

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.

Please send your required application materials to Aislinn Callahan-Brandt (calla141@msu.edu) by Monday, March 25, 2024.

- Current resume/CV
- Cover letter that includes your top 3 choices for both fall and spring semester courses

Requirements for all courses:

- Enrollment as a degree seeking student in a 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 2024 and spring 2025** (20 hours/week)

Courses for Teaching Assistantships

Fall 2023

FSC 310: Sensory Analysis and Consumer Research

Job description/responsibilities:

Assist in developing and/or modifying course curriculum to align with class project for the semester. Design and execution of hand on sensory oriented lab sessions. (Set-up and operation of SIMS data collection program. Purchase and preparation of samples for weekly lab. Deliver pre and post lab lectures and discussions. Help students organize and execute a real sensory test). Grading lab reports, quizzes, and presentations and proctoring of examinations. Holding regular office hours (4 hr/week) and answering students questions in person or by email. Management of D2L online learning website. Coordination with FSC 470. (Provide students with information about product development competitions and encourage/recruit members. Familiarize students with departmental resources through hands on student project. Help students organize competing teams as a result of 310 ideation which can carry through to 470).

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, focus group). 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 graduate teaching assistant (GTA) is to support instructional capacity for FSC 342 and FSC 442. The GTA will support these courses by fulfilling the following duties and responsibilities: Hold weekly "help room" or "office hours", 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

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:

Lab set-up, lab clean-up, grading, office hours, laboratory instructional assistance.

Requirements:

The TA should have taken FSC 455 (or equivalent 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.

HNF 150: Introduction to Human Nutrition

Job description/responsibilities:

Manage the D2L course system, make updates to posted content, assist with lecture and exam preparation. Supervise and train the six Undergraduate Learning Assistants, hold weekly meetings with the ULAs. Schedule weekly office hours, organize and offer pre-exam review sessions. Proctor exams, arrange for makeup exams as needed. Assist with grading, managing the D2L gradebook and iClicker attendance logs. Manage the course email system, promptly responding to student emails. 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.

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 and RD status highly preferred.

Spring 2024

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:

Lab set-up, lab clean-up, grading, office hours, laboratory instructional assistance.

Requirements:

The TA should have taken FSC 402 (or equivalent 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.

FSC 470: Integrated Approaches to Food Product Development

Job description/responsibilities:

Assist in developing and/or modifying course curriculum to align with the industry sponsor and class project for the semester. Collaborate with industry student mentors and guest speakers as needed to empower students to succeed in development of a novel food product. Grading individual and group assignments, presentations and poster presentations. Holding regular and comprehensive office hours and answering students questions in person or by email. Understand the course and class routine fully and be capable of delivering class lessons or organizing discussion when the professor is absent. Network with FSHN faculty to enable cooperative use of department resources for students. Ensure safe use of the kitchen space and be able to help students understand and communicate basic techniques for using complex ingredients, such as gums and flavorants.

Requirements:

Demonstrated understanding of basic food chemistry, food microbiology, HACCP, food sensory science, product marketing, and culinary science. Experience in new product development, such as food industry experience or participation in new product development competitions. Bench-top formulation experience. 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 build rapport with students and FSHN faculty to ensure student access to department equipment and resources. Ability to self-teach new topics and skills rapidly. Excellent GPA (3.0 or higher). Ability to work up to 20 hours per week.

HNF 150: Introduction to Human Nutrition

Job description/responsibilities:

Duties: Manage the D2L course system, make updates to posted content, assist with lecture and exam preparation. Supervise and train the six Undergraduate Learning Assistants, hold weekly meetings with the ULAs. Schedule weekly office hours, organize and offer pre-exam review sessions. Proctor exams, arrange for makeup exams as needed. Assist with grading, managing the D2L gradebook and iClicker attendance logs. Manage the course email system, promptly responding to student emails. 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.

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.

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.

1. TA must devote 20 hours of time for office hours and grading assignment/quizzes and exams.
2. TA must be available to assist with in-class debates as well as in 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, 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.