Teaching Assistantships are usually awarded for the following year in late March. In the case of new students, decisions are made on the basis of their previous academic work, letters of recommendation, and relevant experience. Continuing students are assessed on the basis of their academic progress in the program as indicated by grades, faculty evaluations of course work, and *timely* completion of program requirements.

Applicants should complete the application <u>HERE</u>. All applications and Major Advisor Letters of Recommendation should be completed and received by <u>Monday</u>, <u>March 24</u>, 2025.

Students will upload the following to the application:

- Current resume/CV
- Cover letter that includes your top 3 choices for both fall and spring semester courses and why you would be qualified to TA for that course.
- Major Advisors will receive an automated email with letter of recommendation request <u>after</u> the student submits the application.
- The application can be found here.

Requirements for all courses:

- Enrollment as a degree seeking student in an MSU graduate program
- Minimum 3.0 GPA
- Strong verbal and written skills in English
- Attention to detail and strict adherence to deadlines

Desired for all courses:

- Ability to relate well to and establish rapport with students, faculty, and staff
- Ability to work effectively with students of varying levels of academic preparedness

Pay:

- Half-Time Graduate Assistantship for Fall 2025 and Spring 2026 (20 hours/week)
- Level to be determined by eligibility requirements (see the MSU Human Resources page on Assistantships)

Courses for Teaching Assistantships

Fall 2025

FSC 310: Sensory Analysis and Consumer Research

Job description/responsibilities:

Attend weekly lecture and lab sections (6 contact hours/week). Prepare samples and set up experiments for lab sessions. Grade lab reports, assignments, and presentations. Hold office hours (2 hr/week) answer student questions in person or by email. Hold exam review sessions (3x/semester) and proctor make-up examinations. Add course content, announcements, and grades to D2L online learning website. Guide students through execution of sensory research projects, participate in client consultations, facilitate study execution, provide feedback to students.

Requirements:

Demonstrated understanding of sensory science and consumer research. Experience in consumer testing and/or other types of sensory testing methods (i.e., descriptive sensory analysis, discrimination tests, focus groups). Excellent written and oral communication skills. Experience with student group work and familiarity

with strategies to facilitate team-work and cooperation between students. Ability to self-teach new topics and skills rapidly. Excellent GPA (3.0 or higher). Ability to work up to 20 hours per week.

COMBINED: FSC 342: Food Safety and Hazard Analysis Critical Control Point Program (HACCP) FSC 442 Hazard Analysis Critical Control Point Training and Certification (HACCP)

Job description/responsibilities:

The primary responsibility of the teaching assistant (TA) is to support instructional capacity for FSC 342 and FSC 442. The TA will support these courses by the fulfilling the following duties and responsibilities: Hold weekly "help room" or "office hours", attend in-class lectures for FSC 342, prepare and deliver up to two lectures for FSC 342, prepare and deliver one lecture for FSC 442, aid the instructor in developing quiz and exam questions, review quizzes and exams prior to student assessment, proctor in-class examinations, proctor make-up quizzes and exams, grade exams, grade extra credit assignments, interact within discussion postings and contribute to the weekly discussion topic, monitor and record student attendance within D2L. TA will also attend weekly meetings with the instructor of FSC 342 (or as needed).

Requirements:

- 1. Has previously completed an upper-level undergraduate food microbiology lecture course
- 2. Completed an introductory HACCP course
- 3. Skill in both verbal and written communication
- 4. Experience using D2L course management software

FSC 430: Food Processing: Fruits and Vegetables

Job description/responsibilities:

The TA will work closely with the instructor to orchestrate all aspects of the course including, but not limited to, lecture preparation, administering and collecting data from the examinations, grading course assignments and assessments, as well as aiding in the set-up and running of weekly laboratory sessions. The TA will also have the opportunity to present a lecture on a topic of their choice throughout the course.

Requirements:

- 1. Background in fruit and vegetable processing, unit operations, and basic plant physiology
- 2. Pursuing a graduate degree in food science, food processing, or related fields e.g. horticulture, biosystems engineering, chemical engineering etc.
- 3. Ability to attend all lecture and laboratory periods
- 4. Willingness to work with pilot plant scale equipment in a food processing setting

FSC 441: Food Microbiology Laboratory

Job description/responsibilities:

The TA for this course will be required to attend weekly planning meetings with the instructor to review necessary materials for the week. Responsible for set-up and clean-up of the lab before each lab section, monitor stock of lab supplies, and maintenance of bacterial stocks. The TA will be present during all lab sections and will monitor student activities, answer student questions, and assist students working at the bench as needed. Manage and monitor students' media incubation times. Prepare and deliver the lecture portion for one lab experiment during the semester. Respond to student emails and hold office hours. Grade lab assignments. Submit hazardous waste pick-up requests to EHS as needed. Supervise during quizzes and exams and assist with the practical portion of exams. Assist instructor with grading quizzes and exams.

Requirements:

Graduate student candidates should be in good academic standing with significant experience in microbiology, including familiarity with practices for handling BSL-2 microbes.

FSC 455: Food and Nutrition Laboratory

Job description/responsibilities:

- Student support during each lab period
- Prepare and post attendance surveys and record attendance in D2L
- Lab inventory maintenance
- Lab housekeeping/ student checkout
- Regular office hours for student support
- · Weekly teaching staff meetings or as needed
- Arriving 15-20 minutes early to each lab to greet students and finalize lab set-up
- Assist with grading student worksheets

Requirements:

The TA should have taken FSC 455 (or similar course). Have knowledge of principles and applications of analytical techniques for analysis for fats, proteins, carbohydrates, minerals, vitamins, and additives. Have knowledge of laboratory techniques including spectroscopy, fluorimetry, chromatography, electrophoresis, and proximate composition, and have knowledge of how to use/operate equipment including volumetric flasks, pipets, spectrophotometer/plate reader, pH meter, centrifuge, preparation of buffers and safe handling and disposal of chemicals. Knowledge of gas chromatograph operation a plus. Ability to work up to 20 hours per week.

HNF 150: Introduction to Human Nutrition

Job description/responsibilities:

Manage the D2L course system, gradebook, and iClicker attendance logs. Assist with updates to posted content, and lecture and exam preparation. Assist with supervising and training the six Undergraduate Learning Assistants (ULA's) and attend weekly meetings with the instructor and ULA's. Hold weekly office hours, schedule the weekly ULA office hours, and schedule and offer pre-exam review sessions. Schedule and assist with proctoring exams, hiring exam proctors, and arranging for makeup exams as needed. Assist with grading. Manage the course email system and promptly respond to student emails. Assist with food tastings and demonstrations and other special requests as needed.

Requirements:

Required qualifications: Graduate student (M.S. or Ph.D.) in Human Nutrition; completion of at least 9 credits in undergraduate and/or graduate nutrition courses; demonstrated ability to supervise staff. This position requires 20 hours per week. Must be available on campus for in-person meetings and activities each week.

HNF 471: Medical Nutrition Therapy I

Job description/responsibilities:

Grade assignments. Serve as standardized patient for student counseling assignments. Attend class/recitation to assist with instruction and assist with data collection regarding instructional innovation projects.

Requirements:

Prior completion of Medical Nutrition Therapy undergraduate coursework; RD status highly preferred.

Spring 2026

FSC 325: Food Processing: Unit Operations

Job description/responsibilities:

The TA will work closely with the instructor to orchestrate all aspects of the course including, but not limited to, lecture preparation, administering and collecting data from the examinations, grading course assignments and assessments, as well as aiding in the set-up and running of hands on in-class demonstrations. The TA will also have the opportunity to present a lecture on a topic of their choice throughout the course.

Requirements:

- 1. Background in unit operations, food chemistry, and other basic food science principles.
- 2. Pursuing a graduate degree in food science, food processing, or related fields e.g. horticulture, biosystems engineering, food packaging, chemical engineering etc.
- 3. Ability to attend all lecture periods and set up equipment for demonstrations as needed.
- 4. Willingness to work with pilot plant scale equipment in a food processing setting.

FSC 402: Food Chemistry Laboratory

Job description/responsibilities:

- Student support during each lab period
- Prepare and post attendance surveys and record attendance in D2L
- Weekly experiment preparation (typically Wednesday or Thursday)
- Weekly experiment set-up
- · Laboratory notebook grading
- Lecture content delivery (1-2 times/semester)
- Quiz preparation and grading
- Lab inventory maintenance
- Lab housekeeping
- Lab EHS inspection preparation
- Arriving 15-20 minutes early to each lab to greet students and finalize lab set-up

Requirements:

Prospective students should have taken FSC 402 (or similar course). Have knowledge of chemical composition and properties of food that affect texture, color, flavor, stability, safety, and nutritive quality of foods; and the chemical changes food undergoes during handling, processing, and storage. Have knowledge of laboratory techniques and use of equipment including volumetric flasks, pipets, spectrophotometer, separatory funnel, pH meter, centrifuge, preparation of buffers and safe handling and disposal of chemicals. Ability to work up to 20 hours per week.

FSC 470: Integrated Approaches to Food Product Development

Job description/responsibilities:

- Student support during each lab period
- Prepare and post attendance surveys and record attendance in D2L
- Weekly grocery store shopping
- Lab notebook grading
- Lecture content delivery (1-2 times/semester)
- Exam guestion development

- Lab inventory maintenance
- Lab housekeeping/ student checkout
- Lab orientation and tour
- Poster printing
- Regular office hours for student support
- Attendance at lectures
- Weekly teaching staff meetings or as needed
- Create scoring surveys for oral presentations

Requirements:

Demonstrated understanding of basic food chemistry, food microbiology, HACCP, food sensory science, product marketing, and culinary science/product development. Experience in new product development is desired but not required. Excellent written and oral communication skills. Ability to work up to 20 hours per week.

HNF 150: Introduction to Human Nutrition

Job description/responsibilities:

Duties: Assist with maintenance of the D2L course system and gradebook. Review updates to posted content, may contribute to content development as time allows. Supervise and train six Undergraduate Learning Assistants (ULAs) and attend biweekly meetings with the instructor and ULAs. Hold weekly office hours, schedule the weekly ULA office hours. Schedule/conduct pre-exam review sessions, oversee exam printing, assist with exam proctoring, and arrange and administer makeup exams as needed. Monitor ULA grading progress, assisting as needed. Manage the course email system and promptly respond to student emails. Other special requests as assigned.

Requirements:

Required qualifications: Graduate student (M.S. or Ph.D.) in Human Nutrition; completion of at least 9 credits in undergraduate and/or graduate nutrition courses; demonstrated ability to supervise staff. This position requires 20 hours per week. Must be available on campus for in-person meetings and activities each week.

Combined HNF 350: Advanced Human Nutrition and Metabolism

HNF 450: Nutrition in the Prevention and Treatment of Disease

Job description/responsibilities:

HNF 350: Responsibilities include holding office hours, answering students' questions, maintaining grade book, grading writing assignments, and helping with general course logistics. TA will devote 10 hours of time for HNF 350.

HNF 450: This is an upper-level capstone course for graduating nutritional sciences majors. This course focuses on the impact of nutritional status on infectious disease. TA must devote 10 hours of time for office hours, grading assignment/quizzes and exams, assist with in-class debates, and helping groups with preparations for debates

Requirements:

HNF 350:

- 1. Have taken a 400 level or higher biochemistry or biochemical nutrition course and have a fundamental understanding of both macro- and micro-nutrient metabolism
- 2. Have experience in analyzing peer-reviewed scientific publications, familiar with journal club
- 3. Have good scientific writing skills.
- 4. Previous experience in biochemical/physiological aspect of nutrition research is preferred.

HNF 450:

- 1. Must have taken HNF 450 at the undergraduate or graduate level
- 2. Preference will be given to a TA who has also taken an undergraduate or graduate level immunology course
- 3. Must have strong communication and teaching skills

HNF 472: Medical Nutrition Therapy II

Job description/responsibilities:

Assist in simulation based educational experiences (clinical skills laboratory, standardized patient counseling), assist in providing feedback on clinical documentation, assist with course management system set up, assist with grading course assignments (including case study research papers), hold office hours and provide technical assistance to students.

Requirements:

Must be an RDN, RDN eligible, or completed Didactic Program in Dietetics and clinical rotations of Supervised Practice.

Research Assistantships (Fall 2025 and/or Spring 2026)

John Harvey Kellogg Research Assistantship

Eligibility: Human Nutrition Ph.D. students

<u>For the cover letter</u>: The student should include in the cover letter a brief description of their research/research interests for their dissertation and how it relates to human nutrition and health.

Sara Lee Research Assistantship in microbial Food Safety

Eligibility:

Students interested in pursuing an M.S. or Ph.D. degree in the Department of Food Science and Human Nutrition at Michigan State University with interest in microbial food safety. The student's major advisor must be appointed in the Department of Food Science and Human Nutrition.

Goal of the program:

The graduate research assistantship in Microbial Food Safety is designed to support graduate student research in the Department of Food Science and Human Nutrition at Michigan State University. The intent of the research program is to increase the understanding of microbial hazards in foods with a desired focus on emerging pathogens, chemical and pathogenic bacterial toxins that may enter the food chain and other specific food microbiological systems of importance to public health. This knowledge will be used to develop a safer food supply.

For the cover letter:

The student should include a section in their cover letter describing why they would like to be considered for the research assistantship, their current and/or intended research, and how their research applies to the goals of the Microbial Food Safety Research Assistantship.