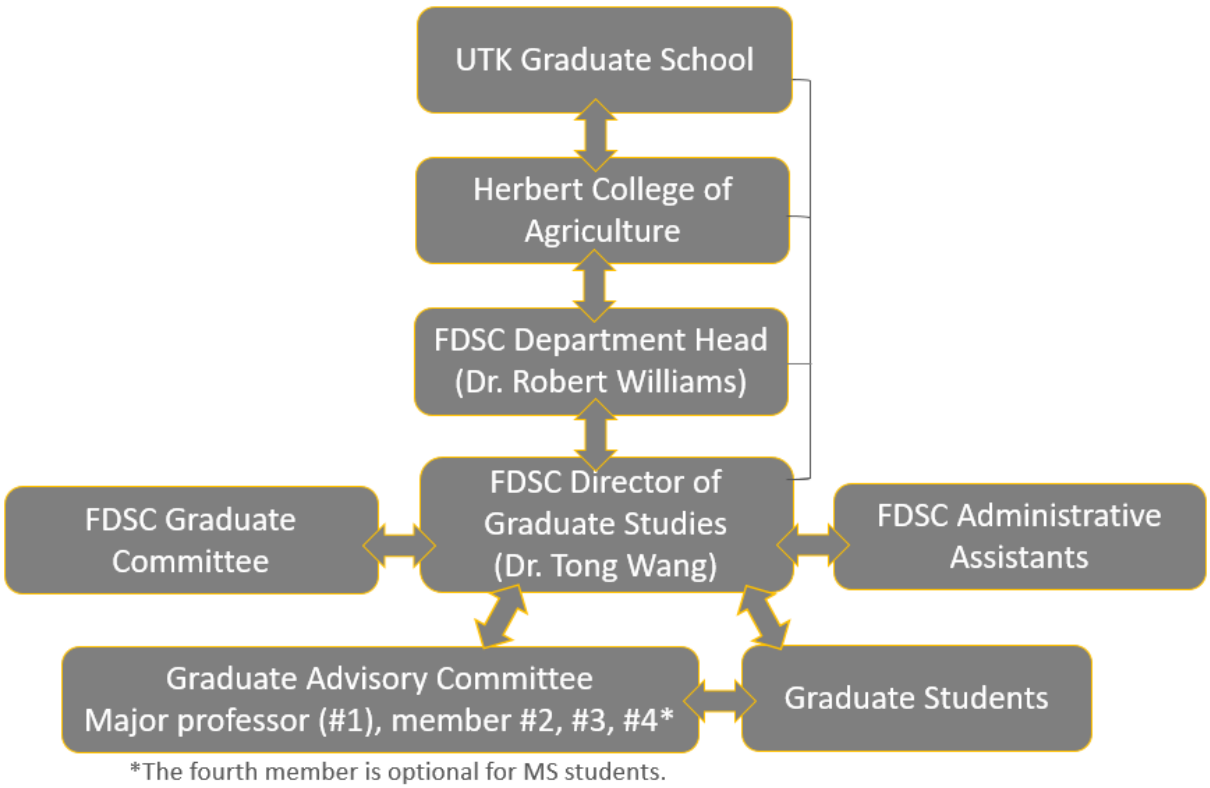

Figure 1. Administrative structures relevant to graduate programs in the FDSC Department.

GRADUATE PROGRAMS OFFERED IN FOOD SCIENCE

The FDSC Department offers both Master of Science (MS) and Doctor of Philosophy (PhD) degrees. Each graduate student must choose a faculty member as a major professor to guide his/her program. Except for non-thesis MS students, a faculty member with a research appointment is to be chosen to serve as the major professor. FDSC faculty eligible to direct original research are listed in **Appendix C**. The eligibility of a faculty member to direct doctoral dissertations is to be approved by the FDSC Department Head and verified by the GS.

The goal of FDSC Graduate Programs is to train graduate students with multidisciplinary expertise to solve complex problems in FDSC and enable students to compete for job opportunities aligning with student's primary area of interest. As such, we have established the following **three learning outcomes** with specific rubrics to assess the quality of FDSC graduate education.

1. Students able to critically evaluate scientific literature and information relevant to food science.
2. Students able to design and conduct research projects.
3. Students able to effectively communicate research findings to professional audiences.

Master of Science with a Major in Food Science

The MS program in FDSC has two options:

Thesis Option. Students in this program are trained with the capability to perform quality research in an area of their interest. In addition to meeting course requirements described in later sections, a thesis of original research directed by a research faculty member serving as the major professor (**Appendix C**) is required to receive a MS degree with thesis.

Non-Thesis Option. The MS non-thesis program is available for students with no interest in completing a thesis or decided by the GAC for inadequacy to complete a thesis. The non-thesis program requires same course hours as the MS thesis program. In lieu of a thesis, students are required to complete a project in cooperation with their employer (company or governmental agency) and/or their major professor or take a written comprehensive exam.

Accelerated Five Year BS-MS with a Major in Food Science

The accelerated 5-year BS-MS program is designed for qualified FDSC BS students with a Science concentration and an interest in a thesis-based MS degree with a major in FDSC. The qualified students are conditionally admitted to the 5-year BS-MS program by the end of their junior year of undergraduate study at UT. They will start their thesis research not later than starting the senior year of their undergraduate program. Central to this program is that a qualified student may take up to 9 hours of approved graduate-credit courses (e.g., those listed in **Appendix E**) for their senior undergraduate electives and have them count toward both the BS degree and the MS degree. For each student in the program, a GAC composed of a minimum of three faculty members must be established before completion of BS degree. After official admission by the GS and enrollment in the graduate program, these students will continue to take courses and conduct thesis research to meet requirements expected from all MS students, with the approved 9 hours being counted for graduate credits when they apply for the MS degree candidacy. Students admitted to the MS program then become eligible for assistantships awarded to graduate students.

Doctor of Philosophy with a Major in Food Science

A PhD degree is the highest degree awarded in FDSC. Students entering the PhD program typically have already earned a master's degree in FDSC, or a closely related field. Students admitted to the PhD program without a MS degree will have to demonstrate promise to complete a doctoral dissertation by the third semester before continuing further doctoral studies, which will be determined by the GAC based on progresses such as submitting manuscripts to refereed journals, presenting papers at scientific meetings, or independently developing and proving research hypotheses. Students not meeting the expectations are advised to switch to the MS program. In addition to extra course work beyond the MS degree, students must pass a comprehensive exam to become a doctoral candidate, which is based upon developing and defending a proposal with hypotheses unique from that of their dissertation research. Lastly, the PhD candidate must pass the defense of their dissertation before being awarded with a PhD degree.

ADMISSION TO FOOD SCIENCE GRADUATE PROGRAMS

General Information

Degree programs. The Graduate Catalog lists official graduate programs available to applicants (https://tiny.utk.edu/grad-catalog).

Application deadlines and materials. The FDSC Department uses the same application deadlines and materials of the GS (https://gradschool.utk.edu/admissions/). In addition to the admission requirements of the GS (https://gradschool.utk.edu/admissions/applying-to-graduate-school/admission-requirements/), the FDSC Department may have additional requirements.

Graduate school contact. The FDSC applicants can contact the Office of Graduate Admissions by E-mail, graduateadmissions@utk.edu or phone, 1 (865) 974-3251.

Disciplinary preparation. Applicants must have a BS degree in food technology, food science, or a related scientific field from an accredited college or university in the United States. An equivalent degree awarded outside the United States must be issued by a college or university accredited by an appropriate agency. Students without a prior BS degree in FDSC are required to take **FDSC 410 Food Chemistry** and **FDSC 421 Food Microbiology** after enrolling in their graduate programs.

Materials and Admission Requirements

Admission to FDSC graduate programs is through the Office of Graduate Admissions of the GS. All application materials must be received by the Office of Graduate Admissions of the GS.

Transcripts. Official transcripts from eligible institutions as described previously are required by the GS when applications are submitted.

Grade point average (GPA). The following GPA requirements of the GS apply: "United States degree holders must have earned a minimum of 2.7 out of a possible 4.0 GPA or a minimum of 3.0 during the senior year of undergraduate study. If you have completed previous graduate coursework, you must have earned a minimum of 3.0 out of a possible 4.0 GPA. Applicants with non-U.S. degrees must have earned a minimum of 3.0 on a 4.0 scale or other equivalent to a 'B'

average. If you have completed previous graduate coursework, you must have earned a minimum of 3.3 out of a possible 4.0 GPA or other equivalent to a 'B+' average."

Graduate Record Examination (GRE). Students are required to provide their official GRE scores. The minimum requirements of the FDSC Department are a verbal score of 145, a combined verbal + quantitative score of 300, and an analytical **writing score of 3.0**, all internet-based tests (iBT). Please use these codes when requesting official GRE scores: UT Institutional code: 1843; Food Science code: 0107.

English proficiency. A valid Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) score is required for non-native speakers of English. The FDSC Department requires a TOEFL score of **no lower than 80**, with each sub-section no lower than 20, or an overall **IELTS score of 6.5** and above with no particular sub-section below 6.5. The English proficiency requirement for students with a previous degree from an English-instructing university may be waived by the GS. Please use these codes when requesting official TOEFL scores: UT Institutional code: 1843; Food Science code: 0107.

The GS requires international students to take English 122 Academic English for Graduate Students if their TOEFL or IELTS score does not show sufficient English proficiency (https://gradschool.utk.edu/graduate-student-life/international-graduate-students/). Students may be exempted from this requirement if they pass an English Placement Exam offered by the English as a Second Language program about a week before classes begin.

Recommendations. Students are required to provide three recommendations from qualified referees to evaluate the potential for a successful graduate program.

Statements of career goals and preparations. Applicants are required to prepare statements about their career goals and how their potential graduate programs are important to achieve these goals. Statements about an applicant's prior research and work experiences and how these experiences would benefit graduate education are also required. Lastly, applicants are asked to provide their perceived responsibilities as a graduate student in FDSC.

Selecting major professors. Applicants are asked to identify and prioritize 3-6 FDSC faculty members that they would prefer to have as a major professor. Students are encouraged to contact faculty whom they would like to serve as their major professor. Only students for which a faculty member is willing to serve as a major professor and who meet GS and FDSC requirements will be admitted to the program.

Exemptions. Exemptions to the above requirements may be requested by a faculty member, for example, waiving GRE score of MS applicants with outstanding work and/or research experience. Exemptions are to be approved by the majority of the FDSC Graduate Committee and may require an approval from the GS.

No decision or rejection of applications. Students failing to meet the above requirements will receive a rejection from the FDSC Department, unless an exemption has been approved. In addition, no admission decision or a rejection will be made in the event that there is no FDSC faculty committing to advise a student.

Conditional Admission to the 5-year BS-MS Program

The qualified students can apply for conditional admission to the 5-year BS-MS program during their junior year of undergraduate study at UT, if they meet the following requirements,

summarized in **Figure 2**.

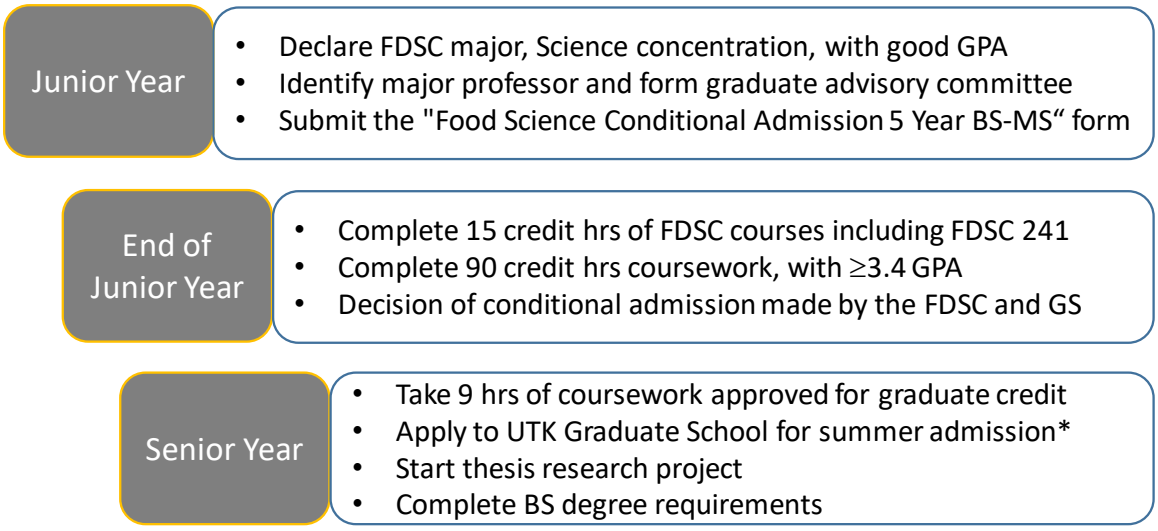

Figure 2. Requirements and steps for conditional admission to the 5-year BS-MS FDSC program. *For students graduating in Spring semester; those graduating in Fall semester shall apply for Spring admission.

- A student must be a declared FDSC major, Science concentration, with a minimum GPA of 3.4, must have completed at least 15 credit hours in FDSC, and must have completed at least 90 hours of the 120 hours of coursework required for the BS degree with a major in FDSC.
- A student must provide three letters of recommendation and complete a personal interview with individuals comprising the Graduate and Undergraduate Committees in the FDSC Department.
- A student must obtain a commitment from a FDSC graduate research faculty member (**Appendix C**) to serve as his/her major professor and at least two other faculty members to serve on their GAC.
- Applicants are required to have completed FDSC 241 Food Preservation and Packaging. The Department may consider other relevant factors such as an applicant's work experience and level of maturity before conditionally admitting a student to the BS/MS program. Conditional admission of a student into the 5-year BS/MS program must be approved by the FDSC Department and the GS. Students will be informed of the outcome of their application by the end of their junior year of undergraduate study.

Any graduate course that is to be counted towards both the BS degree and the MS degree must be approved by the student's GAC, the FDSC DoGS, and the GS. These courses must be identified, in consultation with the GAC members. The form "Food Science Conditional Admission 5 Year BS-MS" is available from the DoGS and must be completed and signed by the student, the student's GAC, and the DoGS before submitting to the GS for approval and processing. To receive graduate credit for the 9 credit hours listed on the Food Science Conditional Admission Form and approved by their graduate advisory committee, and others granting approval by signing that form, the student must complete and submit the Senior Requesting Graduate Credit Form to the Graduate School. If courses are to be taken during different semesters, the student will need to submit this form per each relevant semester.

UT's Senior Privilege rule imposes a maximum limit of 9 hours on the number of graduate-level hours that an undergraduate student may complete before completing an undergraduate degree and being formally admitted to the GS. A student that is conditionally admitted to the BS-MS program completes 9 credit hours of graduate level coursework during the student's undergraduate study, and applies those 9 credit hours to satisfy BS degree requirements. The approved 9 credit hours may also apply to satisfy MS degree requirements.

Conditional admission into the BS/MS program does not guarantee acceptance into either the GS or the MS program. Students in the BS/MS program must apply for admission to the GS and to the MS program for a term right after getting their BS degree during their senior year of undergraduate study, following the same procedures of all other student applicants. A GRE score must be submitted as part of the application for admission into any graduate program in the FDSC Department. Students will be fully admitted to the MS program after they have been accepted both by the GS and by the FDSC Department. Students will not be eligible for graduate assistantships until they are enrolled as graduate-level students in the GS.

International Applicants

International applicants are advised to pay attention to deadlines specific to each term (https://gradschool.utk.edu/admissions/deadlines/) to initiate their applications and submit the required application materials. Additional help may be available from the Center for Global Engagement (CGE) post-admission and after enrolling at UT.

Center for Global Engagement (https://international.utk.edu/). CGE, located at 1620 Melrose Avenue, promotes and supports all aspects of international education and international exchanges at UT, both for American students and faculty and for students and faculty from other countries. CGE coordinates the administration of official linkage agreements between UT and institutions of higher education in other countries.

CGE provides information and assistance in matters related to United States visas and U.S. Immigration and Naturalization Service regulations. It produces an on-line newsletter for UTK's international students and scholars, and administers the insurance policy required of all international students at UT. International student advisors are available to discuss academic and personal concerns. Orientation programs conducted at the beginning of each semester facilitate adjustment to the campus and community, and provide essential information related to U.S. laws for international students.

The International House (I-House, https://ihouse.utk.edu/). The "I-House," located at 1623 Melrose Avenue, is CIE's on-campus social, recreational and programming center and serves as a meeting place for international and U.S. students, faculty, and staff.

Contact information. International students seeking admission to UT should directly contact the Office of Graduate Admissions (email: graduateadmissions@utk.edu). General inquiries to CGE can be made by email (international@utk.edu) or phone (+1-865- 974-3177). The CGE and I-House websites with addresses listed above provide useful information to international applicants.

FINANCIAL SUPPORT AND FEES

Assistantships

An assistantship offers a financial payment to a graduate student as an employee to work

part-time in research, teaching, or administration. In the FDSC Department, Graduate Research (GRA) and Teaching Assistantships (GTA) are available on a competitive basis. Appointments are usually on a one-fourth or one-half time basis, equivalent to 10 or 20 hours per week, respectively, payable in monthly installments. Tuition and health insurance are provided to students on assistantships but students are typically responsible for the programs and services fee, the library fee, the technology fee, the facilities fee, and the transportation fee. A breakdown of these fees can be found at https://onestop.utk.edu/tuition-fees/. To maintain health insurance through the summer months, a student must be enrolled for at least 3 hrs. If assistantship is paid over 12 months, it also covers tuition for summer registration, but the student is responsible for all other fees. The offer letter should clearly stipulate terms of an appointment, start and end dates of an appointment, and payment schedule. All assistantships are governed by the Policy for the Administration of Graduate Assistantships (https://tiny.utk.edu/grad-policies). Failure to make satisfactory progress can result in revocation of assistantships.

Students appointed as a GTA are required to attend the GTA orientation of the GS before or during the first semester of their appointment. The announcement is distributed by the FDSC DoGS. UT requires all GTAs to be proficient in oral communication in English. All **GTAs and Graduate Teaching Associates whose first language is not English** are required to take the Oral Proficiency Interview by Computer Test (OPIc) exam administered through the GS before they can be assigned with teaching responsibilities (https://gradschool.utk.edu/graduate-student-life/ita-testing-program/). Results of this test will be communicated to the appropriate department to determine the nature and extent of instructional or other duties assigned to the GTAs or Graduate Teaching Associates. Deans, Department Head, and DoGS are responsible for validating such competence.

Scholarships

Opportunities for scholarships from professional organizations also exist. The information is available on websites of relevant professional organizations or distributed to students when the FDSC Department receives announcements.

Fellowships

Several fellowships to incoming and returning graduate students are available through UTK GS (https://gradschool.utk.edu/graduate-student-life/costs-funding/graduate-fellowships/). Fellowships are awards that typically require no service. Most fellowships are awarded on the basis of academic merit and potential for scholarship. Each department can only nominate one candidate for each fellowship, and a nomination letter is needed for each application. For returning students, a resume is additionally needed. Contact the FDSC DoGS for questions.

Some federal agencies also provide fellowships to support graduate studies. The United States Department of Agriculture has a pre- and post-doctoral fellowship program (https://nifa.usda.gov/funding-opportunity/agriculture-and-food-research-initiative-food-agriculture-natural-resources-and). The National Science Foundation also has a fellowship program (https://www.nsfgrfp.org/). These fellowships are competitive, require a proposal, and may have citizenship requirements. Discuss with your major professor if you are interested in these opportunities.

Employment

The Office of Financial Aid and Scholarships coordinates the Federal Work Study Program which provides part-time off- and on-campus jobs for U.S. citizens or permanent residents who have demonstrated financial need by completing the Free Application for Federal Student Aid (FAFSA). A wide range of jobs are available in academic units, administrative offices, and non-profit agencies. Also, part-time jobs frequently are available in the Department for students who are not on assistantships.

Students with assistantships are discouraged to take additional jobs to ensure successful progression of their graduate program. International students may work up to 20 hours on campus and are encouraged to communicate with CIE about employments so as to follow requirements expected from a student visa holder.

Graduate Student Travel Award

The Graduate Student Travel Award (https://gradschool.utk.edu/2021/09/21/graduate-student-senate-travel-awards/) is administered by the Office of the Dean of Students in cooperation with the Graduate Student Senate and the Dean of Graduate Studies. Allocations from this fund are utilized to provide travel awards for UTK graduate students attending professional meetings. The awards are made on the basis of merit, not need, and allow for partial reimbursement of transportation, lodging and registration expenses. Although awards are made throughout the year, applications must be received before deadlines for a specific semester in which the travel is planned.

Loans (https://onestop.utk.edu/financial-aid/)

Students must apply through the Office of Financial Aid and Scholarships for all loan programs. Loans are limited to U.S. citizens and certain permanent residents. Students must be admitted into a degree program and be enrolled for a minimum of 6 credit hours each semester to receive student loans. All students receiving financial aid are expected to maintain satisfactory academic progress standards to remain eligible to receive aid.

Veterans Benefits (https://onestop.utk.edu/discounts/)

Veterans, reservists, and widows or children of certain deceased or disabled veterans, who have been admitted to a degree program, may apply for benefits by contacting the Office of Veterans Affairs. Maximum benefits are paid by the Office of Veterans Affairs for course loads of 9 or more graduate hours each semester.

Tuition and University Fees (https://onestop.utk.edu/tuition-fees/)

In-state and out-of-state tuition must be paid in order to enroll in UT. Students on assistantships are provided with in-state tuition by the Department as a benefit of being a UT employee.

Starting from F 2022, students will no longer pay fees that include those for Maintenance, Programs and Services, Technology, Library, Facilities, and Transportation. The Herbert College will pay these fees in 22/23 academic year, then, your major professor will cover these.

Graduate Student Health Insurance (https://studenthealth.utk.edu/health-insurance-records-requests/student-health-insurance/)

All graduate students are required to have adequate health insurance during their graduate studies. Students on assistantships for at least a quarter-time appointment are provided with graduate health insurance by the Department as a benefit of being a UT employee. Self-supported students can purchase the student health insurance arranged by UT.

RESPONSIBILITIES OF FACULTY AND GRADUATE STUDENTS

Every graduate student must have an advisor (major professor). This professor advises the student about courses, supervises the student's research, and facilitates communication within the Department, to other departments, and with the Dean of GS. The advisor must approve the student's program each semester. The major professor and the student together select a GAC. The student is expected to maintain close consultation with the major professor and other members of the GAC with regard to progress in the program.

Graduate students with assistantships are considered as part-time employees of UT and are expected to show the same degrees of professionalism as staff and faculty. Each graduate student is expected to be trained as an expert with a specialized area of his/her choice and therefore is expected to communicate with professionals orally through presentations in professional and scientific meetings and in writing through peer-reviewed publications. Faculty serve as mentors to develop skills of graduate students to achieve their career goals.

The FDSC Department adopts similar responsibilities expected from faculty and graduate students as those defined in the Graduate Student Handbook of the Department of Animal Science, UTK: (https://animalscience.tennessee.edu/graduate/), excerpted below with some modifications.

General Rights and Responsibilities

Rights and responsibilities peculiar to graduate students may not be mentioned in the Graduate Catalog (https://tiny.utk.edu/grad-policies). Those rights and responsibilities which are viewed as more general and apply to all students, both graduate and undergraduate, are discussed in *Hilltopics* (http://hilltopics.utk.edu/). It is YOUR responsibility to satisfy all deadlines and requirements of the GS as listed in the Graduate Catalog.

Right to learn. UT has a three-fold purpose: Instruction, Research, and Public Service. All of these involve graduate students, as graduate students are necessary for carrying out each of the three purposes. No student may interfere with the learning process, another's research, or a public service program (as determined by the University).

Code of professional and academic standards. You have the right to be informed concerning departmental, professional, and academic policies and procedures that affect you. You should be informed of these during the initial semester in which you enrolled and this handbook is one component of that. It is your responsibility to be familiar with the departmental program, collegiate policies and procedures and to ask questions if the information is not clear or if it is not provided.

Change of degree requirements. Normally, you have the right to be evaluated according to the requirements of the program under which you entered. However, departments/colleges have the right to change program requirements and apply them to students already admitted provided adequate notice is given and the requirements are not made retroactive to parts of

the program already completed by you. You should expect to receive periodic assessments of your progress reflecting current requirements - ask for this if you do not get it. Current requirements will be given in each Fall semester's edition of this Handbook.

Academic programs are decided by the faculty. The rights for making policies about academic programs are vested with the faculty. Students may contribute in the decision through invited participation in committee efforts, or through contributions of their own initiative. The Graduate Committee and faculty always welcome your feedback.

Confidentiality of records. Most of your academic records are confidential. The FDSC Department may not release grades, etc. to anyone without your permission, not even your parents! Only you and staff and faculty involved in your training may view your records. Information concerning confidentialities may be found in the current edition of *Hilltopics* (https://hilltopics.utk.edu/).

Grievance procedure. Normally, grievances should be handled at the departmental level through the student's major professor, DoGS, or the Department Head. Further appeal may be made to the Dean of HCA, then to the Graduate Council and Dean of the GS. Students should familiarize themselves with the Graduate Council Appeal Procedures found at https://tiny.utk.edu/rights-obligations. You can contact any member of the FDSC Graduate Committee for advice on your circumstances. Appeals should be filed within 30 days of the event that created the grievance.

Academic Standards of Conduct (As per Graduate Catalog and *Hilltopics*)

Academic integrity is a responsibility of all members of the academic community. An honor statement is included on the application for admission and readmission. The applicant's signature acknowledges that adherence is confirmed. The honor statement declares the following:

An essential feature of the University of Tennessee, Knoxville, is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the university, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.

Dismissal from the FDSC Graduate Program, GS and/or UT or any lesser penalty may result from any of the following examples of misconduct or other forms of gross misconduct as defined by the Office of Equity and Diversity, Human Resources, Dean of Students Office, *Hilltopics* or Graduate Council as conveyed in the Graduate Catalog.

Plagiarism. Students shall not plagiarize. Plagiarism is using the intellectual property or product of someone else without giving proper credit. The undocumented use of someone else's words or ideas in any medium of communication (unless such information is recognized as common knowledge) is a serious offense subject to disciplinary action that may include failure in a course and/or dismissal from the graduate program and university.

Plagiarism examples:

- Using without proper documentation (quotation marks and a citation) of written or spoken words, ideas, phrases, or sentences from any source.
- Summarizing without proper documentation (usually a citation) of ideas from another source (unless such information is recognized as common knowledge).

- Borrowing facts, statistics, graphs, pictorial representations, or phrases without acknowledging the source (unless such information is recognized as common knowledge).
- Collaborating on a graded assignment without instructor's approval.
- Submitting work, either in whole or in part, created by a professional service or any individual for hire.

Extreme caution should be exercised by students involved in collaborative research to avoid questions of plagiarism. If in doubt, students should check with the major professor or the Graduate Committee. Plagiarism will be investigated when suspected and prosecuted to the fullest extent possible if established.

Academic dishonesty. Academic dishonesty will also be prosecuted, and can lead to dismissal from the university. Dishonesty must not occur in academic coursework, and must not occur during the conduct of your research program.

Examples include, but not limited to

- Academic cheating
- Furnishing false information with the intent to deceive
- Eliminating data with no basis
- Misrepresenting sample population
- Falsification or fabrication of data

Expectations of Food Science Graduate Students

Professionalism. The purpose of graduate training is to develop a considerably higher degree of professionalism. Whereas an undergraduate is trained as a generalist, the graduate student is trained as a specialist. The earning of a graduate degree carries with it an understanding that you have achieved a certain level of professional competence. Thus, the graduate program must be designed to accomplish this.

Time required for graduate study. Time required for a graduate program varies with the nature of your research program, your previous preparation, and your individual ambition or motivation. Normally, an MS degree requires 2 years while a PhD requires 3 years beyond the MS degree. Students willing to devote more hours per day to their tasks will generally finish earlier, have a more productive graduate experience, and greater opportunities when finished. Please be reminded with the absolute necessity of satisfying all university regulations in a timely fashion. Please refer to **Appendix D** for suggestions of making your study plan.

Ownership of Research. All graduate students must be cognizant of the fact that, although an individual student invests considerable amounts of talent, time and effort in an MS or PhD research project, UTIA also has a significant financial interest in any research conducted in the Department. The costs of all materials and supplies, graduate assistantships/fellowships, research facilities, faculty, and technical personnel, etc. are underwritten by UTIA and alternative sources procured by the project leader. In fact, legal ownership of any research in the Department is vested in UTIA and is under the control of the project leader (usually your major professor).

Given the above, the GS suggestion that students copyright their thesis or dissertation may

cause legal questions. Therefore, you must obtain permission from your major professor before including a copyright page in your thesis or dissertation, and the Department's legal interpretation is that this copyright applies only to the written expression, not to the data. Your major professor may continue to use the data and has the right to publish results from your research project without violating copyright.

Publishing research in peer-reviewed journals. Although it is difficult to set minimum research standards for the MS and PhD degrees, high quality should be maintained in all cases. It is incumbent upon your major professor and your GAC to ensure your selected research program is of high-quality and deserves awarding of credits for research and thesis/dissertation in fulfillment of the degree requirements. It is in your best interest, and the Department's, to publish research results with minimal delay. Therefore, manuscripts emanating from thesis or dissertation research are expected to be submitted to your GAC before or at the time the completed thesis/dissertation is submitted.

Since the ultimate goal of any research is publication of results, the policy of the Department requires that all research you conduct be published within a reasonable length of time after the research is completed. The length of time deemed reasonable will, of course, vary with the nature of the research, and any extenuating circumstances will be considered. If the project leader (usually your major professor) determines that you have failed to write up the research results in a thesis or dissertation in a reasonable length of time (usually six months after obtaining the data), your major professor may proceed to prepare a scientific manuscript for publication. This would naturally preclude use of the data for a MS thesis or PhD dissertation, as it will no longer be your work.

To timely publish research findings, the faculty at FDSC department approved the following guidelines. MS, thesis-option students must have at least one manuscript submitted before scheduling thesis defense. PhD students must have at least one manuscript published/accepted or two manuscripts submitted before scheduling dissertation defense. The major professor will verify the status and inform the GAC and DoGS. Exceptions must be requested by the student and major professor in writing and receive approval from the DoGS and Department Head.

Authorship of manuscripts. Authorship resulting from research programs is a measure of recognition for the individuals who made substantive contributions to the research effort. Responsibility for establishing the order of authorship for any article rests with the project leader. The subject of authorship should not be taken lightly by the project leader and should reflect as accurately as possible the relative contributions of those involved. Generally, you will be first author on publications based on your research, but that assumes you have taken primary responsibility for writing the manuscript. Generally, you will not be first author if you have left the university and have not continued contributing to writing the manuscript(s).

Authorship should be established by determining the specific contribution each person made in the conduct of the research. Those who made significant inputs in the planning, execution, and evaluation of the research should be considered for authorship. People who performed routine functions such as data collection and data analysis should not be awarded authorship. Other types of recognition can be given to contributors who do not warrant author status, i.e. acknowledgements and footnotes. Of course, many people who may contribute to the success of the research effort and the completed manuscript are never recognized because of the nature of their work assignments. Since so many different people with different skills are

usually associated with the conduct of any experiment, it becomes an impossible task to attempt to recognize all who made contributions through authorship.

Patents, Copyrights, & Other Intellectual Property. As a graduate student of UT, patents, copyrights, and other intellectual property may arise from sponsored work, substantial use of funds or facilities of UT, or without substantial use of funds or facilities. Ownership and use of patents, copyrights, and other intellectual property are governed by The University of Tennessee Policy on Patents, Copyrights, & other Intellectual Property (https://research.tennessee.edu/intellectual-property-agreement/). You are encouraged to discuss with your major professor and consult with the University of Tennessee Research Foundation about the specific rules and steps of dealing with intellectual property. Be mindful that once the information is made public in any shape or form, the intellectual property may no longer be protected. You shall also be aware of the delay in publishing your work if a provisional or utility patent is filed by the UT Research Foundation.

Involvement in departmental functions. You should take advantage of every possible opportunity to improve your professional abilities, and in fact this is expected. This includes not only formal coursework, but all department and institutional seminars, defense seminars, and journal clubs when available. The greatest learning experiences may be through exercising an intensely inquisitive mind by reading current literature in the field; informal discussions with faculty, staff, and other graduate students; attendance at scientific meetings and participation in many other functions of the Department. Indeed, much can be learned in classic discussion with fellow graduate students. Students unwilling to participate in these will miss much in their program and may take longer to earn the degree.

Graduate students are strongly encouraged to actively participate in the Food Science Club. Occasionally, a graduate student may be asked to serve on a departmental or college committee. As one meaningful way to train communication and professional skills, each graduate student is required to gain teaching assistant experience (TA, student mentoring, etc) agreeable with the GAC. The teaching assignment typically will not be given in the first semester and students would be given notice sufficiently in advance to allow appropriate preparation. If a student is interested in gaining experience teaching a specific course, he/she should communicate this interest with his/her advisor, instructor, and DoGS in order to arrange the student's involvement in teaching.

Membership in professional organizations. Membership in professional organizations, including but not limited to the Institute of Food Technologists (its divisions and the Volunteer Section), American Chemical Society, American Oil Chemists' Society, International Association for Food Protection, and American Society for Microbiology, is highly encouraged. Many societies have "associate" or "student" memberships for graduate students at a reduced cost. Remember you are training for a profession and should begin to direct your interests accordingly.

Teaching and research activities, trainings, and approvals. Teaching and research activities of your graduate program likely require the use of hazardous chemicals, biohazards, and possibly animals and human subjects. There are safety regulations to ensure the safety and health of not only you but also others around you. Therefore, you must undergo all necessary trainings and receive approvals before starting your experiments.

- Each graduate student must receive chemical safety training of UTIA (https://ag.tennessee.edu/safety) and maintain an active certificate.
- If your work involves biohazards and radioactive materials, you must receive safety training from the Biosafety Office (https://biosafety.utk.edu), maintain an active certificate, and be involved in the biosafety monitoring plan specific to the laboratory you work in.
- Any work involving human subjects (sensory tests, surveys, etc.) must be approved by the Institutional Review Board (IRB; https://irb.utk.edu/). Applications should be initiated by the Principal Investigator and all pertinent training obtained by all personnel involved with human subjects (https://irb.utk.edu/training/).
- If your work involves any live animal or animal tissues/specimens, you must enroll in the Occupational Health Program (https://iacuc.utk.edu/occupational-health-program/), be appropriately trained, maintain an active certificate, and work with the Principal Investigator to prepare a protocol for approval by the Institutional Animal Care and Use Committee (IACUC; https://iacuc.utk.edu/).

REGISTRATION

Registration Procedures and Timelines

Course listings and information concerning registration are available at MyUTK or in the Timetable of Classes (https://bannerssb.utk.edu/kbanpr/bwckschd.p_disp_dyn_sched) each term. After consulting with your major professor, you can register online via MyUTK. During priority registration, a schedule and bill is mailed to the registrant. Retroactive registration is not allowed.

Payment is due by the deadline noted on the bill. A late fee is assessed to any student who fails to register during priority registration. Additional information can be obtained from the University Registrar's Office, 865-974-2101. Failure to pay tuition and fees before the deadline, as noted each semester on the schedule/bill, will result in cancellation of the schedule. Pay your fees and confirm your attendance to avoid schedule cancellation! Even if your fees have been paid by financial aid or another third party, you MUST confirm your attendance.

Types of Courses and Course Credit

Prerequisites. The FDSC Department requires all students receiving a graduate degree (MS or PhD) to have completed certain courses that are required for a BS degree in FDSC. Students having completed a BS degree from a program approved by the Institute of Food Technologists will have satisfied these requirements. Some or all of these courses may need to be taken by students who received their degrees in other fields. Students must provide evidence of completion of the following FDSC or equivalent courses:

FDSC 410 Food Chemistry

FDSC 421 Food Microbiology

Graduate courses. Each course listed in the Graduate Catalog contains information in abbreviated form. The course number indicates the level at which the course is taught. All 500-

and 600-level courses are graduate courses. The 400-level courses are upper division undergraduate courses available for graduate credit only if listed in the Graduate Catalog. To receive graduate credit for these courses, a student must request so at registration. FDSC courses approved for graduate credits can be found on the Graduate Catalog (https://tiny.utk.edu/grad-catalog) and are listed in **Appendix E**. Graduate students also take many graduate credit courses offered in other departments and these courses are listed in **Appendix F.**

Prerequisite courses may be mandatory for some courses. Co-requisite courses may be taken prior to or concurrently with the specific course. Both prerequisites and co-requisites are checked during registration. Recommended prerequisites should be taken previously but are not mandatory. Required background is the knowledge base needed before taking the course. A symbol indicating the semester or frequency that the course is normally offered is included at the end of many course descriptions: F- Fall; Sp-Spring; Su-Summer; E-Every semester; A-Alternate years.

The Timetable of Classes, published several weeks prior to each semester, is the official notification of courses offered for a given semester. Students should contact the appropriate department/program head concerning courses to be offered in future semesters.

Course Grading

FDSC graduate courses are graded as following. The grade assignments may differ in other academic units.

A (4 quality points per semester hour), superior performance.

B+ (3.5 quality points per semester hour), better than satisfactory performance.

B (3 quality points per semester hour), satisfactory performance.

C+ (2.5 quality points per semester hour), less than satisfactory performance.

C (2 quality points per semester hour), performance well below the standard expected of graduate students.

D (1 quality point per semester hour), clearly unsatisfactory performance and cannot be used to satisfy degree requirements.

F (no quality points), extremely unsatisfactory performance and cannot be used to satisfy degree requirements.

I (no quality points), a temporary grade indicating that the student has performed satisfactorily in the course but, due to unforeseen circumstances, has been unable to finish all requirements. An "I" is NOT given to enable a student to do additional work to raise a deficient grade. The instructor, in consultation with the student, decides the terms for the removal of the "I," including the time limit for removal. If the "I" is not removed within one calendar year, the grade will be changed to an "F." The course will not be counted in the cumulative GPA until a final grade is assigned. No student may graduate with an "I" on the record.

S/NC (carries credit hours, but no quality points), an "S" grade is equivalent to a grade of "B" or better, and NC means no credit earned. Courses in which an "NC" grade is received may be repeated for a grade of "S." A grade of "S/NC" is allowed only where indicated in

the course description in the Graduate Catalog. The number of "S/NC" courses in a student's program is limited to one-fourth of the total credit hours required.

P/NP (carries credit hours, but no quality points), P indicates progress toward completion of a thesis or dissertation. NP indicates no progress or inadequate progress.

W (carries no credit hours or quality points), indicates that the student officially withdrew from the course.

Minimum Number of Hours Required for Full-time Status with and without Assistantships

Registration is required of all graduate students when using University facilities and/or faculty time. Registration allows the use of services such as library services, laboratories, and recreation facilities not open to the public. The credit hour requirements of full-time graduate students are listed in **Table 1**.

Table 1. Credit hours required to maintain full-time graduate student status.

Course load	No assistantship		1/4 time assistantship		1/2 time assistantship	
	Fall/Spring	Summer	Fall/Spring	Summer*	Fall/Spring	Summer*
Minimum	9	1	9	1 [3]	6	1 [3]
Maximum	15	12	15	12	15	12

*The minimum number of hours for registration is one. However, students on assistantships must sign up for a minimum of 3 hours to be exempt from FICA and Medicare taxes during summer sessions.

Registration for Use of Facilities

Students using University facilities, services or faculty time, including summer term, must be registered. Normally, students are registered for coursework and/or thesis/dissertation credit. Students who are not taking coursework and are not yet eligible to register for thesis or dissertation hours, must register for course **FDSC 502 Use of Facilities** if they wish to have borrowing privileges in the University Library or to use computer labs, other labs, or other university resources.

Registration for FDSC 500 Thesis and FDSC 600 Dissertation Hours

The academic program of each MS (thesis option) graduate student must include a minimum of 6 hrs of **FDSC 500 Thesis**. During the semester in which your thesis is accepted, you must be enrolled in 3 hrs of **FDSC 500**. The official policy of the UTK GS is that master's students should be enrolled in one or more hours of **FDSC 500** during every semester that they work on their thesis, use UTK facilities and/or consult with their major professor about their research. Students may register for up to 15 thesis hours. After receiving the master's degree, a student is no longer permitted to register for **FDSC 500**.

PhD students must register continuously for course **FDSC 600 Doctoral Research/Dissertation** (minimum of 3 hrs) each semester from the time the doctoral research proposal is approved, admission to candidacy is accepted, or registration for course **FDSC 600** is begun, whichever comes first, including summer semester and the semester in which the dissertation is approved and accepted by the GS. A minimum total of 24 hrs of **FDSC 600** course is required before the dissertation will be accepted. A student who will not be using faculty

services and/or university facilities for a period of time may request leaves of absence (LOA) from dissertation research up to a maximum of six terms (including summer terms). The request, approved by the major professor, will be submitted by the student and filed in the Registrar's Office (see page 34 “Leave of Absence”).

DEGREE REQUIREMENTS AND EXAMINATIONS

Master of Science in Food Science, Thesis Option

The FDSC MS thesis program requires 30 or more graduate hours of coursework. A minimum of one-half of the total hours required for a master's degree must be taken at UTK. Transferred courses must have been completed within the six-year period prior to receipt of the degree. The courses must be listed on the Admission to Candidacy form and will be placed on the student's UT transcript only after admission to candidacy.

Course requirements. Course requirements for a MS degree in FDSC with a thesis are listed as follows. To help you plan your course work, a worksheet is given in **Appendix G**.

- Registration for 6 hours of **FDSC 500 Thesis** is required. See page 18 for policies of registering **FDSC 500**.
- In addition to the thesis requirement, a minimum of 24 credit hrs of graduate coursework is required. The course work must be approved by the student's GAC and a minimum of 14 hrs must be taken from courses numbered above 500. The GAC may require additional coursework if the student's progress or background indicates such a need.
- All students are required to take 1 hr **ANSC 525/PLSC 525 Research Ethics**. All students are also required to take 2 hrs of **FDSC 601 Seminar** in their program and are expected to attend departmental seminars.
- All students are required to complete at least 6 hours from the list of FDSC 511, FDSC 514, FDSC 521, FDSC 525, FDSC 541, FDSC 590, and FDSC 618.
- All students are required to complete at least 3 credit hours of graduate level statistics courses as approved by the GAC.

Advisory Committee. A GAC composed of the major professor and at least two other faculty members should be formed as early as possible in a student's program, and must be formed by the time a student applies for admission to candidacy. GAC faculty members shall hold the rank of assistant professor or above and at least two members shall have an appointment in FDSC. The responsibility of this GAC is to assist the student in planning a program of study and carrying out research, and to assure fulfillment of the degree requirements. If the student has a minor, one member of the GAC must be from the minor department. Once a GAC is established, graduate students are expected to hold GAC meetings at least once a year to report academic and research progresses and seek input and advice from the GAC.

Thesis proposal. Each student must develop a detailed written research proposal for his/her thesis and defend the thesis proposal by his/her GAC at least one semester before the graduating semester. For example, if a student plans to graduate in Spring semester, the thesis proposal must be defended by the end of previous Fall semester. Rubrics of assessing a MS

thesis proposal in FDSC are available on the departmental website and are included in **Appendix H**.

Admission to candidacy. Admission to candidacy indicates that the student has demonstrated ability to do acceptable graduate work and that satisfactory progress has been made toward a degree. This action usually connotes that all prerequisites to admission have been completed and a program of study has been approved. The application for the MS degree candidacy is made as soon as possible after the student has completed any prerequisite courses and nine hours of graduate coursework with a 3.0 or higher GPA in all graduate work. The Admission to Candidacy form (https://gradschool.utk.edu/forms-central/admission-to-candidacy-masters-or-specialist-degree/) must be signed by the student's GAC and list all courses to be used for the degree, including transfer coursework. The student must submit this form to the Graduate School no later than the last day classes of the semester proceeding the semester in which he/she plans to graduate.

Thesis preparation and defense. A thesis is required for an MS (thesis option) degree in FDSC. Students are encouraged to attend a workshop to learn the preparation of a thesis (information sent by e-mails or resources on GS website (https://gradschool.utk.edu/thesesdissertations/). Students can also request up to 10 hours of statistical assistance by signing up the service at https://oit.utk.edu/research/schedule/. Students are required to follow the format and work with and receive approval from a thesis consultant about the content and format (http://gradschool.utk.edu/thesesdissertations/formatting/).

As stated previously, MS students must have at least one manuscript submitted before scheduling thesis defense. A final examination including a defense of thesis and subjects that the student's GAC considers appropriate is required. An MS candidate must pass an oral examination on the thesis. The thesis, in the form approved by the major professor, must be distributed to the GAC at least two weeks before the examination. The examination is announced publicly and is open to all faculty, staff, and students. The defense of thesis will be administered by ALL members of the GAC after completion of the thesis and all course requirements. This examination must be passed at least two weeks before the date of submission and acceptance of the thesis by the GS. The major professor/GAC chair must submit the results of the defense by the deadline by completing this form: https://gradschool.utk.edu/forms-central/report-of-final-examination-masters/. Rubrics of assessing a thesis in FDSC are available on the departmental website and are included in **Appendix I** of this Handbook. In case of failure, the candidate may not apply for reexamination until the following semester. The result of the second examination is final. After revising the thesis based on feedback from the GAC and receiving GAC members' approval, this thesis approval form is to be completed and submitted to the GS: https://gradschool.utk.edu/forms-central/thesisdissertation-approval/. Keep in mind it is YOUR, not your major professor's, responsibility to make sure all deadlines relevant to thesis defense and graduation are met.

Time limits. Candidates have six calendar years to complete an MS degree, starting at the beginning of the semester of the first course counted toward the degree. Students who change degree programs during this six-year period may be granted an extension after review and approval by the Dean of GS. In any event, courses used toward a master's degree must have been taken within six calendar years of graduation.

Second Master's degree. For a second master's degree, the student must have fulfilled all

major requirements applicable to the first master's degree, including the thesis, if appropriate. Coursework applied to one master's degree program may not be applied toward a second Mater's degree.

Concurrent Master's degree. In exceptional cases where an individual is admitted to PhD program having a BS but no MS degree, the individual may complete a thesis-based or non-thesis based MS degree in the continuum of PhD program efforts. If departmental stipend is awarded, the individual would start at MS pay rate. The individual would work with their graduate advisor to submit a manuscript containing their initial, original research efforts to a scientific peer-reviewed journal, normally after 2 years in the program. The submitted manuscript would then be formatted into a thesis for presentation at an oral defense. Or, the student will complete all the requirement as stated under the non-thesis option. Upon completion of MS degree requirements, the individual would then be eligible for PhD stipend rate and complete PhD requirements as outlined in this Handbook.

Master of Science in Food Science, Non-Thesis Option

- In lieu of a thesis, students are required to complete a project in cooperation with their employer (company or governmental agency) and/or their major professor or take a written comprehensive exam. Students must register for 6 hours of **FDSC 503**.
- In addition to the requirement for 6 hours of **FDSC 503**, a minimum of 24 hours of graduate course work is required. This work must be approved by the student's GAC and a minimum of 14 hours must be in courses numbered above 500. The GAC may require additional course work if the student's progress or background indicates such a need.
- All students are required to take 1 hour **ANSC 525** or **PLSC 525 Research Ethics** and 2 hours of **FDSC 601 Seminar** during their program. Students are expected to attend departmental seminars during their master's program.
- All students are required to complete at least 6 hours from the list of FDSC 511, FDSC 514, FDSC 521, FDSC 525, FDSC 541, FDSC 590, and FDSC 618.
- All students are required to complete at least 3 credit hours of graduate level statistics courses as approved by the GAC.
- Students not working on a project will be required to take a written comprehensive examination covering their course work. In addition, an oral final examination covering the project or contents in the written comprehensive exam, and course work is required. The oral examination must be held on the Knoxville campus. In case of failure, the candidate may not apply for reexamination until the following semester. The result of the second examination is final.

Accelerated Five Year BS-MS Program

Students in this program are conditionally admitted while working on their BS degree as described on page 6. After official enrollment in the MS program, the same requirements for an MS degree in FDSC with a thesis apply.

Doctor of Philosophy in Food Science

A doctoral degree is an evidence of exceptional scholarly achievements and the demonstrated capability of original investigation. The student's program of study is subject to

Graduate Council policies and individual program requirements. The program of study as listed by the student on the Admission to Candidacy form must be approved by the GAC. Doctoral programs include a major field or area of concentration and, frequently, one or more cognate fields. Cognate fields are defined as a minimum of 6 hrs of graduate coursework in a given area outside the student's major field.

Requirements for the degree, therefore, include courses, examinations, and a period of resident study, as well as arrangements which guarantee sustained, systematic study and superior competency in a particular field. Examinations for PhD students include the comprehensive exam on students' ability to propose original research, the dissertation proposal examination to test students' ability to design original research, and the final defense of the dissertation to examine students' ability to analyze, reason, and conclude original research.

Course requirements. Course requirements for a PhD degree in FDSC are listed as follows. To help you plan your course work, a worksheet is given in **Appendix J**.

- A minimum of 72 hours beyond the bachelor's degree, excluding credit for the master's thesis (FDSC 500 or equivalent), is required. Of this, 24 hours must be **FDSC 600 Doctoral Research/Dissertation**.
- A candidate for a doctoral degree must complete a minimum of 24 hrs of graduate coursework beyond the master's degree (exclusive of **FDSC 600**), which is a prerequisite for entry into most doctoral programs. For students without a master's degree, the candidate must complete a minimum of 48 hrs of graduate coursework beyond the baccalaureate degree (exclusive of **FDSC 600**). A minimum of 12 of the 24 hrs, or 30 of the 48 hrs, must be graded A-F.
- A minimum of 6 hrs of the student's coursework must be taken in UT courses at the 600 level, exclusive of FDSC 600.
- A minimum of 6 hours of courses for graduate credit must be taken outside the FDSC Department.
- All students must complete **FDSC 601** (2 hours) and are expected to attend departmental seminars during their PhD program. One credit hour of **PLSC 525** or **ANSC 525** must be taken before admission to candidacy.
- All students are required to complete at least 6 hours from the list of FDSC 511, FDSC 514, FDSC 521, FDSC 525, FDSC 541, FDSC 590, and FDSC 618.
- All students are required to complete at least 6 hours of graduate level statistics courses.
- Coursework taken prior to admission to a doctoral program may be used up to 24 credit hrs toward the degree, as determined by the student's GAC. Although the courses are used as part of the requirements toward the degree and are listed on the admission to candidacy, they are not official transfer courses and are not placed on the student's UT transcript (see section "Transfer of Credits from Previous Graduate Courses" on page 25).

Advisory committee. The major professor directs the student's dissertation research and chairs the GAC. The student and the major professor identify a GAC composed of at least four members. At least two of GAC members must be UT tenured or tenure-track faculty. At least two members shall have an appointment in FDSC. At least one member must be an expert from

another academic unit of UTK or another institution. Details of dissertation committee appointment can be found on the GS website (https://gradschool.utk.edu/forms-central/admission-to-candidacy-doctoral-degree/). The chair, co-chair, and members of the GAC must be approved by FDSC Department Head and verified by the Dean of GS.

The GAC should be formed during the student's first year of doctoral study. Subject to Graduate Council policies and individual program requirements, the GAC must approve all coursework applied toward the degree, certify the student's mastery of the major field and any cognate fields, assist the student in conducting research, and recommend the dissertation for approval and acceptance by the GS. Once a GAC is established, graduate students are expected to hold GAC meetings at least once a year to report academic and research progresses and seek for input and advice from the GAC. Any changes of the GAC must be approved by the FDSC Department Head and the Dean of GS.

Comprehensive examination. Each student must pass a comprehensive examination prior to admission to candidacy. The comprehensive exam must be taken at least one year before the graduating semester. The successful completion of the comprehensive exam, in the judgment of the GAC, indicates that the doctoral student can think analytically and creatively, has a comprehensive knowledge of the field and the specialty, knows how to use academic resources, and is deemed capable of completing the dissertation.

The comprehensive exam for a PhD degree in FDSC has written and oral components. The written portion is in the format of proposal independently written by the candidate following the Request for Applications (RFA) of a research or fellowship program of a federal agency, commonly the United States Department of Agriculture, the National Institutes of Health, or the National Science Foundation. The chosen agency and program shall be in line with the student's training area and be agreed by both the major professor and the candidate. The proposal topic can be related but not part of PhD research to allow for exploration of unique hypotheses, subject to the determination by the GAC, and must include the main components of a proposal required in the RFA. Proposal length may be shortened from the RFA if agreed upon by all members of the GAC. The exam follows the same code of conducts of other exams of *Hilltopics*. Therefore, the proposal must be prepared by the candidate only, without any revisions and editions by anyone else, and meet the standards of the Student Code of Conduct. The RFA and proposal must be distributed to the entire GAC at least two weeks before the oral exam. If the written proposal is deemed satisfactory by all members of the GAC, an oral exam is conducted for a) the candidate to defend the proposal and b) the GAC to examine additional preparations expected from a doctoral candidate to complete a dissertation.

Rubrics of assessing the comprehensive exam are available on the departmental website and are included in **Appendix K** of this Handbook.

Candidates receiving an "unsatisfactory" exam outcome may request for a second examination with the format to be decided by the GAC. If a candidate fails in both exams, the GAC, upon approval by the FDSC DoGS, Department Head, and GS, may suggest the candidate to pursue a MS degree, if without a previous MS degree in FDSC from UTK, or terminate the graduate study, if having already earned an MS degree in FDSC from UTK.

Grant proposals. In addition to the proposal required in the comprehensive exam, doctoral students may have the opportunity to gain experience in preparing an actual competitive grant application as part of their doctoral training. Please note the policies regarding intellectual

property while working at UT (https://research.utk.edu/policies/). Graduate students may not submit a proposal to a funding agency directly due to their appointments and the responsibilities, policies, infrastructures, and supports required to perform a research project. Graduate students are encouraged to work with their major professor and the UTIA Office of Sponsored Programs if an agreement is made to submit a grant proposal.

Dissertation proposal. Each student must develop a detailed written research proposal for his/her dissertation and defend the dissertation proposal by his/her GAC at least one semester before the graduating semester. For example, if a student plans to graduate in Spring semester, the dissertation proposal must be defended by the end of previous Fall semester. Rubrics of assessing the dissertation proposal are available on the departmental website and are included in **Appendix H** of this Handbook.

Admission to candidacy. Admission to candidacy indicates that the student has demonstrated the ability to do acceptable graduate work and that satisfactory progress has been made toward a degree. This action usually connotes that all prerequisites to admission have been completed and a program of study has been approved. A student may be admitted to candidacy for the doctoral degree after passing the comprehensive examination, fulfilling any language requirements (for PhD), maintaining at least a B average in all graduate coursework, and defending the dissertation proposal. Each student is responsible for filing the admission to candidacy form (https://gradschool.utk.edu/forms-central/admission-to-candidacy-doctoral-degree/), which lists all courses to be used for the degree, including courses taken at UT or at another institution prior to admission to the doctoral program, and is signed by the GAC. Admission to candidacy must be applied for and approved by the GS at least one full semester prior to the date the degree is to be conferred. Once a candidacy is approved by the GS, any changes to the course work and membership of the GAC must be approved by the GS by completing this form: https://gradschool.utk.edu/forms-central/revised-admission-to-candidacy-doctoral-degree/.

Dissertation preparation and defense. A dissertation is required for a PhD degree in FDSC. Students are encouraged to attend a workshop to learn the preparation of a dissertation (information sent by e-mails or resources on GS website (https://gradschool.utk.edu/thesesdissertations/). . Students can also request up to 10 hours of statistical assistance by signing up the service at httpss://oit.utk.edu/research/schedule/. Students are required to follow the format and work with and receive approval from a thesis/dissertation consultant about the content and format (https://gradschool.utk.edu/thesesdissertations/formatting/).

As stated previously, PhD students must have at least one manuscript published/accepted or two manuscripts submitted before scheduling dissertation defense. A final examination including a defense of dissertation and subjects that the student's GAC considers appropriate is required. A doctoral candidate must pass an oral examination on the dissertation. The dissertation, in the form approved by the major professor, must be distributed to the GAC at least two weeks before the examination. The examination must be scheduled through the GS at least one week prior to the examination and must be conducted in University-approved facilities. The examination is announced publicly and is open to all faculty, staff and students. The defense of dissertation will be administered by ALL members of the GAC after completion of the dissertation and all course requirements. This examination must be passed at least two weeks before the date of submission and acceptance of the dissertation by the GS. The major

professor/GAC chair must submit the results of the defense by the dissertation deadline by completing the form from the GS after approving the defense. Rubrics of assessing a dissertation in FDSC are available on the departmental website and are included in **Appendix I** of this Handbook. In case of failure, the candidate may not apply for reexamination until the following semester. The result of the second examination is final. After revising the dissertation based on feedback from the GAC, this dissertation approval form is to be completed and submitted to the GS after receiving the GAC approval: https://gradschool.utk.edu/forms-central/thesisdissertation-approval/. Keep in mind it is YOUR, not your major professor's responsibility to make sure all deadlines relevant to dissertation defense and graduation are met.

Residency requirements. Residence is defined as full-time registration for a given semester on the campus where the program is located. The summer term is included in this period. During residence, it is expected that the student will be engaged in full-time on-campus study toward a graduate degree. For the doctoral degree, a minimum of two consecutive semesters of residence is required. A statement as to how and during what period of time the residence requirement has been met will be presented with the Application for Admission to Candidacy along with signatures of approval from the major professor and the Department Head/Program DoGS. More information about the rationale for the residence requirement may be obtained from the Graduate Council report available on the GS website.

Continuous registration. See page 18 for policies of continuous registration for course **FDSC 600** (minimum of 3 hours).

Time limits. The comprehensive exam must be completed within five years, and all requirements must be completed within eight years, from the time of a student's first enrollment in a doctoral degree program. The GS sets a time limit of eight years on coursework, so courses taken eight years ago may not be used to satisfy degree requirements.

Transfer of Credits from Previous Graduate Courses

Courses taken at another institution may be considered for transfer into a master's program as determined by the GAC and approved by the Dean of GS. At the doctoral level, courses are not officially transferred although they may be used to meet degree requirements. Official transcripts must be sent directly to the Office of the University Registrar from all institutions previously attended before any credit will be considered. To be transferred into a master's program at UTK, a course must:

- Be taken for graduate credit.
- Carry a grade of B or better.
- Be a part of a graduate program in which the student had a B average.
- Not have been used for a previous degree.
- Be approved by the student's GAC and the Dean of GS on the Admission to Candidacy form.

Courses transferred to any graduate program will not affect the minimum residence requirements for the program, nor will they be counted in determining the student's GPA. Credits transferred from universities outside the UT system cannot be used to meet the thesis or dissertation requirements or 600-level coursework requirements. Credit for extension

courses taken from other institutions is not transferable, nor is credit for any course taken at an unaccredited institution. For more information, see current Graduate Catalog.

SERVICES AVAILABLE TO GRADUATE STUDENTS

The student handbook, *Hilltopics* (https://hilltopics.utk.edu/services/), has a list of services available to UT students. Some of these services are listed here.

Academic, Career, and Personal Support

These offices provide supports to develop students' career, enrich their cultural experience, and promote their academic excellence. Please visit the websites for specific supports available from these organizations.

Center for Career Development

Center for International Education

Division of Student Life

Office of the Dean of Students

Office of Disability Services

Office of Equity & Diversity

Office of Information Technology

Office of Multicultural Student Life

Office of Student Conduct & Community Standards

Pride Center

Student Success Center

Health and Safety

When you experience issues related to physical and psychological health and safety, these offices are available to help.

Center for Health Education & Wellness
Distressed Student Protocol
Emergency Blue Light Phones (visit the online campus map for locations)
Office of Emergency Management
Sexual Assault Response Team
Student Counseling Center
Student Health Service
UT Police Department. The UT Police Department offers basic police services and UT police officers have full police powers. In addition to the contact information of UT Police Department listed below, there are other telephone numbers that you can get help.

UT Police Department
1101 Cumberland Avenue
Knoxville, Tennessee 37996
Phone: 865-974-3114
Fax: 865-974-4072

E-mail:utpolice@utk.edu
Website: https://utpolice.utk.edu/

Emergency: 911

UT Police (Emergency): 865-974-3111

UT Police (Main line): 865-974-3114

VolAware Student Hotline: 865-974-HELP (4357)

Distressed Faculty and Staff Hotline: 865-946-CARE (2273)

Emergency Information Line: 865-656-SAFE (7233)

Office of Emergency Management: 865-974-3061

T-Link (Late-night shuttle): 865-974-4080

General Campus Information: 865-974-1000

A VolCard is issued by UT to active students, staff, or faculty. The VolCard is needed to access various facilities and programs such as libraries, TRECS, and dining. VolCard has gone digital and is no longer in plastic form. Please follow the instruction on VolCard website (https://volcard.utk.edu/) for activation.

E-mail

UT provides a university e-mail account to each student. Visit websites to set up your e-mail (email.utk.ed) and learn about the features and policies of using your UT e-mail (oit.utk.edu).

Transportation

Public transportation to the UT campus is limited. The Knoxville Area Transit (KAT) offers buses on limited routes and schedules: https://www.katbus.com/. UT offers buses for students free of charge to transit to different parts of the campus. For up-to-date schedules and routes, please visit the website: https://ridethet.utk.edu/route-information/.

If you wish to commute with your personal vehicle, limited parking space is available at student parking lots, e.g., lot CFN1 in front of the FSB. A valid hangtag permit is required during work hours. Parking permits may be ordered online through the Parking Services: https://parking.utk.edu/. Conditions of using parking permits are detailed in Parking regulations: https://parking.utk.edu/regulations/.

Libraries

Students have access to facilities at the Agriculture-Veterinary Medicine Library located on the Agriculture Campus (https://www.lib.utk.edu/agvet/) and the Hodges Library on the main campus (https://www.lib.utk.edu/). Besides hardcopies of literature collections, students have access to electronic literatures that UT has purchased copyrights. Please be mindful about the limitations of using and sharing copyrighted materials.

Intercollegiate Athletics

Graduate students can attend many events of UT athletics free of charge or at a discounted rate. For events and ticket information, visit https://bigorangetix.utk.edu/.

Student Organizations

Students can join various organizations to enrich their education. A list of student organizations registered with UT can be found on this site: https://utk.collegiatelink.net/organizations.

RecSports

UT offers excellent facilities for recreational sports. Active students can use these facilities as they have already paid these fees. Dependents of students can also use these facilities by paying certain fees. Please visit the website to learn about facilities, clubs, activities, and schedules: https://recsports.utk.edu/.

Drug-, Alcohol- and Smoke-Free Campus and Workplace (Policy HR0720)

UT strives to create and maintain a safe, healthful, smoke-free, alcohol-free, and drug-free environment. Please visit these policies related to the regulations of drugs, smoke, and alcohol on UTK and UTIA: https://news.tennessee.edu/2017/02/01/policy-drug-alcohol-free-campus-workplace/; https://bewell.utk.edu/policy/.

WORKING IN FOOD SCIENCE DEPARTMENT

The following information is provided to assist your graduate program.

Office Hours, Holidays, and Vacations

Office hours are Monday through Friday, 8:00 a.m. until 5:00 p.m., EST. Lunch hour is from 12:00 p.m. until 1:00 p.m. During that time, the Main Offices (FSB 201) are closed. Graduate assistants are part-time employees of UTIA and are expected to follow the same work hours as staff and faculty, unless they are attending classes or engaged in their scholarly activities. Students not on assistantships shall communicate with their major professors about their schedules and are expected to be committed in research projects just as students on assistantships. Students observe the same holidays determined by UT as faculty and staff. The holidays are published on UT website (https://hr.tennessee.edu/benefits/holiday-schedule/) and included in the academic calendar (https://registrar.tennessee.edu/academic_calendar/). Being a graduate student, working beyond regular hours is occasionally expected to complete academic and research commitments to receive best possible outcomes of a graduate program.

Graduate assistants are part-time employees of UTIA and therefore are not eligible for benefits such as annual vacation. When you expect to miss one day or more of school, you must receive an approval from your major professor in advance so as to make sure the successful progress of your research project. Excessive absences in expected work hours (10% or more) can result in termination of assistantship.

Building and Laboratory Access

The FSPB and FSB are unlocked Monday through Friday, 7:30 a.m. until 5:30 p.m. Once enrolled in the UT system and approved, a student can enter the FSPB after regular work hours with his/her VolCard or an entrance key. Students shall work with the Main Office Staff and their major professor to request keys if they are to use facilities after work hours and during

weekends and holidays. Graduate students can also request keys to appropriate laboratories that are to be locked when no experiments are in progress. For safety reasons, working alone in labs after hours is discouraged and shall be permitted at the discretion of the Principal Investigator. Call T:Link (Late-night shuttle; 865-974-4080) if you need service.

Graduate Student Offices

Desks are available in graduate student offices and laboratories. Students with major professors' research laboratories in FSPB can request desk space in FSPB 11, while MS and PhD students in FSB can request desk space in FSB 311 and 302, respectively. A desk space is assigned to all students on assistantships (and those not on assistantships based on availability) and assignments are coordinated by the FDSC Administration Specialist (Ms. Ann Henry).

Professionalism & Wearing Apparel

As a graduate student in our program, you are expected to maintain a high degree of professionalism both in and outside classroom, office, and laboratory as you fulfill work or degree related-responsibilities. You are expected to wear professional attire (ask your major professor if in doubt) when representing the Department, for example at field days, when in front of a classroom, or at professional meetings. The Department will provide appropriate specialized materials such as protective laboratory apparel required in the execution of GRA or GTA duties. The Department will not, however, provide apparel for routine activities, e.g., coveralls. Related to office space, please assist with keeping it organized and conduct yourself in a manner expected in a professional work space. Because this space is occupied by others, please be respectful of others by limiting meetings/discussions not necessarily related to work. Please also refrain from posting or sharing non-work related information that could be deemed offensive by others.

Use of Pilot Plant

- The use of FDSC pilot plant facilities must be scheduled through appropriate personnel. An agreement is to be signed to ensure the facility will be left in same or better shape than it was prior to use. Contact the Department Head for scheduling or questions.
- Use of the pilot plant should be coordinated through your Principal Investigator. It is imperative that all students are trained on the appropriate and safe use of equipment.
- If you use anything in the pilot plant, please wash and put away all equipment, containers, utensils, etc. and clean up the counters and table tops.
- Any consumables that are needed for work in the FSPB pilot plant must be supplied by the Principle Investigator or major professor.

Lost Keys

If you lose your keys, contact the Main Office Staff for further assistance.

Returning Keys after Graduation

After you graduate and are no longer an active graduate student, you must return keys for labs, offices, and buildings to the key shop after a request has been submitted by the Main Office Staff.

Computers and Software

Computers and/or printers may be available in graduate student offices for academic and research use. Workstations are also available in most research labs. Only software licensed to UT is permitted for use on departmental computers. Some software packages are available for downloading for academic uses. Please check with OIT for the availability and the policies of using these software packages: https://oit.utk.edu/hardware-software/software-purchases/Pages/default.aspx.

Photocopying

Copiers are located in administrative offices in FSPB and FSB. For personal copies, copiers are available in the Pendergrass Library.

Telephone/Fax/Mailboxes

The telephone numbers for the graduate student offices are: 974-1972 for room 11 FSPB, 974-7136 for room 302 FSB, and 974-7396 for room 311 FSB. Calls are limited to local and toll-free. It is necessary to dial 8 to reach an outside line.

The departmental fax machine with a number of 974-7332 is located in the administrative office in FSB. There is no cost to receive a fax. If you have questions, see staff in the Main Office.

Students are provided with mailboxes organized based on the alphabetic order of the last name. They are located in FSB 202. See staff in the Main Office for questions.

Campus and Outgoing Mail Pickup

If you need to send something by campus mail or US mail, a mailbox is located in room 100 FSPB and room 202 FSB. Outgoing mail is picked up at ca. 9:00 a.m. every day.

Room Reservations

See the Main Office Staff if you want to reserve a room.

Travel Request, Approval, and Reimbursement

For any business-related travel, students must submit a Travel Request Form and receive approval from the Department Head prior to the travel. An account responsible for the travel expenses is to be obtained from the major professor to complete the Travel Request Form. Travel arrangement and reimbursement are now through a new system of Concur. The Main Office Staff are available to answer questions on how to use the system.

Bi-Weekly or Monthly Payroll

New graduate students with any form of assistantship, fellowship, or scholarship must check in with the Main Office Staff after arrival for the paperwork required for enrollment in the payroll system. Assistantships and fellowships and are typically paid monthly or by semester. If you move, you need to update the Main Office Staff with your new address. Also, if your address changes, go to MyUTK and select Update Student Addresses. In the dropdown menu, select the address to be edited and choose submit. If you need further help, contact One Stop.

Ordering Supplies

Your major professor will direct you on how to order supplies related to your research. Students need to see departmental business manager (Ms. Davean Brown) if you will be using the UT Marketplace to be added to the system. Typically, one person per faculty group is assigned to ordering supplies. All invoices will need to be submitted to the FDSC Business Office (indicating what account the charges should be made to).

Procurement card (P-card). Your major professor shall have a Credit Card for business expenses. Because there are many policies of using the P-card, work with your major professor and the FDSC Business Office before purchasing any supplies. In most cases, a research staff member will be assigned to place orders for equipment and supplies on the UT Marketplace or with approved vendors.

Tax exempt. UT is a non-profit employer and is exempt from taxes applicable to non-profit organizations. When placing an order, let the vendor know about the tax-exempt status of UT and double check no tax is billed to you. The P-card issued to your major professor carriers a tax exempt number. Please check before leaving the store, to make sure they left the tax off. If a company needs a Tax Exempt Form, see the FDSC Business Office.

Account numbers. When placing an order, an account number to be charged is needed to help bookkeeping. There are two types of accounts, starting with a letter of "E" or "R" followed by a 6- or 9-digit number. "R" accounts with 9 digits are usually associated with a research project awarded by an external agency, while "E" accounts are associated with internal funding and have 6 digits. Some "E" accounts, e.g., E112015, are shared by multiple faculty and staff. In that case, initials of faculty or staff can be added after numbers to help the FDSC Business Office staff to charge purchases to a correct account. Always consult with your major professor or ask the FDSC Business Office staff if you have questions. Examples of account numbers are listed below for an "R" account and an "E" account.

- E112025QZ is an account chargeable to Dr. Zhong's project (all FDSC research faculty have funding linked to this account E112025).
- R112015-156 is a research account associated with a USDA project directed by Dr. Zhong.

Ordering supplies from Fisher Scientific, VWR, and Sigma-Aldrich

Work with your major professor and the FDSC Business Office to set up an account in Marketplace.

Billing and packaging slips. The FDSC Business Office needs a copy of ALL receipts for Departmental orders. Use the address below for billing. If an invoice happens to go to you by mistake, please make sure to give the original copy to the Business Office.

University of Tennessee Department of Food Science
Attn: Business Office
2510 River Drive, Room 201B FSB
Knoxville, TN 37996-4539

Guidelines for Laboratory Practices and Safety

In line with the policies and regulations of the UTIA Safety Office, the FDSC Department

promotes and implements safe and healthful working environments. To achieve this goal, each individual working or conducting research in a laboratory must follow and adhere to the following guidelines:

1. Read and be familiar with the Chemical Hygiene Plan (CHP) and/or Biohazards Manual (BM) available in each laboratory. Detailed chemical and biohazard safety regulations can be accessed at https://ag.tennessee.edu/safety and https://biosafety.utk.edu, respectively.
2. Receive chemical and/or biohazard training and maintain a certificate(s) in the CHP and BM. Schedules for biosafety training can be found online at https://biosafety.utk.edu/biosafety-program/training/.
3. Follow common guidelines, but not limited to safety in laboratories:
    - Wear lab coat and other necessary personal protective means (e.g., gloves, safety glasses, mask) while working in a laboratory.
    - Always remove lab coat and other personal protective equipment before leaving work area.
    - Do not wear lab coat and other personal protective equipment in restrooms, classrooms, break rooms, elevator, and other public areas.
    - Do not touch surfaces such as telephone, door knobs, and computers when wearing gloves.
    - Do not wear open-toe shoes in the laboratory.
    - Do not put broken glassware or sharps in the trashcan. Broken glassware or sharp must be collected in a puncture-proof container or box.
    - Place liquid wastes in containers labeled properly and placed inside a leak-proof secondary containment. The waste labels must list names, NOT abbreviations, of all chemicals in the containers. Never use food containers to store hazardous wastes.
    - Collect biohazardous wastes in a leak-proof container lined with a moderate thick bag, labeled with the biohazard symbol, and having a lid or other means of closure.
    - Label and date packages upon receiving chemicals and other supplies.
    - For each sample used in your research, label it with your initials, date, and major compounds.
4. Be mindful and respectful:
    - Be sure to wash dishes and clean everything right away, so that they are ready for others to use.
    - Store and place glassware and other supplies in the designated areas, so that others can find them easily.
    - Do not remove anything from a laboratory or designated areas without notifying the person in charge.

ACADEMIC STANING, PROBATION, DISMISSAL, AND APPEALS

Academic Standing, Probation, and Dismissal

The following policies of GS are applied regarding academic standing, probation, and dismissal of FDSC graduate students (http://tiny.utk.edu/grad-policies):

"Good Standing. To achieve good standing, graduate students must maintain a cumulative grade point average (GPA) of at least 3.00 on all graduate courses taken for a letter grade of A-F. Grades of S/NC, P/NP, and I, which have no numerical equivalent, are excluded from this computation.

Academic Probation. Upon completion of 3 or more credit hours of graduate coursework, a graduate student will be placed on academic probation when their cumulative GPA falls below 3.00. A student will be allowed to continue graduate study in subsequent semesters if each semester's grade point average is 3.00 or greater. Upon achieving a cumulative GPA of 3.00, the student will be removed from probationary status and returned to good standing.

Academic Dismissal. If a student is on academic probation, the degree or non-degree status will be terminated by the Dean of the Graduate School if the student's semester GPA falls below 3.00 at the end of the next semester while on probation. When the particular circumstances are deemed to justify continuation, and upon recommendation of the appropriate academic unit and approval of the Dean of the Graduate School, a student on probation whose semester GPA is below 3.00 may be allowed to continue on a semester-by-semester basis.

Dismissal of a graduate student by a department or program is accomplished by written notice to the student, with a copy to the Graduate School. Specific reasons for the dismissal should be provided.

In those cases where the department's requirements for continuation are more stringent than university requirements for graduate programs, the Dean of the Graduate School will evaluate the student's record to determine whether the student is eligible to apply for a change of status and register in another area of study. Registration for courses in a department from which a student has been dismissed will not be permitted, except by written authorization from that department."

Dismissal from the Degree Program

Dismissal from graduate program may result if you are on academic probation and earn less than a 3.00 semester GPA, or less than a C in any course, or NP **in FDSC 500 or 600**, or if you withdraw from a course without pre-approval from your GAC. Even if not on academic probation, other reasons for dismissal include failure to make adequate progress towards other degree requirements (e.g., research project, thesis/dissertation preparation), academic dishonesty (e.g., plagiarism, falsification of data), or other forms of gross misconduct as defined by the Office of Equity and Diversity, Human Resources, Dean of Students' Office, Hilltopics or Graduate Council. Dismissal will be accomplished by written notice to the student with a copy to the GS.

Termination of Financial Support

Termination of financial support can occur, and is done by the following process. If annual performance reviews find any of the following, this MAY result in termination of financial support:

- A grade of NP in FDSC 500 or 600
- Grades of D or F, or a W (*without pre-approval of your GAC*)
- Academic probation or dishonesty

- Failure to complete degree requirements within the time frames specified in this Handbook
- Inadequate performance of assigned duties or research activities
- Excessive absences (10% or more) during expected work hours

The FDSC Graduate Committee has the flexibility to consider any additional factors (including source of financial support) in making a final recommendation. This recommendation is sent to the Department Head and major professor. If in agreement, the Department Head sends a written notice of termination of financial support to the student, with copies to the major professor and DoGS. In most cases 30-day notice is given, such that the student will receive a final monthly paycheck at least 30 days after written notice is sent. However, if performance is very inadequate, termination can be immediate, even within a semester. For example, this can occur if you are essentially absent from all duties, making no research progress or are not available for assistantship duties. It is strongly recommended that you meet frequently with your major professor to keep them informed of your activities.

A major professor may initiate this termination of financial support process without involving the FDSC Graduate Committee by working directly with the Department Head and DoGS. This will typically occur when the student is being funded by the major professor, as opposed to departmentally-funded assistantships.

Resignation from GTA, GRA, or Degree Program

If circumstances lead you to withdraw from any of these commitments, provide a hard copy letter stating your resignation to the Department Head and the DoGS. Note that not registering for any coursework in a Fall or Spring semester leads to automatic termination from the degree program, and will require a readmission decision by the Department, and payment of any associated readmission fees, unless a LOA has been granted as described below.

Note that if you resign (or your financial support is terminated) during the semester, as opposed to between semesters, you will be personally responsible for tuition costs for that semester, even if you have a tuition waiver. Essentially a tuition waiver is given after completion of the semester, not at the beginning.

Appeals Procedures

Appeals procedures are described in the Grievance procedure section on page 12.

PROGRESS EVALUATION

All graduate students will be annually evaluated for academic and research progress. The mandatory evaluation form is the “Graduate Student Progress Report” form that can be found at https://foodscience.tennessee.edu/graduate-program/ as shown in the **Appendix L**. The purpose of this evaluation is to ensure students are making expected progress in their program as well as to identify areas for improvement. It is student’s responsibility to fill out the form (all but “Advisor’s comments, and letter grade), discuss with his/her advisor, and submit to DoGE no later than May 15th. The student should discuss with the advisor on progress and plans for the next year.

It is expected that a student and the major professor have a mutual understanding and agreement on expectations and major milestones (see examples in **Appendix D**) of a graduate

program. If the evaluation indicates an unsatisfactory progress, the major professor shall provide feedback and remedies to help the student back on track at a given timeline, which will then be agreed by the student. Termination of assistantship and/or the graduate program can be the next step if the student does not make satisfactory progress toward the remedy plan.

LEAVE OF ABSENCE

In the event of medical conditions, active military duty, and other emergencies, a student may request for a LOA up to 2 years. A LOA form and the supporting documents must be approved by the DoGS and Department Head before submission to the GS. A LOA must be applied before the last day of classes in the applying semester and is not official until receiving an approval from the Dean of the GS. A LOA may impact the financial status of a student such as graduate assistantship and loans. International students must contact CIE regarding the policy of LOA. Policies and forms of requesting LOA and reinstatement are available on the GS website: https://gradschool.utk.edu/forms-central/graduate-student-leave-of-absence/.

THESIS/DISSERTATION FORMATTING AND SUBMISSION

All theses and dissertations are submitted to the Thesis/Dissertation Consultant in the GS for examination. The Consultant will review the material and assure that it is appropriately presented, free of technical errors in format, and suitable for submission, and reflects credit upon the graduate education at UTK. If a thesis or dissertation is not accepted, the student must make corrections and resubmit the material.

The student, major professor, and the GAC share responsibility for the accuracy and professionalism of the final product of the student's research. The student should confer with the Thesis/Dissertation Consultant regarding problems and questions in advance of preparing the final copy. The Guide to the Preparation of Theses and Dissertations (available on the GS, https://gradschool.utk.edu/thesesdissertations/formatting/) provides the correct format for theses or dissertations. Workshops are held periodically throughout an academic year. The date for each workshop is announced on the GS website. All theses and dissertations must be submitted in electronic format.

Before submitting thesis/dissertation to members of the GAC, the document must be evaluated with plagiarism-detection software, such as iThenticate® (https://gradschool.utk.edu/thesesdissertations/using-ithenticate/) and approved by the major professor.

GRADUATION

Steps leading to graduation with an MS or PhD degree and deadlines for these steps are available on the GS website: https://gradschool.utk.edu/graduation/. A student planning to graduate must submit an application for graduation. The graduation application begins the final checking of degree requirements and is used to order the diploma. If the student does not graduate that term, a new graduation application must be submitted for the appropriate term. The form is submitted to the Office of the University Registrar through MyUTK.

Commencement and doctoral hooding ceremonies are held in fall and spring terms. There is no ceremony in summer term.

Before the major professor and DoGS can approve the final thesis or dissertation, a checklist (**Appendix M**) must be completed and approved by the department Head. Please be noted that research notebooks and digital data are to be submitted to the major professor. Failure to do so is a violation of the policies of UT and funding agencies and therefore possibly state and federal laws.

Appendix A. Important Websites

International students

- Center for Global Engagement: https://international.utk.edu
- International House: https://ihouse.utk.edu
- ITA Testing Program: https://tiny.utk.edu/ita-testing

Professional development & training

- Office of Graduate Training and Mentoring: https://gradschool.utk.edu/training-and-mentorship
- Best Practices in Teaching Program: https://tiny.utk.edu/bpit
- UT Libraries Information for Graduate Students: https://libguides.utk.edu/graduate
- Center for Career Development: https://career.utk.edu
- Tennessee Teaching and Innovation: https://teaching.utk.edu
- Center for Integration of Research, Teaching, and Learning Network: https://teaching.utk.edu/utcirtl/
- Experience Learning: https://experiencelearning.utk.edu/

Funding

- Costs and funding opportunities: https://tiny.utk.edu/grad-funding
  - Graduate Student Senate Travel Awards: https://gss.utk.edu/gss-travel-awards/
- Financial Aid and Scholarships: https://onestop.utk.edu/financial-aid

Student resources

- Academic Calendar: https://registrar.tennessee.edu/academic_calendar/
- Academic Policies and Requirements for Graduate Students: https://tiny.utk.edu/grad-policies
- AgResearch: https://agresearch.tennessee.edu/
- Biohazard Safety and Training: https://biosafety.utk.edu
- Bursar's Office: https://bursar.utk.edu/
- Campus bus: https://ridethet.utk.edu/route-information/.
- Canvas: https://oit.utk.edu/instructional/tools/online/canvas/default.html
- Chemical Safety and Training: https://ag.tennessee.edu/safety
- Counseling Center: https://counselingcenter.utk.edu
- Current UT Travel Policies: https://finance.tennessee.edu/travel/
- Department of Food Science: https://foodscience.tennessee.edu
- FDSC Graduate Handbook: https://foodscience.tennessee.edu/graduate-program/
- FDSC Graduate Student Evaluation Form: https://foodscience.tennessee.edu/graduate-program/.
- Graduate Catalog: https://tiny.utk.edu/grad-catalog
- **Graduate School Forms**: https://gradschool.utk.edu/forms-central/
- Graduate School: https://gradschool.utk.edu
- Graduate Student Appeals Procedure: https://tiny.utk.edu/rights-obligations
- Graduate Student Senate: https://gss.utk.edu
- **Graduation Deadlines**: https://tiny.utk.edu/grad-deadlines
- Health Insurance: https://studenthealth.utk.edu/health-insurance-records-requests/student-health-insurance/
- Herbert College of Agriculture: https://herbert.utk.edu
- *Hilltopics*: https://hilltopics.utk.edu/
- Hodges Library: https://www.lib.utk.edu/
- Holidays and Closings: https://hr.tennessee.edu/benefits/holiday-schedule/
- Office of Equity and Diversity: https://oed.utk.edu
- Office of Graduate Admissions: https://gradschool.utk.edu/admissions

- Office of Information Technology: https://oit.utk.edu
- Office of Multicultural Student Life: https://multicultural.utk.edu
- Office of Research Integrity: https://research.utk.edu/compliance
- Parking Services: https://parking.utk.edu/
- Pendergrass Agricultural and Veterinary Medicine Library: https://www.lib.utk.edu/agvet/
- Registration: https://registrar.tennessee.edu/
- Research Compliance/Research with Human Subjects: http://research.utk.edu/compliance/
- Sexual Misconduct, Relationship Violence, and Stalking: https://sexualassault.utk.edu
- Sports and Recreation: https://recsports.utk.edu/
- Student Conduct and Community Standards: https://studentconduct.utk.edu
- Student Health: https://studenthealth.utk.edu/
- Student Organizations: https://utk.collegiatelink.net/organizations.
- Thesis/Dissertation Consultant: https://gradschool.utk.edu/thesesdissertations
- Tuitions and University Fees: https://onestop.utk.edu/tuition-fees/
- University Housing: https://housing.utk.edu/
- UT Athletics: https://www.utsports.com/
- UT Police Department: https://utpolice.utk.edu/
- Vol Dining: https://dining.utk.edu/
- Vol tickets: https://bigorangetix.utk.edu/
- VolCard: https://volcard.utk.edu/
- VolShop: https://shop.utk.edu/

Appendix B. Members of the FDSC Graduate Committee

Name	Title	Contact information
Dr. Tong (Toni) Wang (Committee chair)	Professor Director of Graduate Studies	207 Food Science Building Phone: (865) 974-7279 E-mail: twang46@utk.edu
Dr. Doris D'Souza	Professor	106 Food Safety and Processing Building Phone: (865) 974-2753 E-mail: ddsouza@utk.edu
Dr. Scott Lenaghan	Associate Professor	102 Food Safety and Processing Building Phone: (865) 974-0098 E-mail: slenagha@utk.edu
Dr. John Munafo	Associate Professor	206 Food Science Building Phone: (865) 294-7247 E-mail: jmunafo@utk.edu
Dr. Qixin Zhong	Professor	211 Food Science Building Phone: (865) 974-6196 E-mail: qzhong@utk.edu
Ms. Maddy Fomich	PhD student	306 Food Science Building Phone: (865) 974 7331 E-mail: mfomich@vols.utk.edu

Appendix C. FDSC Faculty Eligible to Direct Theses and Dissertations*

Name	Specialty	Research Interests
Dr. Jiajia Chen	Food Engineering	Multiphysics and multiscale modeling of food processing; microwave heating and radio frequency heating technology
Dr. Thomas Denes	Molecular Food Microbiology	Bacteriophage-pathogen interaction mechanisms; Effects of environmental stress on foodborne pathogens; Bacteriophage control of AMR pathogens
Dr. Doris D'Souza	Molecular Biology	Rapid, molecular detection, surveillance and tracking of foodborne bacteria and viruses; Ecology of emerging variant strains and related antimicrobial resistance; Novel processing approaches to enhance food safety; Strategies to control foodborne bacteria and viruses to combat antimicrobial resistance
Dr. Vermont Dia	Food Chemistry Food Bioactives	Anti-inflammatory and anti-cancer properties of bioactive peptides and phenolic compounds; Mechanism of cancer chemoresistance; Extraction and purification of bioactive compounds in plants
Dr. Scott Lenaghan	Molecular Biology for Food Safety and Health Parasitology	Synthetic biology; Cell and Molecular Parasitology; Advanced Crop Development; High-throughput Assay Development
Dr. Mark Morgan	Process Food Engineering	Hygienic design of equipment; Nonthermal processing methods; Chlorine dioxide gas for sanitation and pathogen interventions
Dr. John Munafo	Food Chemistry	Flavor chemistry, bioactive compounds
Dr. Alessandro Occhialini*	Plant biotechnology for crops improvement and food safety	Synthetic biology; plant biotechnology; crops improvement for food safety, biopharmaceutical and industrial applications
Dr. Tong Wang	Food Chemistry and Lipid Technology	Lipid chemistry for improving nutritional quality and for coating of food and non-food surfaces; Extraction and fractionation of neutral and polar lipids from oleaginous biomass; Compositional, functional, and oxidative quality of seafood, egg, and dairy products.
Dr. Tao Wu	Food Carbohydrate Chemistry	Carbohydrate-related interactions and resulting nanoscale phenomena in food processing that are relevant to food quality; Physical functionalities of carbohydrates; Interactions between carbohydrates and food/cell components in food digestion and biological processes of food safety importance; Fabrication of glyco-nanomaterials for food and non-food applications

Dr. Qixin Zhong	Physical Properties Food Ingredient Science and Technology	Antimicrobial delivery systems as intervention strategies; Bioactive delivery systems as functional foods ingredients; Novel colloidal systems; Nanoparticles and nanomaterials; Structure and function of food biopolymers and food products

*Can co-chair dissertation committees.

Appendix D. Suggested Milestones for Planning Graduate Study

Milestones at the beginning and end of a graduate study are relatively defined. You are advised to carefully plan your study so that you can graduate at a targeted term.

Milestone	Responsible person	Suggested timeline	Date completed
Formation of graduate advisory committee (GAC)	Student and advisor		
Course and study plan	Student and advisor	2nd semester	
1st GAC meeting	Student	2nd semester	
2nd GAC meeting#	Student	4th semester	
3rd GAC meeting*,#	Student	6th semester	
Progress review	Student and advisor	Each December	
MS thesis proposal	Student	No later than 3rd semester	
Teaching requirement	Student	3rd semester	
Application to MS candidacy	Student	3rd semester	
PhD dissertation proposal	Student	No later than 5th semester	
Comprehensive exam*	Student and advisor	No later than 4th semester	
Application to PhD candidacy	Student	4th semester	
Submit MS Graduation Application to Graduate School	Student	3rd semester	
Submit PhD Graduation Application to Graduate School	Student	5th semester	
Schedule thesis defense with GAC	Student	4th semester, check deadlines	
Schedule dissertation defense with GAC and graduate school*	Student	6th semester, check deadlines	
Submit thesis/dissertation to GAC	Student	Two weeks before defense	
Reserve room for defense	Student	Right after defense schedule is confirmed	
Announce the defense to public	Student	At least one week before defense	
Final thesis/dissertation defense	Student	Check deadlines	
Notify graduate school the outcome of defense	Student and advisor	After defense	
Submit final thesis/dissertation	Student	After revisions and GAC approval	
Submit all research notebooks, data, and electronic files to advisor	Student	Post thesis/dissertation submission; failure to do so violates university policies and possibly state and federal laws.	
Complete checkout list and exit interview with Department Head	Student		
Attend graduation ceremony	Student		

*For doctoral students only; #Also serving as the final thesis/dissertation defense.

Appendix E. Food Science Courses Approved for Graduate Credit in the Graduate Catalog

FDSC 410 - Food Chemistry (3 Credit Hours). Reactions of water, proteins, lipids, carbohydrates, minerals, enzymes, vitamins, and additives in foods. *(RE) Prerequisite(s): Chemistry 110 or 350.*

FDSC 421 - Food Microbiology (3 Credit Hours). Physical, chemical, and environmental factors moderating growth and survival of foodborne microorganisms. Pathogenic and spoilage microorganisms affecting quality of foods and their control. *(RE) Prerequisite(s): Microbiology 210 or Biology 220 and 229.*

FDSC 429 - Food Microbiology Lab (2 Credit Hours). Methods for examination, enumeration, cultivation, and identification of foodborne microorganisms. *(RE) Corequisite(s): 421.*

FDSC 442 - Special Topics In Food Science (1-3 Credit Hours). Topics of current concern to the food industry. Repeatability: May be repeated. Maximum 9 hours.

FDSC 430 - Sensory Evaluation of Food (3 Credit Hours). Principles and procedures of sensory evaluation of food, methods of test analyses, physiological, psychological, and environmental factors affecting sensory perception. *Contact Hour Distribution: 2 hours and 1 lab. Recommended Background: A statistics course.*

FDSC 490 - Food Product Development (3 Credit Hours). Food Science capstone course. Application of principles of food chemistry, food processing and engineering, food microbiology, food laws and regulations, sensory evaluation, and statistics in the development of a food product concept. *Contact Hour Distribution: 2 hours and one 3-hour lab. (RE) Prerequisite(s):241, 390, 410 or 418, and 421 or 428. (RE) Corequisite(s):430. Registration Restriction(s): Only open to food science majors with science or technology concentrations. Minimum student level – senior.*

FDSC 495 - Quality Assurance and Sanitation Practices (3 Credit Hours). Design and evaluation of an industrial food processing operation to produce safe and high quality food products. Introduction to Good Manufacturing Practices (GMP) and Hazard Analysis and Critical Control Point (HACCP) Programs. *(RE) Prerequisite(s):410 or 418; and 421 or 428. Registration Restriction(s): Minimum student level — senior.*

FDSC 500 – Thesis (1-15 Credit Hours).*Grading Restriction: P/NP only. Repeatability: May be repeated. Credit Level Restriction: Graduate credit only. Registration Restriction(s): Minimum student level – graduate.*

FDSC 502 - Registration for Use of Facilities (1-15 Credit Hours). Required for the student not otherwise registered during any semester when student uses university facilities and/or faculty time before degree is completed. *Grading Restriction: Satisfactory/No Credit grading only. Repeatability: May be repeated. Credit Restriction: May not be used toward degree requirements. Credit Level Restriction: Graduate credit only. Registration Restriction(s): Minimum student level – graduate.*

FDSC 503 - Problems in Lieu of Thesis (2-3 Credit Hours). *Grading Restriction: Satisfactory/No Credit grading only. Repeatability: May be repeated. Maximum 12 hours. Credit Level Restriction: Graduate credit only. Registration Restriction(s): Minimum student level – graduate.*

FDSC 504 - Research Planning (1-3 Credit Hours). Preliminary research and investigation of thesis research topic. *Grading Restriction: Satisfactory/No credit grading only. Repeatability: May be repeated. Maximum 12 hours. Credit Restriction: May not be used toward degree requirements.*

FDSC 511 – Integrated Food Science (3 Credit Hours). Critical review of the key principles of food science and applications in the chemistry, microbiology, and processing of food. Understanding the impact of processing on the quality of foods with respect to composition, quality and safety. *Recommended Background: undergraduate food chemistry, food microbiology and food processing courses. Registration Restriction(s): Minimum student level – graduate.*

FDSC 514 - Food Colloids (3 Credit Hours). Presents fundamental colloidal theories in the context of food systems. Topics include interactions between colloidal particles, stability of colloidal dispersions, and interfacial phenomena. *Recommended Background: food chemistry, physical chemistry, college-level physics. Registration Restriction(s): Minimum student level – graduate.*

FDSC 516 - Food Analysis (4 Credit Hours). Principles, methods and techniques for qualitative and quantitative analyses of composition and physical, chemical, and biological properties of food and food ingredients. *Contact Hour Distribution: 3 hours and one 2-hour lab. Credit Restriction: Students cannot receive credit for both 415 and 516.*

FDSC 521 - Advanced Food Microbiology (3 Credit Hours). Extrinsic and intrinsic factors associated with foods and food processing that relate to growth, survival, inhibition, detection, and recovery of foodborne pathogens and spoilage organisms; traditional and current approaches to microbiological food safety and quality. *(RE) Prerequisite(s):421 and 429.*

FDSC 525 - Molecular Parasitology (3 Credit Hours). The basics of parasitology, life cycle analysis, prevalence, and control strategies of the major classes of parasites affecting global public health will be presented. In particular, the molecular mechanisms employed by parasites that lead to human disease will be the focus. *Registration Restriction(s): Minimal student level - graduate.*

FDSC 541 - Food Engineering (3 Credit Hours). Transport processes in food engineering; unit operations; thermal and non-thermal processing of foods; food separations; processing and physicochemical properties of foods; calculations, design practices, and equipment used in food processing operations. *Contact Hour Distribution: 2 hours and one 2-hour lab. Credit Restriction: Students cannot receive credit for both 341 and 541. Recommended Background: Basic calculus and physics.*

FDSC 590 - Special Topics in Food Science and Technology (1-3 Credit Hours). Current topics can include critical review of current research and technology, and graduate resources and professionalism training. *Repeatability: May be repeated. Maximum 9 hours.*

FDSC 592 - Internship in Food Science and Technology (1-3 Credit Hours). Practical experience in a selected setting under the supervision of a local professional and departmental representative. *Grading Restriction: Satisfactory/No Credit grading only. Repeatability: May be repeated. Maximum 3 hours. Registration Restriction(s): Minimum student level – graduate. Registration Permission: Consent of Instructor. Must be within the Department of Food Science and Technology.*

FDSC 593 - Directed Studies (1-3 Credit Hours). Research on non-thesis topics chosen by student and major professor. Supervised experience in food industry or governmental laboratories. *Repeatability: May be repeated. Maximum 6 hours. Registration Restriction(s): Minimum student level – graduate.*

FDSC 600 - Doctoral Research and Dissertation (3-15 Credit Hours). *Grading Restriction: P/NP only. Repeatability: May be repeated. Registration Restriction(s): Minimum student level – graduate.*

FDSC 601 – Seminar (1 Credit Hours). Reports and directed discussion on research topics from current literature. *Repeatability: May be repeated. Maximum 3 hours. Registration Restriction(s): Minimum student level – graduate.*

FDSC 603 - Research Planning (1-6 Credit Hours). Preliminary research and investigation of dissertation research topic, and preparation of a research proposal. *Grading Restriction: Satisfactory/No credit grading only. Repeatability: May be repeated. Maximum 18 hours. Credit Restriction: May not be used toward degree requirements. Registration Restriction(s): Minimum student level – graduate.*

FDSC 618 - Structure and Functionality of Polysaccharides (3 Credit Hours). Occurrence of polysaccharides and their role in nature, conformation and behavior in solutions, gelling mechanisms, and applications. *Recommended Background: Organic chemistry and food chemistry. Registration Restriction(s): Minimum student level – graduate.*

Appendix F. External Graduate Credit Courses Relevant to Food Science

(check current catalog for possible changes in other academic units)

ALEC 520 Leadership Development in Organizations and Community Nonprofit (3 credit hours)

ALEC 525 Curriculum Development in Agricultural Leadership, Education, and Communications (3 credit hours)

ALEC 529 Research Proposal Development (3 credit hours)

ALEC 551 Servant Leadership in Agriculture and Natural Resources (3 credit hours)

ANSC 519 Techniques in Molecular Biology (3 credit hours)

ANSC 525 Research Ethics for Life Science (1 credit hour)

ANSC 531 Comparative Nutritional Biochemistry and Metabolism (4 credit hours)

ANSC 571 Design and Analysis of Biological Research (3 credit hours)

ANSC 621 Journal Club - Advanced Topics in Animal Health; OneHealth and AMR (1 credit hour)

AREC 443 Food Industry Management and Marketing (3 credit hours)

BCMB 401 Biochemistry I (4 credit hours)

BCMB 402 Biochemistry II (4 credit hours)

BCMB 412 Molecular Biology and Genomics (4 credit hours)

BCMB 471 Biophysical Chemistry (3 credit hours)

BCMB 481 Biophysical Chemistry (3 credit hours)

BCMB 517 Physical Biochemistry (3 credit hours)

BCMB 522 Advanced Plant Physiology I (3 credit hours)

BCMB 523 Plant Growth and Development (3 credit hours)

BSE 543 Instrumentation and Measurement (3 credit hours)

BSE 576 Applied Microbiology and Bioengineering (3 credit hours)

CEM 507 Epidemiology of Vector-Borne, Bacterial, and Viral Zoonotic Diseases (3 credit hours)

CEM 508 Epidemiology of Parasitic, Foodborne, and Bacterial Zoonotic Diseases (3 credit hours)

CEM 541 Cellular and Molecular Basis of Disease (3 credit hours)

CEM 544 Cancer Cell Biology (3 credit hours)

CEM 611 Journal Club - Emerging Infectious Disease (1 credit hour)

CHEM 510 Analytical Spectrometry (3 credit hours)

CHEM 513 Mass Spectrometry and Surface Characterization (3 credit hours)

CHEM 553 Spectroscopic Characterization of Organic Compounds (3 credit hours)

CHEM 590 Polymer Chemistry (3 credit hours)

CHEM 594 Organic Chemistry of Polymers (3 credit hours)

CHEM 595 Physical Chemistry of Polymers (3 credit hours)

CHEM 596 Advanced Techniques in Polymer Synthesis and Characterization (3 credit hours)

EEB 414 Plant Anatomy (3 credit hours)

EEB 433 Plant Ecology (3 credit hours)

EEB 560 Biometry (3 credit hours)

EPP 505 Mycology (3 credit hours)

EPP 514 Phytobacteriology (3 credit hours)

EPP 515 Physiology of Plant Disease (3 credit hours)

EPP 521 Plant Virology (3 credit hours)

EPP 530 Integrated Pest Management (3 credit hours)

EPP 622 Bioinformatics Applications (3 credit hours)

EPP 630 Advanced Integrated Pest & Pathogen Management (3 credit hours)

EPP 675 Scientific Writing and Grantsmanship (3 credit hours)

MICR 440 Virology (3 credit hours)

MICR 470 Microbial Ecology (3 credit hours)

MICR 520 Microbial Pathogenesis (3 credit hours)

MICR 540 Genomics and Bioinformatics (3 credit hours)

MICR 594 Grant Writing (3 credit hours)

MICR 602 Journal Club - Microbial Pathogenesis (1 credit hour)

MICR 679 Advanced Techniques in Nucleic Acid Sequencing (1-3 credit hours)

NUTR 511 Advances in Carbohydrate, Lipid, and Protein Metabolism (4 credit hours)

PLSC 434 Fruit and Vegetable Crops (3 credit hours)

PLSC 532 Environmental Plant Ecophysiology (3 credit hours)

PUBH 530 Biostatistics (3 credit hours)

PUBH 540 Principles of Epidemiology (3 credit hours)

PUBH 541 Student Outbreak Rapid Response Training (SORRT) (1 credit hour)

STAT 531 Survey of Statistical Methods I (3 credit hours)

STAT 532 Survey of Statistical Methods II (3 credit hours)

STAT 537 Statistics for Research I (3 credit hours)

STAT 538 Statistics for Research II (3 credit hours)

***VMD* 813** - Infection and Immunity I - *Immunology* (2 credit hours)

VMD 815 - Infection and Immunity III - *Virology* (2 credit hours)

Appendix G. Self-check List of Courses for a MS Degree in Food Science.

Requirements: a minimum of 30 credit hrs.

- At least 24 hrs of graduate coursework: at least 14 hrs from 500-level and above courses, including 2 hrs of **FDSC 601 Seminar** and 1 hr of **ANSC/PLSC 525 Research Ethics** and at least 3 hrs of graduate level statistics courses
- These two courses cannot be used toward the MS degree:
    - **FDSC 502 Registration for Use of Facilities**
    - **FDSC 504 Research Planning**
- 6 hrs of **FDSC 500 Thesis Research**: 3 hours must be taken in the last semester.
- At least 6 hrs from the list of FDSC 511, FDSC 514, FDSC 521, FDSC 525, FDSC 541, FDSC 590, and FDSC 618.
- At least 3 credit hrs of graduate level statistics course.

Worksheet to self-check courses meeting the MS degree requirements*

Course Number and Title	Credit Hrs	Semester(s) Taken	Grade
400-level courses approved for graduate credit			
Courses numbered with 500 and above (minimum of 14 hrs excluding FDSC 502 and 504)			
FDSC 601 Seminar	2		
ANSC/PLSC 525 Research Ethics	1		
Thesis research (minimum of 6 hours; must have at least 3 hrs in the last semester)			
FDSC 500 Thesis Research			
Total credit hours for the degree			
Courses not to be used toward MS degree			

*Use separate rows for repeated courses.

Appendix H. Assessment of Thesis/Dissertation Proposal

Assessment of Food Science Graduate Student Learning Outcomes: **Thesis/Dissertation Proposal**

Student's name: _____ Degree sought (circle one): MS or PhD Date of Defense: _____

Evaluator: _____ Role (circle one): Advisor or Committee member

	1 - Poor	2 - Fair	3 –Good	4 - Outstanding	Score
LO1. Students able to critically evaluate scientific literature and information relevant to food science.					
Uses scientific literature to justify the research project	Relevant scientific literature is used inadequately, presented without analysis, and/or incorrectly interpreted.	Relevant scientific literature is presented with minimal analysis, and/or discussed omitting key details.	References analyzed and discussed appropriately; however, the analysis lacks depth and/or mostly shows support for the path of the research.	References are discussed appropriately to clearly show support for the path of the research.	
Comments:					
LO2. Students able to design research projects to test hypotheses.					
Experimental Design	Hypothesis is not necessarily stated or understood. The methods are incorrectly described and/or do not test the hypothesis.	Hypothesis is vague or not a focus of thesis/dissertation. The series of methods are correct, but do not fully test the hypothesis. The analysis of the data is not always correct which might lead to erroneous conclusions.	Hypothesis is clear, but not entirely testable. The series of methods fully and correctly test the hypothesis, but more efficient methods are available. The analysis may not be sophisticated or artificially limit the outcome.	Hypothesis is stated clearly and clearly testable. The series of methods fully and correctly test the hypothesis and minimize the amount of testing required.	
Comments:					
LO3. Students able to effectively communicate proposed research to professional audiences. [(a)]					
Content	Description of background and methods is minimal and has numerous errors; Suggested methods are minimal or irrelevant and do not address the proposed goals.	Description of background and methods is inadequate and has some errors; Suggested methods are inadequate and do not fully address the proposed goals.	Description of background and methods is sufficient and has few errors; Suggested methods are adequate and mostly address the proposed goals.	Description of background and methods is superior and engaging; Suggested methods are appropriate and clearly address the proposed goals.	
Written communication	The tone is unprofessional and not appropriate for an academic paper. Errors in sentence structure are	The writing is not engaging, and the tone is not consistently professional or appropriate for an academic paper. Some	The writing is generally engaging and the tone is generally professional. Sentences are well-phrased and flow from sentence	The writing is compelling. The tone is consistently professional and appropriate for an academic research	

	frequent enough to be a major distraction to the reader. Many words are used inappropriately, confusing the reader.	sentences are awkwardly constructed so that the reader is occasionally distracted. Some words are used inappropriately, and the range of words is limited. Some words are used inappropriately.	to sentence is generally smooth. Word choice is generally good.	paper. Sentences flow smoothly from one to another. Word choice is consistently precise and accurate.	
Oral communication	Does not speak clearly or with enthusiasm. Difficult for the audience to understand. Does not have eye contact with the audience.	Sometimes has eye contact with the audience. Sometimes speaks clearly and with enthusiasm. Easy for the audience to understand portions of the presentation.	Most of the time has eye contact with the audience. Most of the time speaks clearly and with enthusiasm. Easy for the audience to understand.	Appears comfortable & confident; maintains good eye contact. Uses his/her voice to create interest & emphasize key points. Speaks very clearly. Very easy for the audience to understand.	
Style	Contains numerous grammatical errors, lacks a logical progression, and is absent of interpretable visual aids.	Minimal grammatical errors are present. Follows a logical progression. Visual aids enhance the audience experience, but they lack creativity and/or interpretability.	Almost no grammatical errors are present. Visual aids are creative and easy to read; tools enhance the audience experience.	No grammatical errors are present. Visual aids are creative, easy to read, and enhance the audience experience.	
Answers to questions	Demonstrates insufficient knowledge of the topic by answering questions without explanations and elaboration.	Demonstrates partial knowledge of the topic by answering most questions with partial elaboration.	Demonstrates knowledge of the topic by answering most questions satisfactorily and with adequate explanations and elaboration.	Demonstrates full knowledge of the topic by answering all questions satisfactorily with detailed explanations and logical elaboration.	
Comments:					

(a). The weighed score of this LO is composed of 40% Content, 20% Written communication, 20% Oral communication, 10% Style, and 10% Answers to questions.

Please submit the completed forms to the FDSC Director of Graduate Studies, Dr. Tong Wang, within 3 days of the defense, regardless of the outcome of defense.

Appendix I. Assessment of Final Thesis/Dissertation

Assessment of Food Science Graduate Student Learning Outcomes: **Final Thesis or Dissertation Defense**

Student's name: _____ Degree sought (circle one): MS or PhD Date of Defense: _____

Evaluator: _____ Role (circle one): Advisor or Committee member

	1 - Poor	2 - Fair	3 –Good	4 – Outstanding	Score
LO1. Students able to critically evaluate scientific literature and information relevant to food science.					
Uses scientific literature to justify the research project	Relevant scientific literature is used inadequately, presented without analysis, and/or incorrectly interpreted.	Relevant scientific literature is presented with minimal analysis, and/or discussed omitting key details.	References analyzed and discussed appropriately; however the analysis lacks depth and/or mostly shows support for the path of the research.	References are discussed appropriately to clearly show support for the path of the research.	
Comments:					
LO2. Students able to design and conduct research projects. [a]					
Experimental Design	Hypothesis is not necessarily stated or understood. The methods are incorrectly described and/or do not test the hypothesis.	Hypothesis is vague or not a focus of thesis/dissertation. The series of methods are correct, but do not fully test the hypothesis. The analysis of the data is not always correct which might lead to erroneous conclusions.	Hypothesis is clear, but not entirely testable. The series of methods fully and correctly test the hypothesis, but more efficient methods are available. The analysis may not be sophisticated or artificially limit the outcome.	Hypothesis is stated clearly and clearly testable. The series of methods fully and correctly test the hypothesis and minimize the amount of testing required.	
Conducting research	Methods were not used correctly, not well understood, and/or undertaken in a timely manner.	A portion of the methods were performed correctly, and in a reasonable time-frame.	Methods were correctly performed, however lacked deep understanding and/or efficiency.	Clear mastery and understanding of the methods used. Research methods were used correctly and efficiently	
Comments:					
LO3. Students able to effectively communicate research findings to professional audiences. [b]					
Content	Little discussion of project findings; Displayed poor grasp of material; Conclusions not supported by findings/outcomes.	Major topics or concepts inaccurately described; Considerable relevant discussion missing; Conclusions/summary not entirely supported by findings/outcomes.	Discussion is sufficient and has few errors; Conclusions/summaries are based on findings/outcomes and appropriate; Some recommendations are included.	Discussion is superior, accurate, and engaging; Conclusions/summaries and recommendations are appropriate and clearly based on finding/outcomes.	

Written communication	The tone is unprofessional and not appropriate for an academic paper. Errors in sentence structure are frequent enough to be a major distraction to the reader. Many words are used inappropriately, confusing the reader.	The writing is not engaging, and the tone is not consistently professional or appropriate for an academic paper. Some sentences are awkwardly constructed so that the reader is occasionally distracted. Word choice is merely adequate, and the range of words is limited. Some words are used inappropriately.	The writing is generally engaging and the tone is generally professional. Sentences are well-phrased and flow from sentence to sentence is generally smooth. Word choice is generally good.	The writing is compelling. The tone is consistently professional and appropriate for an academic research paper. Sentences flow smoothly from one to another. Word choice is consistently precise and accurate.	
Oral communication	Does not speak clearly or with enthusiasm. Difficult for the audience to understand. Does not have eye contact with the audience.	Sometimes has eye contact with the audience. Sometimes speaks clearly and with enthusiasm. Easy for the audience to understand portions of the presentation.	Most of the time has eye contact with the audience. Most of the time speaks clearly and with enthusiasm. Easy for the audience to understand.	Appears comfortable & confident; maintains good eye contact. Uses his/her voice to create interest & emphasize key points. Speaks very clearly. Very easy for the audience to understand.	
Style	Contains numerous grammatical errors, lacks a logical progression, and is absent of interpretable visual aids.	Minimal grammatical errors are present. Follows a logical progression. Visual aids enhance the audience experience, but they lack creativity and/or interpretability.	Almost no grammatical errors are present. Visual aids are creative and easy to read; tools enhance the audience experience.	No grammatical errors are present. Visual aids are creative, easy to read, and enhance the audience experience.	
Answers to questions	Demonstrates insufficient knowledge of the topic by answering questions without explanations and elaboration.	Demonstrates partial knowledge of the topic by answering most questions with partial elaboration.	Demonstrates knowledge of the topic by answering most questions satisfactorily and with adequate explanations and elaboration.	Demonstrates full knowledge of the topic by answering all questions satisfactorily with detailed explanations and logical elaboration.	
Comments:					

(a). The weighed score of this LO is composed of 40% Experimental Design and 60% Conducting Research.
(b). The weighed score of this LO is composed of 40% Content, 20% Written communication, 20% Oral communication, 10% Style, and 10% Answers to questions.

Please submit the completed forms to the FDSC Director of Graduate Studies, Dr. Tong Wang, within 3 days of the defense, regardless of the outcome of defense.

Appendix J. Self-check List of Courses for a PhD Degree in Food Science

Requirements: a minimum of 48 hrs beyond MS or 72 hrs beyond BS.

- At least 24 hrs beyond MS or 35 hr beyond BS must be taken for 500-level and above courses, including 2 hrs of **FDSC 601 Seminar** and 1 hr of **ANSC/PLSC 525 Research Ethics**.
    - At least 12 of the 24 hrs beyond MS or 30 of the 48 hrs beyond BS must be taken from courses with A-F grades.
    - These FDSC courses cannot be used for the PhD degree: 500, 502, 503, 504, and 603.
    - At least 6 hrs of courses numbered above 600, including 2 hr of FDSC 601.
    - At least 6 hrs of courses outside FDSC, including 1 hr of ANSC/PLSC 525.
    - At least 6 hrs from the list of FDSC 511, FDSC 514, FDSC 521, FDSC 525, FDSC 541, FDSC 590, and FDSC 618
    - At least 6 hrs of graduate level statistics courses.
- At least 24 hrs of **FDSC 600 Doctoral Research/Dissertation**:
    - Research hours for MS degree do not count.
    - At least 3 hrs must be taken in the last semester.
    - Once registered, must be registered continuously in later semesters until graduation.

Worksheet to self-check courses meeting the PhD degree requirements*

Course Number and Title	Credit Hrs	Semester(s) Taken	Grade
400-level courses approved for graduate credit			
500-level courses (excluding 500, 502, 503, and 504)			
ANSC/PLSC 525 Research Ethics	1		

600-level courses (minimum of 6 hr, excluding 603)			
FDSC 601 Seminar	2		
Dissertation research (minimum of 24 hours; must have at least 3 hours in the last semester)			
FDSC 600 Doctoral Research/Dissertation			
Graduate courses to be transferred from another credited institution (up to 24 hrs, must have a grade of B and above, must be approved by the advisory committee and the Graduate School)			
Total credit hours for the degree			
Courses not to be used toward PhD degree			

*Use separate rows for repeated courses.

Appendix K. Assessment of Comprehensive Exam Proposal

Assessment of Food Science Graduate Student Learning Outcomes: **Comprehensive Exam**

Student's name: _____ Degree sought: PhD Date of Defense: _____

Evaluator: _____ Role (circle one): Advisor or Committee member

	1 - Poor	2 - Fair	3 –Good	4 - Outstanding	Score
LO1. Students able to critically evaluate scientific literature and information relevant to food science.					
Uses scientific literature to justify the research project	Relevant scientific literature is used inadequately, presented without analysis, and/or incorrectly interpreted.	Relevant scientific literature is presented with minimal analysis, and/or discussed omitting key details.	References analyzed and discussed appropriately; however, the analysis lacks depth and/or mostly shows support for the path of the research.	References are discussed appropriately to clearly show support for the path of the research.	
Comments:					
LO2. Students able to design research projects to test hypotheses.					
Experimental Design	Hypothesis is not necessarily stated or understood. The methods are incorrectly described and/or do not test the hypothesis.	Hypothesis is vague or not a focus of the proposal. The series of methods are correct, but do not fully test the hypothesis. The analysis of the data is not always correct which might lead to erroneous conclusions.	Hypothesis is clear, but not entirely testable. The series of methods fully and correctly test the hypothesis, but more efficient methods are available. The analysis may not be sophisticated or artificially limit the outcome.	Hypothesis is stated clearly and clearly testable. The series of methods fully and correctly test the hypothesis and minimize the amount of testing required.	
Comments:					
LO3. Students able to effectively communicate proposed research to professional audiences. [a]					
Content	Description of background and methods is minimal and has numerous errors; Suggested methods are minimal or irrelevant and do not address the proposed goals.	Description of background and methods is inadequate and has some errors; Suggested methods are inadequate and do not fully address the proposed goals.	Description of background and methods is sufficient and has few errors; Suggested methods are adequate and mostly address the proposed goals.	Description of background and methods is superior and engaging; Suggested methods are appropriate and clearly address the proposed goals.	

Written communication	The tone is unprofessional and not appropriate for an academic paper. Errors in sentence structure are frequent enough to be a major distraction to the reader. Many words are used inappropriately, confusing the reader.	The writing is not engaging, and the tone is not consistently professional or appropriate for an academic paper. Some sentences are awkwardly constructed so that the reader is occasionally distracted. Some words are used inappropriately, and the range of words is limited. Some words are used inappropriately.	The writing is generally engaging and the tone is generally professional. Sentences are well-phrased and flow from sentence to sentence is generally smooth. Word choice is generally good.	The writing is compelling. The tone is consistently professional and appropriate for an academic research paper. Sentences flow smoothly from one to another. Word choice is consistently precise and accurate.	
Oral communication	Does not speak clearly or with enthusiasm. Difficult for the audience to understand. Does not have eye contact with the audience.	Sometimes has eye contact with the audience. Sometimes speaks clearly and with enthusiasm. Easy for the audience to understand portions of the presentation.	Most of the time has eye contact with the audience. Most of the time speaks clearly and with enthusiasm. Easy for the audience to understand.	Appears comfortable & confident; maintains good eye contact. Uses his/her voice to create interest & emphasize key points. Speaks very clearly. Very easy for the audience to understand.	
Style	Contains numerous grammatical errors, lacks a logical progression, and is absent of interpretable visual aids.	Minimal grammatical errors are present. Follows a logical progression. Visual aids enhance the audience experience, but they lack creativity and/or interpretability.	Almost no grammatical errors are present. Visual aids are creative and easy to read; tools enhance the audience experience.	No grammatical errors are present. Visual aids are creative, easy to read, and enhance the audience experience.	
Answers to questions	Demonstrates insufficient knowledge of the topic by answering questions without explanations and elaboration.	Demonstrates partial knowledge of the topic by answering most questions with partial elaboration.	Demonstrates knowledge of the topic by answering most questions satisfactorily and with adequate explanations and elaboration.	Demonstrates full knowledge of the topic by answering all questions satisfactorily with detailed explanations and logical elaboration.	
Comments:					

(a). The weighed score of this LO is composed of 40% Content, 20% Written communication, 20% Oral communication, 10% Style, and 10% Answers to questions.

Please submit the completed forms to the FDSC Director of Graduate Studies, Dr. Tong Wang, within 3 days of the defense, regardless of the outcome of defense.

Appendix L. Food Science Graduate Student Annual Progress Report Form

Graduate Student Annual Progress Report

*Completed Progress Report **is due to the DOGS May 30.***

Student: .....Advisor: .....Evaluation period: .....

Degree sought: ☐ MS ☐ PhD Program started: .....Expected graduation term: .....

Date of: Committee established and Date?: .....Last committee meeting: .....Research proposal submitted and when?: .....

To be completed by student and evaluated by advisor:

1. Summarize your accomplishments in the past year and indicate your plans for the coming year.
2. Meet with your advisor and discuss your progress and areas for improvements, if needed.
3. Your advisor will evaluate your achievements and plans by checking the appropriate columns: "A" Outstanding, "B" Satisfactory, "C" Needs improvement, or "D" Unsatisfactory.
4. Completed Progress Report is due in June. However, if any of the items on this report is marked "C" Needs improvement or "D" Unsatisfactory, the follow-up meeting needs to be scheduled and Progress Report completed **in six months**.
5. **It is student's responsibility to bring the signed Report to the department's Director of Graduate Studies** by May 30.

Research
Research accomplishments in the past year:
Research planned for the next year:
Manuscripts submitted/Papers published (full citation):
Presentations given (full citation; indicate if poster or oral presentation):
Course work
Courses completed in the past year with grade, and report cumulative GPA:
Courses planned for the next year:
Award, honor, fellowship, or significant service:
Teaching assignments (if any):

Evaluation of students' effort/skills by checking "A" Outstanding, "B" Satisfactory, "C" Needs improvement, "D" Unsatisfactory, or "n/a" Not applicable.

(To be completed by advisor and discussed with student)

Research skills	**A**	**B**	**C**	**D**	**n/a**
Critical evaluation of scientific literature					
Accuracy and precision of lab work					
Problem solving / troubleshooting					
Critical evaluation of data					
Intellectual creativity in developing research directions					
Ability to grasp new concepts					
Ability to draw conclusions based on research data					
Professional skills	**A**	**B**	**C**	**D**	**n/a**
Oral presentation skills					
Writing skills (manuscripts, proposals)					
Teaching skills (in a classroom)					
Teaching skills (one-on one)					
Identifying mentors/committee members and utilizing them effectively					
Mentoring others					
Time management	**A**	**B**	**C**	**D**	**n/a**
Meeting deadlines					
Establishing priorities					
Working efficiently					
Organizational skills					
Multitasking					
Interpersonal skills	**A**	**B**	**C**	**D**	**n/a**
Ability to give and receive constructive feedback					
Relationships with other students					
Relationships with faculty and staff					
Reliability, following through on commitments					
Written communication					
Verbal communication					
English proficiency					
Teamwork skills					
Management and Leadership skills	**A**	**B**	**C**	**D**	**n/a**
Data management					
Resources management					
Delegating responsibilities					
Leading and motivating others					
Training new students					
Supervising/managing lab personnel					

Discuss with your student his/her strengths, weaknesses, and plans for improvement and provide your comments and suggestions for improvements:

I have reviewed this document with my advisor and I have seen his/her comments.

Student's signature ..... Date: .....

Advisor's signature ..... Date: .....

Appendix M. Checklist before Leaving UT

Check Item	Initials of student	Initials of major professor
Have you submitted or published at least one (MS)/two (PhD) papers?		
Have you asked your committee to submit the thesis/dissertation assessment form to the Food Science Director of Graduate Studies?		
Have your office and lab workspace been cleared up?		
Have you disposed all samples and wastes in your workspace and common space including refrigerators and freezers? If some materials and samples are to be kept, have you labeled them clearly with sample information, your name, and date?		
Have you informed the Main Office Staff about your final date of employment at least one month prior to departure?		
Have you submitted the thesis/dissertation approval form to the Graduate School and the PDF copy of your thesis/dissertation to TRACE?		
Have you paid all your relevant fees, e.g., for graduation?		
Have you returned your keys to the Key Shop?		
Have you given your research notebooks, digital data, and electronic copies of your thesis/dissertation and manuscripts to your major professor?		
Have you provided contact information to your advisor and the Department so as to reach you in the future for forwarding your mails, sharing job opportunities, and distributing newsletters and announcing social events of the Department and University with you being an alumnus?		
Have you scheduled an exit interview with the Department Head?		

Final approval by the Department Head at the Exit Interview

Robert Williams, Professor and Department Head (signature) Date