GRADUATE STUDENT HANDBOOK

College of Education, Health, and Human Sciences

2025-2026

Revised September 23rd, 2025

THE UNIVERSITY OF TENNESSEE KNOXVILLE

DEPARTMENT OF NUTRITION

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WELCOME FROM THE DEPARTMENT

GRADUATE SCHOOL IS YOUR VEHICLE, NOT YOUR DESTINATION. WE UNDERSTAND THAT.

The future of the Department of Nutrition at the University of Tennessee (UT) depends collectively on the talent and vision of its students, faculty, and staff. We recognize that our vision and goals reach well beyond our classrooms and laboratories. Our success is defined, in part, by the impact that our students and alumni make on the health of our population and the advancement of our science. The field of Nutrition is dynamic in both research and application, and its importance to the global community continues to grow. Our faculty value the potential brought by each new class of graduate students to nutrition research and practice. We take pride in maintaining strong programs with focus areas in biomedical nutrition science (BNS), clinical nutrition and dietetics (CND), and community and public health nutrition (CPHN). In addition, faculty engage in research, professional service, and advocacy to improve human health across populations, and thus we recognize our responsibility to introduce graduate students to the highest levels of professionalism in the discipline, which includes scholarship, public involvement, and evidence-based applied practice.

We warmly welcome you to the Department of Nutrition's graduate programs. This *Graduate Student Handbook*, hereafter, referred to as the *Handbook*, is your "user's guide" to all graduate programs in the Department and to key requirements of the UT Graduate School. Please consult this *Handbook* frequently, as it contains all the departmental policies and guidelines that apply to your graduate school experience.

The degree programs that are covered in this *Handbook* include the MS and PhD in Nutrition with degree tracks in BNS (MS and PhD), CND (MS), CN (MS and PhD), and ISCN (PhD). Please refer to the *Handbook* and the Graduate Catalog for the specific minimum course requirements and the policies and procedures pertaining to each degree program. Any discrepancies between these two documents should be discussed with your major advisor. Additionally, the graduate programs are revised over time; therefore, the *Handbook*, *Graduate Catalog*, and your major advisor are the best resources for addressing questions specific to your year of admission.

The *Handbook* reflects a continuing process, and its contents represent long-standing policies as well as more recent changes. Recommendations for the *Handbook's* improvement are welcome, and they may be presented to your advisor, other members of the faculty, or members of the Department's Graduate Committee.

We hope you enjoy your graduate studies; this *Handbook* has been compiled to support the process to follow for your graduate education.

INTRODUCTION

This *Handbook* does not deviate from established Graduate School Policies noted in the *Graduate Catalog* but provides the specific ways in which those policies are carried out within the Department of Nutrition.

Graduate students are strongly encouraged to review the Graduate School's specific deadlines and all required forms at the Graduate School's *website*.

PURPOSE OF THE HANDBOOK

The purpose of this document is to present the policies and procedures pertaining to graduate study in the Department of Nutrition. The policies and procedures documented here are specific to the Department, but are also consistent with those of the College of Education, Health, and Human Sciences and UT. Because this *Handbook* is revised annually, it contains information that may be more current than the *Graduate Catalog*. However, though this *Handbook* may include changes in departmental programs that are not yet in the *Graduate Catalog*, the *Graduate Catalog* remains the *final word* and students are encouraged to review both documents and discuss any discrepancies with their major advisor.

The *Handbook* contains several important hyperlinks related to policies and procedures. These hyperlinks may be directly accessed from within this document by clicking on the hyperlink associated with the document or webpage.

Graduate students are expected to be aware of and satisfy all regulations governing their work and study at the university. Graduate students should review the following documents and websites: *Hilltopics Student Handbook* (Academic Standards of Conduct), the *Graduate Catalog*, *Graduate Student Appeals*, and *Graduate Student Assistantships*.

All issues related to graduate administration are overseen by the Department's Director of Graduate Studies, *Dr. Katie Kavanagh*. Specific questions related to CN or PHN should be directed to the Community and Public Health Nutrition Graduate (CPHN) Programs Coordinator, *Dr. Marsha Spence*. Specific questions related to CND and/or credentialing as a registered dietitian nutritionist (RDN) should be directed to the Director of the ACEND-accredited Graduate Program in Nutrition and Dietetics (GP), *Dr. Melissa Hansen-Petrik*. Specific questions related to BNS concentration should be directed to *Dr. Ling Zhao*. General concerns may also be directed to the Interim Department Head, *Dr. Thankam Sunil*.

MISSION

Academic Impact Mission: To inspire a new generation of bold leaders, scholars, and entrepreneurs by providing a transformative environment that promotes scientific inquiry, knowledge creation, academic distinction, social commitment, and ethical responsibility.

Research Impact Mission: To serve as a preeminent global leader committed to biomedical and translational research, open innovation, economic growth, and civic engagement to advance disruptive solutions for current and future challenges in food and nutrition security, environmental sustainability, community welfare, and human health.

VISION

Be a global leader in advancing science, education, application, and practice of evidence-based nutrition to promote equitable health.

CORE VALUES

- Supports the continuous quest for academic achievement through teaching, research, and service through collaboration among faculty, staff, students, communities, families, and youth.
- Strives to develop tomorrow's leaders who are prepared to work in a variety of settings and have the skills to work collaboratively and effectively upon entering the workforce.
- Believes that the classroom is a safe environment, which welcomes individuals and promotes ideation and discourse, in which all ideas are respected and welcome.
- Actively works to ensure, through both policies and actions, that all individuals will feel included, welcomed, connected, supported, and valued.
- Commits to fostering professionals who are dedicated to increasing nutrition and health through student and faculty-led research and outreach using university, community, and government resources for the benefit of the scientific community and as a means of positively affecting nutrition-related health that will benefit society.

NUTRITION PHILOSOPHY

The field of nutrition can be scientifically examined across the translational spectrum, from cellular mechanisms to implementation of clinical interventions and public health policies that improve the health of individuals and the public.

GENERAL DUTIES AND RESPONSIBILITIES

Faculty and graduate students are responsible for knowing the rules and regulations of the University's Graduate Council and departmental requirements. The Department of Nutrition's graduate programs have requirements beyond the minimum established by the Graduate School. Students are expected to keep up to date on curricular rules and regulations by visiting the Graduate School website regularly and meeting with their graduate committee.

A statement of graduate students' rights and responsibilities is printed on the student's admission status form. Additional copies are available from the *Office of Graduate Admissions*.

As detailed in the *Graduate Catalog* and *Hilltopics*, academic integrity is the responsibility of all faculty and students. This includes intellectual integrity, academic honesty, and avoidance of plagiarism. Plagiarism is a serious offense, which involves using the work of others without giving appropriate credit or acknowledgement. All members of the academic community are expected to summarize, paraphrase, and quote sources appropriately. There are a variety of resources available on how to avoid plagiarism through the University Libraries. Nutrition students are strongly encouraged to review these resources, so that they can write effectively and confidently, and with the knowledge that they have appropriately credited their resources. All members of the academic community are responsible for being familiar with and following the code of honesty. Further, it is important to read course syllabi statements related to the use of generative artificial intelligence tools, such as ChatGPT. Some courses may allow students to use these tools, while others may not.

GUIDANCE ON THE USE OF GENERATIVE AI

While policies and procedures related to use of generative AI* (genAI) are rapidly evolving, it is the student's responsibility to remain up-to-date on their ethical use, both inside and outside of the classroom.

Coursework: For each course taken at UTK, the student should carefully review the syllabus for the instructor's specific policy on use of genAI in that course and then follow that guidance. If there is no policy, or if there are questions about an existing policy, it is the student's responsibility to request clarification from the instructor.

Outside of the classroom: During your time as a graduate student in our department, you will be involved in a wide range of creative opportunities that will help shape you as a professional, including but not limited to participation in your faculty advisor's research process, developing and conducting your own research project, and creating products to widely disseminate research findings. While use of genAI tools has quickly become commonplace across a great swath of applications, its ethical and appropriate use continues to be actively debated. Moreover, each funding agency, professional organization, and publication house may have slightly different guidance regarding use of these tools. Therefore, it is the student's responsibility to communicate regularly with their faculty advisor re: how and when one might use these tools appropriately for ***any*** component of the research process.

**Tools that can create text, images, video, etc, using machine learning models*

In addition to communicating with your faculty advisor, here are some important resources you should bookmark and visit regularly:

- The University of Tennessee System Policy on Artificial Intelligence (BT0035)
- The Office of Research, Innovation & Economic Development, Research Integrity & Assurance provides up-to-date guidance on the use of AI in human subjects research.
- The College of Arts & Sciences, Judith Anderson Herbert Writing Center hosts a website that provides some guidance re: citing use of genAI tools in your writing, as well as some 'best practices' for ethical use of these tools: GenAI Tools and Writing: Information and Guidelines for Students
- UT Libraries Research Guide: Using Generative AI. This guide covers types of genAI and how to use them, but the section on Ethical & Evaluative Use may be particularly helpful.

Any suggested additions to this list should be emailed to the department Director of Graduate Studies.

FACULTY DIRECTING GRADUATE RESEARCH AND RESEARCH INTEREST

Department of Nutrition faculty members serve as major advisors and/or on committees for graduate students undertaking research/projects as part of the degree programs in BNS, CPHN, and ISCN. Faculty have a variety of research areas of interest. **Table 1** provides a list of faculty who are eligible to direct graduate theses, dissertations, and projects, along with their contact information and research interest areas. For more information on faculty research interests, please view the Faculty and Staff section of the Nutrition Department *website*.

Table 1. Faculty Eligible to Direct Graduate Theses, Dissertations, or Projects

Biomedical Nutrition Science	
Faculty Name & Contact Information	**Research Interests**
Ahmed Bettaieb, PhD Associate Professor 865-974-6267 Laboratory Website abettaie@utk.edu	Molecular and genetic mechanisms contribute to the development of metabolic diseases including obesity, diabetes, chronic inflammation, and cardiovascular diseases. The main goal of this research is to exploit novel therapeutic strategies aimed at reducing the overall burden of these diseases. This is achieved using cellular, biochemical, gene knockout, and system biology approaches.
Carolina Cawthon, PhD, RDN, LD Assistant Professor ccawthon@utk.edu	Eating behavior consists of food choices and the meal patterns that ultimately determine total food intake. Using animal models, the overarching research goal is to understand the physiological factors driving eating behavior, particularly the role of the gustatory system and changes to eating behavior induced by pharmaceutical obesity treatments.
Jiangang Chen, MD, MPH, PhD Adjunct Professor 865-974-5041 Department of Public Health Faculty Website jchen38@utk.edu	Potential environmental impacts on human reproduction, with a special interest in effects of endocrine disruptors (EDS) on the homeostasis of endogenous hormones. This disruption may contribute to the pathology of hormone-responsive diseases, including prostate and breast cancers.
Dallas Donohoe, PhD Associate Professor 865-974-6238 Laboratory Video ddonohoe@utk.edu	Dietary chemoprevention and cancer cell metabolism. Mechanism by which a high fiber diet and bacterial derived butyrate protect against colorectal cancer. The importance of the Warburg effect in driving cancer progression.
Ling Zhao, MD, PhD Professor 865-974-1833 Laboratory Video ling.zhao@utk.edu	Cellular and molecular basis through which dietary components, pharmacological agents, or environmental exposure (e.g., chemical ingredients in personal care products) increase or decrease the risk of obesity and obesity-associated metabolic diseases (e.g., insulin resistance and diabetes) using cell and animal models.

Community/Public Health Nutrition	
Faculty Name & Contact Information	**Research Interests**
Sarah Colby, PhD, RDN Associate Professor 865-974-6248 Laboratory Website; Laboratory Video scolby1@utk.edu	Individual, family, and community behavior change for health promotion (primarily in diet, physical activity, and stress management) with an emphasis on health communication through novel nutrition education strategies (including marketing, arts, and technology).
Katie Kavanagh, PhD, RDN, LDN, CLC Associate Professor 865-974-6250 Laboratory Website; Laboratory Video kkavanag@utk.edu	Infant- and child-feeding behaviors and the impact on appropriate growth; development of effective strategies to support compliance with infant- and child-feeding recommendations.
Jared McGuirt, PhD, MPH Associate Professor jmguirt@utk.edu	Developing and evaluating practical tools and approaches that improve systems and dietary behaviors within the context of where people live, work, and play, including digital technology-based nudging and educational approaches (including digital applications and virtual reality) and food access interventions. Examining the influence of the built food environment on shopping, dietary behaviors, and health outcomes using GIS mapping software. His research is conducted in the clinical outpatient setting, retail food environment, urban and rural communities, worksites, and military installations.
Hollie Raynor, PhD, RDN, LDN Professor 865-974-9126, ext 1 Laboratory Website hraynor@utk.edu	Lifestyle interventions, designed to improve eating and activity behaviors, for obesity treatment in children and adults. Both efficacious studies, in which dietary factors, such as energy density and timing of eating, and effectiveness studies, in which lifestyle interventions are translated into practice-based settings (i.e., primary care), are focused on.
Marsha Spence, PhD, MPH, RDN, LDN Professor of Practice 865-974-6265 Laboratory Video	Improving food and nutrition security among maternal and child populations and on college campuses. School- and community-based interventions to prevent childhood obesity and

mspence@utk.edu	promote access to healthful food using novel methods, i.e., positive youth development, peer leadership, coaching, active parental engagement, and advocacy training.

GENERAL POLICIES AND PROCEDURES

Faculty, graduate students, and staff are accountable for the policies and procedures detailed in these documents. See **Table 2** for degrees and concentrations.

Table 2. Department of Nutrition Graduate Degrees and Concentrations

Bachelor of Science/Master of Science Degrees (BS/MS)	Master of Science (MS) Degrees	Doctor of Philosophy (PhD) Degrees
Biomedical Nutrition Science	Biomedical Nutrition Science	Biomedical Nutrition Science
Clinical Nutrition and Dietetics	Clinical Nutrition and Dietetics	Implementation Science in Community Nutrition (for those matriculating before Fall 2025)
Community Nutrition	Community Nutrition	
	Public Health Nutrition	Community Nutrition (for those matriculating in Fall 2025)

ADMISSION

BACHELOR OF SCIENCE/MASTER OF SCIENCE (BS/MS)

Students pursuing the accelerated combined BS/MS program in Nutrition may complete up to 9 credit hours of graduate level coursework during the student's undergraduate study and apply up to 9 of those credit hours to satisfy both the BS and MS degree requirements, provided that these graduate credit hours were approved by both the Department and by the Graduate School. The form "Department of Nutrition Accelerated Combined Bachelor's/Master's Program Application" is available on the Department *website* and must be completed and signed by the student, the graduate committee director/primary faculty advisor, the coordinator of the relevant graduate concentration, and the department director of graduate studies after selection and prior to starting graduate coursework. The form should be completed by the last day of the term in which the student will have earned a minimum grade point average of 3.3 and completed 90 credit hours toward their Bachelor's degree. This is generally at the end of the junior year. The Director of Graduate Studies will submit the completed form to the Graduate School for approval and processing.

To receive graduate credit for the 9 credit hours approved on the Department of Nutrition Accelerated Combined Bachelor's/Master's Program Application, the student must complete and submit the *Senior Requesting Graduate Credit Form* to the Graduate School before the start of each semester when graduate courses are taken and have approval of their academic advisor and the course instructor(s).

Pursuing the BS/MS program does not guarantee acceptance into either the Graduate School or the MS program. Students in the BS/MS program must apply for admission to the Office of Graduate Admissions and to the MS program during their senior year of undergraduate study for the term immediately following the completion of their undergraduate study, following the same procedures

of all other student applicants. Students will be fully admitted to the MS program after they have been accepted both by the Graduate School and by the Department of Nutrition. Students will not be eligible for graduate assistantships until they are enrolled as graduate-level students in the Graduate School.

MASTER OF SCIENCE (MS) AND DOCTOR OF PHILOSOPHY (PhD)

University graduate student admission requirements can be found on the *Office of Graduate Admissions website*. Information regarding special admission categories, such as non-degree, graduate certificate, and transient admission, also can be found in the UT *Graduate Catalog*. Applying for the MS or PhD program is completed *online*. Information about these programs is located on the Department of Nutrition *website*.

CLINICAL NUTRITION AND DIETETICS

Students applying to the ACEND-accredited Graduate Program in Nutrition and Dietetics (CND concentration) should refer to the *Guide to ACEND-Accredited Nutrition and Dietetics Programs* at The University of Tennessee regarding program-specific prerequisites and application procedures.

DUAL MS-MPH

A coordinated dual program, leading to both the MS in Nutrition (PHN concentration) and the Master in Public Health (MPH), is available (dual MS-MPH). This program allows students to complete both degrees in less time than would be required to earn both degrees independently. Students applying for the dual MS-MPH program file separate applications for the MS and for the MPH Programs. The MPH degree is administered by the Department of Public Health. These students must be admitted to both the MS Program and the MPH Program to pursue the dual MS-MPH.

TERMINATING ONE DEGREE

Students enrolled in the dual program, but who later consider dropping one of the two degrees, should work very closely with their major advisor as reverting to only one degree may introduce unexpected issues that could impact their progress depending on the student's specific program (i.e., thesis vs. project option). Therefore, it is imperative that students explore their situation with their major advisor as soon as they are considering taking this action.

MASTER'S BYPASS

Exceptional students with demonstrated research ability may apply directly to the doctoral program without having first completed a master's degree. The master's bypass is for bachelor-level students who apply for the PhD program prior to completing a master's degree OR for master's level students who exhibit extraordinary promise for success in the doctorate program after originally being admitted to the MS program.

Criteria and Procedures for those with a Bachelor's Degree: Students who wish to bypass the master's program and apply directly to the PhD program, must, at a minimum, meet the following:

- Satisfactory completion of all pre-requisite courses necessary for admission into the master's program with a B or better,
- An undergraduate GPA of 3.5 or better upon completion of the bachelor's degree,
- Previous research experience in private or public settings.

Criteria and Procedures for Enrolled Master's Students: Students who enter any graduate program in the Department as a master's student and wish to bypass the master's degree and move directly into the doctoral program without receiving a master's degree, must, at a minimum, meet the following:

- An average GPA of 3.5 or better after completion of at least 18 graduate-level credit hours, excluding independent or directed study courses.
- Demonstrated research ability by disseminating research findings as an author on a manuscript submitted for publication and/or as a presenter at a national scientific meeting (either oral presentation or poster) prior to manuscript submission **or** previous research experience in private or public settings.

After completion of at least 18 credit hours, a MS student who is interested in the master's bypass must provide a written request (along with a current CV and unofficial transcript) via a single email to their major advisor, and cc'ing all master's committee members, the Director of Graduate Studies, and the Department Head. If a student is in the MS-MPH dual program, the request may not be submitted until after the student has completed their interdisciplinary and block field experiences.

After receipt of the written email request, the Director of Graduate Studies will convene a committee that will consist of the Department Head, the Director of Graduate Studies, and enough additional faculty members so that both the PhD-granting concentrations in the department are represented by at least two faculty members. The committee will meet to discuss the request and will make a decision within two weeks of that meeting. If the student is granted the master's bypass, they should *apply for admission* to the Department of Nutrition's doctoral program no later than the semester after the bypass is granted.

ORIENTATION

Information on the University's graduate student orientation can be found *here*. In addition, the Department of Nutrition hosts an orientation for all new and continuing graduate students on the Friday prior to classes beginning each Fall semester. Programs may host concentration-specific orientations for new students around the same time.

INITIAL ENROLLMENT

Upon arrival at UT, graduate students should report to the Nutrition Department office (229 JHB) to complete an information card for the Departmental file. The major advisor has been carefully selected based on the degree program and desired concentration area, a match between student and faculty member regarding common research and career interests with the student, and the faculty member's qualifications and availability. This faculty member should serve as the permanent major advisor under most circumstances. If you are unsure who your major advisor is, please contact the department Director of Graduate Studies for that information. If a student wishes to change major advisor or

concentration, it is the responsibility of the student to contact other faculty to determine if an opening is available. It is important to note that not every faculty will have an opening for new students, and that a change in concentration may increase the length of time that it takes to complete the degree.

ADVISING

Students should register for classes using UT's online registration *system*.

Both the advisee and the major advisor have responsibilities in the advising process. The responsibilities of the advisee are as follows:

- Contact their major advisor to schedule an appointment prior to registration for classes for the subsequent semester.
- Consult the University registration *webpage* and the *timetable of classes*.
- Consult the University Graduate School *webpage*. This site provides information on procedures. Students have found the *Graduation* information and the *Steps to Graduation* helpful.
- Notify a member of the Nutrition Department staff of any change in address or telephone number.

Responsibilities of the major advisor are as follows:

- Schedule advising appointments when contacted by the advisee.
- Assist the advisee in the development of a plan of study that is commensurate with the advisee's background, interests, and goals that comply with the approved curricula policies.
- Provide guidance to the advisee on selection of committee members if appropriate for concentration and program.
- Assist the advisee in meeting Graduate School requirements and deadlines.
- Provide guidance in the development of a research project as appropriate for concentration and program.
- Coordinate written and/or oral examinations, as required by the specific concentration and programs in which the advisee is a candidate.

ADMISSION TO CANDIDACY

MS

The Admission to Candidacy (ATC) form for the MS degree establishes the coursework required for graduation. You may submit this application after completing nine hours of graduate coursework with a 3.0 average or better. ***You must submit the application no later than the last day of classes preceding the term in which you expect to graduate*** (*see current deadline dates*). *Note that the ATC application must be submitted before you will be allowed to complete your thesis defense or final examination if required by your program concentration*. If for any reason (class unavailability, etc.), a course listed on the approved ATC cannot be completed, the candidate may submit a Revised Admission to Candidacy form. These revisions will need to be approved by the candidate's major advisor. These can be found on the *Graduate School's Forms Central page*.

Thesis Option (BNS & CN students) and Project without Comprehensive Exam Option (BNS students): The *MS Admission to Candidacy-Masters or Specialist Degree Form* must be completed and signed by all committee members and the Director of Graduate Studies and submitted to the Graduate School no later than the last day of classes in the semester preceding the semester they plan to graduate.

Coursework only without Comprehensive Exam Option (CND and CN students): the *MS Admission to Candidacy-Masters or Specialist Degree (Course only, No Comprehensive Exam) Form* must be completed and signed. The form must be signed by the Program Coordinator of either the CND program or the CN program, as appropriate for the student's concentration, and the Director of Graduate Studies.

If there are any changes to the committee or if the thesis/project options changes, the *Revised MS Admission to Candidacy Application* (Graduate School form) must be revised and reprocessed.

MS/MPH

The *Admission to Candidacy (ATC) form* establishes the coursework required for graduation. You may submit this application after completing nine hours of graduate coursework with a 3.0 average or better. ***You must submit the application no later than the last day of classes preceding the term in which you expect to graduate*** (*see current deadline dates*). Note that the ATC form must be submitted before you will be allowed to complete your thesis defense or final examination. If for any reason (class unavailability, etc.), a course listed on the approved ATC cannot be completed, the candidate may submit a *Revised Admission to Candidacy form*. These revisions will need to be approved by the candidate's major advisor. Because the dual MS-MPH program represents two distinct programs, two forms must be filed for all steps to graduation: one for the MS and one for the MPH program. This means the ATC form is filed for each program. Both ATC forms should be submitted together with one academic history record and at the top of each ATC form, the student should type in bold letters: "Dual MS-MPH Program." As noted previously, the courses listed for completion of the MS and MPH **will be the same** on both ATC forms. Both forms must include all courses completed for the MS, foundation courses for the MPH, plus the concentration-specific courses listed for the MPH. The committee members, however, will differ slightly, so students should carefully coordinate completion of these forms with their major advisor in Nutrition. Other forms that are filed for both programs include the Application for Graduation.

PhD

Prior to starting the process of being admitted to candidacy, the doctoral student must establish their dissertation committee, and that process is detailed under *Degree Requirements for the PhD* later in this document.

A doctoral student may be admitted to candidacy after passing the comprehensive examination, fulfillment of the language requirement (if applicable), and maintenance of at least a 3.0 GPA in courses. Admission to candidacy must be secured **at least one semester prior to the anticipated graduation**. Each student is responsible for completing their application for admission to candidacy, gathering signatures from each committee member, and forwarding the completed form to the Director of Graduate Studies. Upon approval of this application, the Director of Graduate Studies will submit the form to the Graduate School for approval. The student will be notified when admission to candidacy has been approved.

LIABILITY INSURANCE, SUBSTANCE ABUSE, AND CRIMINAL BACKGROUND CHECK

The Department of Nutrition trains graduate students through experiential learning opportunities. During many of these experiences, graduate students will interact with people from the community. *To protect the community, the Department requires all graduate students who will be engaging in service learning and/or research projects that involve direct contact with the public (i.e., supervised practice and block field experiences, courses with service-learning components and/or practicum courses included in the ACEND-accredited Graduate Program) to have the following assurances prior to participation*:

- Liability insurance
- Criminal background check
- 12-panel drug and alcohol screening test

The costs of the insurance, background check, and drug and alcohol screening are the sole responsibility of the graduate student.

For students who participate in community-based activities and experiences, all assurances listed above must be completed upon entering the program in the first semester of the first year and *must be maintained for all the years in which field experiences are occurring.* Students will be provided with information regarding the insurances at the graduate student orientation, or as soon as vendor contracts are finalized, if not yet finalized by the time of this orientation. A student who has any criminal incident on their background check and/or has a positive drug and/or alcohol screening (showing the presence of drugs or alcohol) will NOT be allowed to complete ANY experiential learning component described above for at least 1 year, which may substantially delay the student's graduation and/or may result in the student being unable to complete the requirements for graduation from the program.

ETHICS AND INTEGRITY

The Department of Nutrition faculty, staff, and students take research ethics and integrity very seriously. Nutrition students who participate in research are expected to understand and demonstrate ethical principles in the performance of all activities related to scientific research, including mechanisms to promote honesty, accuracy, efficiency, and objectivity in research. Nutrition students are strongly encouraged to participate in *trainings and workshops* related to the responsible conduct of research provided by the *Office of Research, Innovation & Economic Development*.

Research notebooks, records, and data are the property of UT and may not be removed from the University or accessed from unsecure internet connections.

If you desire a copy for your own use, you are required to obtain permission from the faculty supervising the research project, and the copy should be made at your own expense.

All official documents submitted by graduate students, such as but not limited to theses, dissertations, and manuscripts *will be reviewed electronically for plagiarism and other ethical issues*, using plagiarism detection software provided by UT. Students should familiarize themselves with the *iThenticate software*, and should use it to review any and all work completed in the process of earning their degree.

GRADUATE STUDENT TRAVEL

As part of graduate training, the faculty highly recommend students make presentations at professional meetings when possible. Discuss these opportunities with your major advisor.

In general, partial funding can be arranged for graduate students who travel to meetings to present their work or take part in other educational opportunities. Students should begin the process of requesting funds and completing the necessary paperwork well in advance to ensure proper reimbursement of expenses. Potential funding sources include their major advisor's internal and external funding, when appropriate, the Department, the College, and the University's *Graduate Student Senate (GSS) Travel Awards*. The student should take responsibility for exploring all funding sources. Students on official University travel are responsible for adhering to University travel regulations and should consult the University of Tennessee Travel Policy to ensure compliance with those regulations. Travel requests and arrangements should be made in Concur, a UT supported online booking tool, and in consultation with the major advisor. Typically, expenses not paid by a Department or faculty travel card, i.e. meal per diem and ground travel, are reimbursed within two weeks of processing the expense report. However, if paying for these expenses out-of-pocket, students may request a cash advance for the expenses.

Please consult your major advisor and the *Department business manager* for the steps to process your travel request, arrangements, and reimbursement.

RESEARCH COMPLIANCE

Human Subjects: UT has a training requirement for Human Subjects Research. All researchers at UT, including students doing dissertation or thesis research, who will be submitting an Institutional Review

Board (IRB) protocol must take the *CITI training*. In many cases, IRB training completed as classwork meets this requirement. However, students should confirm this with their major advisor, as additional training may be required. The training is valid for 3 years.

All research projects or studies that involve the use of human subjects must be reviewed by UT's IRB or be certified as exempt from IRB review. All students involved in projects with human subjects should familiarize themselves with the information available from the Office of Research, Innovation & Economic Development's Research Integrity & Assurance *website* regarding working with human subjects. ***No research with human subjects can be initiated until approval from IRB is acquired.***

Understanding the special nature of the human subjects research review system is important and required by federal regulations governing research with human subjects. To obtain copies of the regulations governing research with human subjects, graduate students should contact the *IRB Liaison* for the Department of Nutrition, and your major advisor will guide you through this process.

If you are engaging in research that involves minors, additional paperwork will be necessary. Specifically, anyone (faculty, students, or other covered adults) who conducts research that involves minors must submit certification received from registering and completing all the requirements outlined in the *Policy on Programs with Minors*. Your major advisor will guide you through this process.

Animal Subjects: All research projects or studies that involve the use of animals must be approved by the University's *Institutional Animal Care and Use Committee* **(IACUC)**. There are no exemptions to this requirement. Graduate students working with animals or animal tissues are required to enroll in the occupational health program (OHP) and complete the mandatory training, which can be completed by logging in at the UTK-IACUC Members and Community IACUC Training *website*. Your faculty research advisor will guide you through this process.

Working with Biological and Biohazardous Material: Research projects involving the use of biological and biohazardous materials must be approved by the Institutional Biosafety Committee as well as completion of general laboratory and site-specific trainings. More information can be found *here*. Your faculty research advisor will guide you through this process.

Radioactive Materials and/or Radiation Sources (including x-ray): Research involving the use of radioactive or ionizing radiation must be approved by the *Radiation Safety Office*. Training in this area is required prior to engaging in such research. Your major advisor will secure the approvals and guide you through the process of receiving the necessary training.

FINANCIAL ASSISTANCE

Types of Assistantships - General information regarding graduate assistantships and other types of funding for graduate school can be found in the *Cost and Funding from the UTK Graduate School*.

The Department has several types of assistantships available. These include Graduate Teaching Assistant/Associate (GTA) and Graduate Research Assistant (GRA). All assistantships are governed by the *Policy for the Administration of Graduate Assistantships*. The work hours are 20 hours per week, excluding organized class time, with a 50% appointment, or 10 hours per week, excluding organized class time, with a 25% appointment. Salary is subject to federal income tax. Work responsibilities of the different assistantships vary as described below, but all provide a monthly stipend, maintenance fees

(tuition), other mandatory fees, health insurance (if at least a 25% appointment), and differential tuition, if applicable. Students should review their appointment letter for a description of assistantship responsibilities and discuss these with the assigned faculty supervisor.

Students on 9-month appointments for the fall and spring semesters receive 12 equal monthly payments for the 9 months of service and maintenance fees (tuition), other mandatory fees, and health insurance for all 3 three semesters, including the summer. Students appointed to a 9-month appointment beginning in the spring semester have the option of receiving seven equal monthly payments for the January-July period or six equal payments for the February-July period. In both cases, maintenance fees (tuition), other mandatory fees, and insurance are provided for spring and summer semesters. Graduate students on 9-month appointments have no assistantship responsibilities in the summer semester.

Students appointed to 12-month or other appointments receive equal monthly payments for the months of the appointments and have assistantship responsibilities for the full period of the appointment. For these appointments, maintenance fees (tuition), other mandatory fees and differential tuition, if applicable, are provided only for those semesters included within the appointments (i.e., payment of maintenance fees (tuition) and other mandatory fees for summer semester requires an appointment which encompasses the summer semester in its entirety). In some situations, a graduate assistant may be appointed for a period shorter than a year (e.g., a semester). Students on 12-month appointments are expected to work during all work days during their appointments, except when the University is closed (holidays and administrative closings).

Graduate Teaching Assistants/Associate (GTA): Graduate Teaching Assistants are appointed for a period of one semester to one year, with renewals possible as per the procedures outlined in "Application Procedure" in the next section. Renewals depend on satisfactory previous performance, progress toward academic degrees, and availability. New GTAs are required to participate in the GTA Orientation offered each fall by the Graduate School.

Graduate Teaching Assistants work under the direct supervision of faculty members and are assigned duties related to instruction. These duties include such activities as assisting in the preparation of lectures, leading discussion sections, conducting laboratory exercises, grading papers and keeping class records. Assistants may not be given primary teaching and/or evaluation responsibilities nor should they be given duties to support faculty research or those basically clerical in nature. GTAs must maintain at least a 3.0 GPA and be full-time graduate students to retain eligibility for department-supported assistantships.

Graduate Teaching Associates are advanced graduate students who have been given primary responsibility for teaching undergraduate courses, including the assignment of final grades. No other category of graduate assistant may be so charged. Graduate Teaching Associates may not be assigned primary responsibilities for teaching and student assessment in courses approved for graduate credit. Associates must have met the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) 18-credit hour guideline for teaching undergraduate courses.

GTAs are part of the UT Instructional Staff and should conduct themselves accordingly. This includes:

- Dressing appropriately.
- Showing up on time to all class/discussion sections (a few minutes early is recommended).

- Answering student emails in a timely and professional fashion.
- Answering faculty emails in a timely and professional fashion.
- Understanding that teaching is a major mission of the University; and therefore, to always give their best effort.
- Conducting themselves in a manner that positively represents UT.

Graduate Research Assistants (GRA): Nutrition GRAs are funded by contracts or grants from specific businesses, government or other agencies, and foundations, approved projects funded by the Agricultural Experiment Station, or in some instances associated with the Department of Nutrition. GRAs are appointed from a period of one semester to one year, with renewal at the discretion of the faculty research advisor and/or the Department Head when department funds are used and are contingent on sufficient sources of funding.

The primary functions of GRAs in research are as follows:

- To work under the direction of faculty members in specified approved project areas.
- To contribute to specific research projects and, at the same time, acquire training in research techniques and methods.
- To work for the Department in a support capacity for their development.

Assistantship Application Procedure: The Departmental assistantship application priority deadline for GTA/GRA funding for the following academic year for new applicants to and continuing students in the graduate program is January 15. Students already enrolled in the graduate program are required to complete the Nutrition Graduate Student Annual Survey each fall (generally in October). The survey link will be circulated via email and posted on the Nutrition Graduate Program Canvas site. **All continuing graduate students are expected to complete this annual progress survey**. ***Components of this survey will be used when considering distribution of any funding opportunities that arise such as GTA positions, fellowships, and scholarships***. Current graduate students will also receive a reminder email in early January, encouraging them to provide their major advisor with relevant updates prior to the January 15th priority deadline for GTA/GRA funding.

GTA/GRA awards are made by May of each year. Results of annual survey responses (current students) or results of the New and Deferred Applicants survey (new applicants) received after the January 15 deadline are considered late but may be considered as determined appropriate. GRA assistantships are at the discretion of the faculty holding the funding or the Department Head if the funding source is the Department and may be assigned and evaluated on a semester-by-semester basis. Speak with your major advisor about potential GRA opportunities. A GPA of 3.0 is required to retain eligibility for department-supported assistantships.

Additional Sources of Funding: The College of Education, Health, and Human Sciences has scholarship funding available for graduate students. The application deadline is April 4 for the following year and the process with current form can be found *here*.

Additional information on financial assistance is available from Graduate School's Cost & Funding webpage. Graduate students are encouraged to begin seeking outside funding about a year preceding the academic year for which funding is needed, as some deadline dates are very early. Graduate Record Examination (GRE) scores for the general section are encouraged, especially for PhD students,

but are not required. GRE scores may be required by external funding sources. Applicants are encouraged to reach out to the Director of their program of interest with any questions.

Evaluation Procedure: The evaluation procedure for funding awarded through the Department's graduate assistantships is as follows:

- Applications and responses to surveys (described in the *Assistantship Application Procedure* section, above) are reviewed by the Department's Graduate Committee.
- The Graduate Committee meets to rank applicants for assistantships. This ranking includes, but is not limited to, input from applications (new students), survey responses (new and continuing students), and equitable distribution across research-active faculty.
- The Graduate Committee makes recommendations to the Department Head on allocations of assistantships.
- Selected graduate assistantship recipients are contacted by the Graduate Program Coordinator by email to see if they remain interested in receiving the type of financial assistance offered.
- Recipients accept or decline the awards in a written response to the Department Head.

GRAs are awarded at the discretion of individual faculty members who have the appropriate funds.

GRADUATION

The Graduate Hooding Ceremony is held at the end of Fall and Spring semesters only. Please visit the Graduate School Graduation page for details about graduation. Click here for the Graduate School's Steps to Graduation. For a complete description of minimal requirements, see the current Graduate Catalog for Degree Program Requirements.

ALUMNI

After completion of a degree, alumni are urged to notify the University, College, and Department of name, address, email address, and position changes so that the University can keep alumni informed of current events, while at the same time supply and obtain valuable information and data regarding our graduates and programs. We also encourage alumni to keep abreast of departmental activities by following departmental social media accounts.

DEGREE REQUIREMENTS

MS

Master's Committee – BNS students (Thesis or Project Option) and CN students (Thesis Option): For these degrees and concentrations, master's committees are composed of the major advisor and at least two additional faculty members with the rank of Assistant Professor or above. An instructor may serve as a fourth member of the committee. The major advisor serves as committee chairperson. All members of the committee may be departmental faculty members unless the student has a minor. If the student has a minor, one member of the committee must be from the minor department. If the student has a second minor, one member of the committee also must be from the second minor department. Students completing the Coursework only without Comprehensive Exam Option (CND and CN students) do not form an MS committee.

These MS Committees (Thesis or Project Option) serve the following functions:

- Assist the student in planning a program of coursework appropriate to the student's background and goals and in compliance with departmental and Graduate School policies. It is the student's responsibility to propose, for committee review, a timetable for development and completion of coursework and thesis research (Thesis option) or a project or other culminating experience (Project option).
- Provide guidance and critiques in the development and completion of the student's project and, for thesis option students, in writing the thesis proposal and thesis.
- Evaluate the student's performance on committed evaluated outcomes, i.e., thesis or project. Students should consult with the Graduate School's Forms Central website to ensure all proper forms are provided to the committee at appropriate times.

Thesis Option

Thesis Proposal: The thesis proposal is a 2-part written document that includes two chapters. The first chapter should be a detailed literature review that provides a foundation for the study the student will be proposing. The second chapter should be a detailed description of the methodology they are proposing to use in the study. A proposal hearing, which the student should schedule for a 2-hour block of time with their committee, is designed to evaluate the proposal and guide the research process. At least 2 weeks in advance of the proposal hearing, the thesis proposal is submitted to all committee members. At the proposal hearing, the student formally presents the proposed research as an oral presentation to the student's committee members in a closed session. The presentation is expected to take 25-30 minutes. Upon conclusion of the presentation, committee members engage the student in further questions about the proposed research. The purpose of this hearing is to help the student refine the proposed research and to understand how to proceed further. Specifically, upon conclusion of the proposal hearing the student's graduate committee members will make a recommendation from any of the following options:

- conduct the research as proposed;
- conduct the research with specific modifications as identified by the committee;

- re-write the proposal to address significant research concerns identified by the committee during the proposal hearing; or
- write a new proposal

Thesis: Students pursuing this degree are required to have at least two semesters of master's level research and thesis completion. The thesis is a written account of original research conducted by the master's student under the direction of their major advisor and the graduate committee members. It serves as the culminating experience for thesis students. The student research topic typically falls in the major advisor's research interests, which can be found in the "Faculty Directing Graduate Research and Research Interest" section of this document. The student must enroll in NUTR 500 (variable credits) each term that they are planning research, collecting data, or writing the thesis. The student must be enrolled in 3 hours of NUTR 500 credit during the semester in which the final thesis is defended and approved. If the thesis is approved after the final deadline date for graduation during a certain term, but prior to the early deadline date for the following semester, the student is not required to enroll in NUTR 500 and may graduate the next semester. The thesis must satisfy University requirements, as described on the Graduate School's Theses and Dissertations website, and it must be approved by the graduate committee members and the Graduate School Thesis/Dissertation Consultant. The complete thesis, in a form approved by the major advisor, shall be distributed to all committee members at least two weeks before the date of the final oral examination/defense.

By the beginning of the semester in which the student plans to defend the thesis, the student must submit a preliminary draft of the thesis online in TRACE for review by the Coordinator of Student Services. Preliminary drafts do not need to be complete. Failure to submit a preliminary draft by the deadline may result in the thesis not being reviewed prior to the final deadline for acceptance in TRACE. Students should check the Graduation Deadlines website for specific deadlines. For instructions on submitting the thesis, please visit the submission page. For questions about the submission process, please contact thesis@utk.edu.

Thesis Defense: After thesis research has been completed, each master's thesis student must pass an oral examination in defense of their thesis. The examination in defense of the thesis is administered by the student's committee and is intended to evaluate the student's overall knowledge gained through completion of their coursework, research, and thesis. The thesis defense must be scheduled to occur with the student's major advisor and all members of the committee at least two weeks before the thesis deadline published on the UT Graduate School Graduation Deadlines website. An abstract of the thesis in the form of the defense announcement should be sent to the Department's Director of Graduate Studies two weeks in advance of the thesis defense. Students should use the thesis defense announcement template, available on the Nutrition Graduate Program Canvas site, to develop their announcement. The email defense announcement should contain the thesis title, date, time, and place of the thesis defense, and all committee members' names. All graduate students and faculty are invited to attend an oral presentation of the thesis research, which should be no more than 45 minutes in length, which includes time for audience questions.

Aside from requiring that the Chair be present at the student defenses, the Department of Nutrition follows the Graduate Catalog's policy on Remote Participation in Oral Defense.

The student must pass the oral examination/defense of their thesis work by the committee before the student can graduate with the MS degree (thesis option). The major professor must complete the

Report of Final Examination/Defense of Thesis/Project/Capstone- Master's or Specialist Degree and obtain electronic or original signatures from the committee. The major advisor or another departmental representative must submit the form to the Graduate School before the thesis or final examination submission deadline.

An electronic copy of the approved form of the thesis must be submitted to TRACE and accepted by the Graduate School on behalf of the Graduate Council. Each thesis must be accompanied by the Thesis/Dissertation Approval Form. In addition, the students should either make plans with the major advisor for writing and publishing of their thesis research, be prepared to submit, or have submitted the manuscript for publication in a professional research journal.

The thesis itself is a 2-part written document that includes in the minimum: 1) detailed literature review as a foundation for the study, which is an updated version of Chapter 1 of the thesis proposal; 2) at least 1 manuscript expected for submission, submitted, in press, or published. The committee may request additional components (expanded methods appendix). The thesis must be distributed to all committee members at least 2 weeks prior to the oral thesis defense.

Project Option without Comprehensive Exam

Project Development

BS/MS Degree students in the 5-year program in BNS who pursue the Project without Comprehensive Exam option must obtain commitment from a BNS faculty member, at the rank of Assistant Professor or higher, to be their major professor and chair their graduate committee after they have completed at least 90 credit hours of the 120 credit hours of coursework required for the BS degree. The full committee ***must be formed before completion of Term 7*** in the BS program. During Term 8 of the BS program, students will follow the same processes as the MS Degree described below.

MS Degree students in BNS who pursue the Project without Comprehensive Exam option should work with their major professor to form their committee ***within the first four weeks of their first semester***. During the first semester of graduate study, students will work closely with their major professor and their committee, as appropriate, to develop a project, which typically is a literature review, a short-term research project, or another scholarly endeavor. After the project has been determined, the student will email a synopsis to all committee members for their approval. The committee will email their approval or concerns, if not approved, within two weeks of receiving the email. If not approved, the student will address concerns and resubmit the revised synopsis for approval. When approved, the student will work closely with their major professor to complete the project at least four weeks prior to the Report of Final Examination deadline in the term in which they plan to graduate. Upon completion of the project, the student will email the project outcome(s) to their committee members and will find a one-and-one-half-hour time block that works for all committee members in order to present their final project.

Project Presentation: The student will work with departmental administrative staff to book a room for the presentation. The student will present their project to their committee and other faculty and students in the Department of Nutrition at least one week prior to the Report of Final Examination deadline. An announcement, using the project defense announcement template available on the Nutrition Graduate Program Canvas site, to develop their announcement. This should be sent to the Department's Director of Graduate Studies two weeks in advance of the project presentation. The

email announcement should contain the project title, date, time, and place of the presentation, and all committee members' names. The project presentation should be no longer than 45 minutes in length, which includes time for audience questions. During the last portion of the one-and-one-half-hour block, the audience, except the committee, will leave so that the committee may ask the student additional questions, as necessary, and determine if the student's project earned a passing result.

If students do not complete their projects prior to coursework completion, they must enroll in at least one hour of NUTR 548 or 549.

Before the student can graduate with the MS degree (project option, without comprehensive exam), the student's project must receive a passing result from all committee members. The major professor will complete the Report of Final Examination/Defense of Thesis/Project/Capstone- Master's or Specialist Degree and obtain electronic or original signatures from the other committee members. The major advisor or another departmental representative must submit the form to the Graduate School before the submission deadline.

Coursework Only without Comprehensive Exam Option

MS students who pursue the Coursework Only Without Comprehensive Exam option (CND students, and relevant CN students) will complete the required coursework for the MS degree and will complete a required capstone experience in NUTR 520. The Director of the ACEND-accredited Graduate Program in Nutrition and Dietetics serves as the major professor for all CND students. Students in the CN concentration must obtain commitment from a faculty member in their concentration, at the rank of Assistant Professor or higher, to be their major professor. The student's major professor and the Director of Graduate Studies will sign the Admission to Candidacy Masters or Specialist Degree (Course-Only, No Comprehensive Exam) form; thus, no committee is formed for this option.

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Major advisor: The director of the ACEND-accredited Graduate Program (GP) in Nutrition and Dietetics serves as major advisor for all students in the concentration. As this concentration is approved as a coursework-only option, students all take the same coursework to complete degree requirements and there is not a committee. The required capstone experience is completed by all students within NUTR 520. The director of the GP and the Director of Graduate Studies will sign the Admission to Candidacy Masters or Specialist Degree (Course-Only, No Comprehensive Exam) form; thus, no committee is formed for this option.

PhD

Doctoral Committee: For general university requirements regarding who is eligible to serve on a PhD committee, see the Graduate School's Guidelines for PhD Committee Service. During the first semester in the doctoral program, or as soon as the topic area for the doctoral work has been identified, a doctoral student should discuss potential committee members with their major advisor.

By the beginning of the second year, the student should select potential faculty to serve on their doctoral committee. The student should meet with the potential faculty to discuss the proposed research project area to see if they are willing to serve on the committee. Prior to or at the initial

meeting to plan the student's program of study (see below), the doctoral student should obtain signatures from all their doctoral committee on the Graduate School's PhD Committee Form. Once all signatures are obtained on the PhD Committee form, it is submitted to the Department of Nutrition for approval by the Department Head. If approved by the Department Head, the Department of Nutrition Director of Graduate Studies submits the form to the Graduate School for final approval.

The Revise PhD Committee Form and similar procedures are used for revision of a doctoral committee. Only the graduate student can initiate a revision to the doctoral committee. However, changes should be discussed with the major advisor prior to initiating the changes. Committees can only be revised due to extenuating circumstances, i.e., a committee member leaves the University, research topic area changes and a committee member does not have expertise in the new area, the committee member can no longer serve on the committee due to unforeseen circumstances, etc.

Committee Membership:

- The committee must have at least 4 members.
- At least 2 committee members must be UT tenured or tenure-track faculty members.
- At least one committee member must be from outside of the student's department/interdisciplinary program. This external member can be from outside UT.
- UT tenured or tenure-track faculty without a doctoral degree and other experts in the field may serve on PhD committees with department head approval.
- Emeritus faculty can serve on committees on which they are serving in that capacity at the time of retirement

Requirements for Committee Chairs:

- Committee chairs must hold a doctoral degree.
- UT tenured, tenure-track, and joint faculty holding a doctoral degree may chair PhD committees.
- In cases when a department head believes an exception to the above is needed, the department head may appeal to the Dean of the Graduate School.
- The chair is typically from the student's department/interdisciplinary program, but department heads can make exceptions.
- UT employees holding a non-tenure track assistant professor, associate professor or professor title may co-chair committees if their appointment is within the student's major. (The other co-chair must be a UT tenured, tenure- track or joint faculty member.)
- Emeritus faculty can chair committees on which they are serving in that capacity at the time of retirement

Doctoral Coursework Requirements: A minimum of 24 hours of graduate coursework, beyond the master's degree, is required. A minimum of 12 of these 24 hours must be graded A-F. Exceptionally well-prepared students with demonstrated superior achievement may enter upon completion of the baccalaureate degree, in which case a minimum of 48 hours of graduate coursework beyond the baccalaureate degree is required. A minimum of 30 of these 48 hours must be graded A-F.

Comprehensive Exam

Background: The preparation for and completion of the comprehensive exam are designed to be, in part, a learning experience that contributes to the professional development of the student as they enter PhD candidacy. It provides the student an opportunity to integrate information and knowledge to independently conceptualize a research design and to evaluate their ability to search and appraise the literature, identify gap(s), develop a research question, and detail the methodology needed to answer the research question.

Logistics: The doctoral comprehensive exam, which consists of a preproposal, proposal, and oral examination, is given after all coursework for the degree has been completed or in the semester in which coursework will be completed, and before defending the dissertation proposal; this is typically before the start of the third year of doctoral work. The comprehensive examination must be passed at least one semester before graduation (not including semester of graduation). The student should enroll in NUTR 600 during the semester they will take the exam.

In the student's next to last semester of coursework or at least within the first two weeks of the semester in which the student is completing all required coursework, the student is responsible for initiating the scheduling of their comprehensive exam by emailing their major advisor with a written request. The major advisor must respond to the student's formal written request to take the comprehensive examination within 10 days of receipt of the request.

For the comprehensive exam, all PhD students will be asked to write a preproposal, a hypothetical proposal, and participate in an oral examination. The student's committee will determine the proposal style, depending upon the student's career goals. Most proposals will be written in styles required by the National Institutes of Health (NIH) - Writing Tips or United States Department of Agriculture's (USDA's) Agriculture and Food Research Initiative (AFRI). In the minimum, the proposal should include the justification of a research question based upon a synopsis of peer-reviewed literature; a research question that addresses an identified gap in the synopsis; the rationale and significance, the methodology needed to test the research question; the rationale for decisions made regarding the selected methodology; a timeline for implementation of the methodology; and references. The methodology should be selected with no limitations on resources, and no budget will be requested with the proposal. The research question cannot be the dissertation topic, but it can be related to the dissertation topic.

Students should use the internet and other electronic resources for the preproposal and proposal, particularly in accessing peer-reviewed literature. The student cannot use any documents they have previously written for the preproposal or the proposal; nor can they obtain mentoring on the proposal from internal or external faculty, researchers, or other students. Citations are expected in the text with a reference list at the end of the documents, using AMA Manual of Style: A Guide for Authors and Editors. All documents should be submitted as Word documents and scanned for plagiarism prior to submission. Prior to sharing the document with committee members, the major advisor will scan the document again for plagiarism.

If concerns of plagiarism are raised, the major advisor will meet with the student to discuss the issues. If minimal plagiarism is detected, i.e., a missing citation or quotation marks, the student must revise the document to address plagiarized content. If substantial plagiarism is detected, i.e., using verbatim phrases or sentences without quotations and citations, the major advisor will follow the process outlined in the University of Tennessee's Student Code of Conduct, including reporting the incident to

the Office of Student Conduct and Community Standards (OSCCS) with a proposed academic penalty determined by the major advisor, Director of Graduate Studies, and the Department Head. The student cannot proceed with the comprehensive exam assignments until resolution from the OSCCS, which could result in dismissal from the Program. If complete plagiarism is detected, i.e., using artificial intelligence to generate the assignment, purchasing the assignment, using work from previous assignments, etc., the major advisor will report the incident to OSCCS and recommend dismissal from the Program. The student cannot proceed with comprehensive exam assignments until resolution from the OSCCS.

Although, under unusual circumstances, the committee reserves rights to alter the duration allowed for completion of the written comprehensive exam, typically, students will be given 1 week to complete the preproposal assignment and 6 weeks to complete the hypothetical proposal. Comprehensive exam and faculty response due dates will be set by the major advisor and emailed to the student and all committee members 1 week prior to assignment of the preproposal; 11:59 pm is the default due date for all comprehensive exam assignments and faculty responses.

Comprehensive Exam Assignments

Preproposal: The first assignment of the comprehensive exam is writing and submitting a 2-page preproposal, which includes 1) a summary statement, which is a concise paragraph of the research topic and how it will be addressed, 2) significance/relevance of the research topic, 3) research question, 4) a synopsis of the most relevant literature, 5) an overview of the proposed research design, and 6) a reference list of 5-7 relevant peer-reviewed articles published in the last five years. The pre-proposal is due 1 week after the assigned date. Typically, assigned on a Monday and due the following Monday at 11:59 pm.

The student's committee will provide input on the preproposal as: 1) meets expectations, 2) needs revisions, or 3) does not meet expectations. Committee members will send their feedback to the major advisor who will collate the responses and feedback; the major advisor will email the committee' decision and feedback, with all committee members copied. If revisions are required, the student will have 1 week to make the revisions and resubmit. If any committee member concludes that the preproposal does not meet expectations, the major advisor is responsible for convening a meeting with all committee members within two weeks to determine if the student will need to make major revisions or begin the process again with a new topic. If the student's second submission does not meet expectations, the committee will meet to determine the next steps for the student, which may include additional coursework or research experience, but may include dismissal from the Program.

Proposal: After the preproposal is approved, the 6-week proposal assignment begins. The student will be required to follow the format (e.g. NIH R01, NIH R21, USDA NIFA/AFRI, etc) provided to them by their major advisor and must meet the deadline delineated in the comprehensive exam schedule set forth by their major advisor. Although clarifying questions may be asked of the major advisor and/or committee members, no questions related to content or to methodologies may be asked by the student. The student must submit the proposal as a Word document to the major advisor and committee by 11:59 pm on the due date.

Oral Examination: The student is responsible for scheduling the oral examination, which should be at least two-hours long, by sending a scheduling poll as outlined in the examination schedule. The oral

examination must be convened within two weeks of the proposal due date. Typically, the poll is sent the first week of the comprehensive exam period or before. The student is responsible for finding a suitable date and securing a room for the meeting by emailing an administrative assistant in the Department. The oral comprehensive exam provides the committee with an opportunity to clarify and probe into any information contained in the student's proposal and/or the student's knowledge and understanding of related information. The student will be asked to leave the room for committee deliberations on the examination outcome. After deliberations, the major advisor will ask the student to return to provide the examination outcome.

Decisions can include: 1) pass all comprehensive exam assignments; 2) rewrite the proposal, but do not retake the oral examination; 3) retake the oral examination, but do not rewrite the proposal; 4) rewrite a specific portion or portions of the proposal, but do not retake the oral examination; or 5) fail the comprehensive exam, including the proposal component and the oral examination. If the student fails any portion of the comprehensive exam, they will have only 1 additional opportunity for a second comprehensive exam in the following semester. If the second comprehensive exam is failed, the student will be dismissed from the Program. If the student opted for a master's bypass, they would be able to finish the required coursework for the master's degree and complete a thesis project or comprehensive exam to graduate with a Master of Science degree.

Dissertation Proposal: The dissertation proposal consists of a written and an oral component. The written component consists of a 2-part written document that includes: 1) detailed literature review as a foundation for the study; and 2) the proposed methods for the dissertation research. An oral proposal hearing is designed to evaluate the proposal and guide the research process. This is to be scheduled after successful completion of the Comprehensive Examination (above). It is the student's responsibility to find a date and time that works for all committee members and then to secure a room for the proposal with departmental administrative staff. At least 2-weeks in advance of the proposal hearing, it is the student's responsibility to have the written dissertation proposal submitted to all committee members. It is also the student's responsibility to use the relevant announcement template provided on the Nutrition Graduate Program Canvas site, to provide details about their proposal hearing to the Director of Graduate Studies, so it can be forwarded to all faculty and graduate students in the Department of Nutrition. At the proposal hearing, the student presents the proposed research as an oral presentation to the student's committee members, other Department of Nutrition faculty and graduate students for 25-30 minutes with 10-15 minutes for questions. Upon conclusion of the presentation, invited faculty and graduate students are allowed to ask questions about the proposed research. Upon conclusion of this question-and-answer period, the invited faculty and graduate students are requested to leave the proposal hearing; then the remainder of the hearing is conducted in a closed session with the student and their committee members. In this closed session, committee members engage with the student in further questions about the proposed research. The purpose of this hearing is to help the student refine the proposed research and to understand how to proceed further. Specifically, upon conclusion of the proposal hearing the student's graduate committee members will make a recommendation from any of the following options: 1) conduct the research as proposed; 2) conduct the research with specific modifications as identified by the committee; 3) re-write the proposal to address significant research concerns the committee identified during the proposal hearing; or 4) write a new proposal.

Dissertation: Students pursuing this degree are required to have at least 24 credits of dissertation research and dissertation completion. The dissertation is a written account of original research conducted by the doctoral student under the direction of their major advisor and their graduate committee. It serves as the culminating experience for doctoral students. The student research topic typically falls in the major advisor's research interest area, which can be found under "Faculty Directing Graduate Research and Research Interest". Doctoral students are required to enroll in NUTR 600 (minimum 3 hours) continuously from the time the doctoral research proposal is approved, admission to candidacy is accepted, or enrollment in NUTR 600 is begun, whichever comes first, including the semester in which the dissertation is accepted by the Graduate School. Leaves of absence for no more than 6 semesters may be granted under certain circumstances. All doctoral students are required to complete a minimum of 24 credit hours of NUTR 600.

The dissertation must satisfy University requirements as explained in the Graduate School's Theses and Dissertations website, and it must be approved by the graduate committee and the Graduate School Thesis/Dissertation Consultant. The complete dissertation, in a form approved by the major advisor, shall be distributed by the student to all committee members ***at least two weeks*** before the date of the final oral examination/defense.

By the beginning of the semester in which the student plans to defend the dissertation, the student must submit a preliminary draft of the dissertation online in TRACE for review by the Coordinator of Student Services. Preliminary drafts do not need to be complete. Failure to submit a preliminary draft by the deadline may result in the dissertation not being reviewed prior to the final deadline for acceptance in TRACE. For instructions on submitting the dissertation, please visit the submission page. For questions about the submission process, please contact thesis@utk.edu.

Manuscripts: It is recommended that before graduation, students should either have submitted, be prepared to submit a manuscript, or make plans with the major advisor for the writing and publishing of research paper(s) on the dissertation research work. A primary journal(s) should be selected to which the publication(s) will be submitted as well as one or two alternate journals. The major advisor will be a co-author and approve the paper(s) prior to submission to the journal. The plans should include a schedule with target dates for writing and submitting the paper(s). When possible, plans also should be developed by the student and major advisor for submission of paper(s) for presentation at national professional association meeting(s).

Dissertation Defense: Each doctoral student must pass an oral examination after completion of their coursework, research, and dissertation. The examination is administered by the student's entire committee and must be scheduled at least two weeks before the defense deadline published by the Graduate School. The dissertation defense should be scheduled for a minimum of 2 hours. The purpose of the oral examination is to evaluate the student's knowledge in the areas of their major and related areas as the student's committee specifies. The date of the examination is also announced publicly by the Department. At least two weeks prior to the date of the scheduled defense, using the relevant announcement template provided on the Nutrition Graduate Program Canvas site, the doctoral student will send an announcement of their defense hearing to the Director of Graduate Studies who will then forward this announcement to the College's email distribution list.

At the defense hearing, the student presents the dissertation to the student's committee members, other Department faculty and graduate students, and other attending faculty and students from the

College and the University. The presentation should be no more than 45 minutes in length, which includes time for audience questions. Upon conclusion of this question-and-answer period, the invited faculty and graduate students are requested to leave the defense hearing; then, the remainder of the hearing is conducted between the student and their committee members. In this closed session, committee members engage with the student in further questions about the dissertation. Specifically, upon conclusion of the defense hearing the student's graduate committee members will make a recommendation from the following options: 1) Pass – submit dissertation as is; 2) Pass – submit dissertation with revisions recommended by committee and reviewed by main advisor only; 3) Rewrite the dissertation to address significant concerns the committee identified in the defense hearing and repeat defense hearing with committee members only; or 4) Fail. Students should consult the Graduate School website to ensure all proper forms are brought to the defense.

Aside from requiring that the Chair be present at the student defenses, the Department of Nutrition follows the Graduate Catalog's policy on Remote Participation in Oral Defense.

The student must pass the oral examination/defense of their dissertation work by the committee before the student can graduate with the PhD degree. The student must complete the Report of Final Examination/Defense of Thesis/Project/Capstone- Master's or Specialist Degree and obtain electronic or original signatures from the committee. The major advisor or another departmental representative must submit the form to the Graduate School before the dissertation or final examination submission deadline.

An electronic copy of the approved form of the dissertation must be submitted to TRACE and accepted by the Graduate School on behalf of the Graduate Council. Each dissertation must be accompanied by the Thesis/Dissertation Approval Form.

The dissertation itself is a 2-part written document that includes in the minimum: 1) detailed literature review as a foundation for the study, which is an updated version of Chapter 1 of the dissertation proposal; 2) at least 1 manuscript expected for submission, submitted, in press, or published. The committee may request additional components (expanded methods appendix). The dissertation must be distributed by the student to all committee members at least 2 weeks prior to the oral dissertation defense.

NUTRITION GRADUATE PROGRAMS

BIOMEDICAL NUTRITION SCIENCE (BNS)

Research in the BNS program area is directed towards optimizing diet for the prevention and management of chronic diseases and individualizing nutritional approaches to compensate for specific genetic or inter-individual differences in cellular function, resulting in "tailoring" based upon genetic profile(s). The mission of the BNS concentration is to promote an understanding of the relationship between nutrition and disease, through conducting basic nutrition science research. Our program's goals are to prepare students for excellent careers and professional opportunities in the applied, industrial, research, and academic health sectors. As such, this program concentrates on:

- Defining the molecular basis of diet-disease relationships;
- Identifying novel genes and molecular pathways involved in chronic diseases, resulting in the development of novel intervention targets;
- Determining the effects of dietary patterns and/or specific nutrients on gene expression and function; and
- Determining the effects of genotype on individual nutritional needs.

At the graduate level, the BNS concentration offers the following degree options:

- MS (thesis option or project without comprehensive examination option)
- PhD

BS/MS Degree: Students in the BNS accelerated degree program can choose from a project or a thesis option, based on their original research. Those who choose the thesis option will begin working on their research project no later than the beginning of their senior year of undergraduate studies by enrolling in NUTR 493 and/or NUTR 499. For each student in the program, a graduate advisory committee composed of a minimum of three faculty members must be established before the Fall semester Senior year. More information about the application process can be found in both the undergraduate and the graduate catalog.

MS Degree in Nutrition: BNS Concentration

Thesis Option: Master's students in the BNS program should discuss with their major advisor the thesis option. In general, students will be required to present and get the research proposal approved by their committee during the thesis proposal hearing and write a thesis on their research project. In some cases, the research project may need to get their proposed research approved by the Institutional Review Board, if the research involves human subjects, or the University's Institution Animal Care and Use Committee, if the research involves animals. Then the student will carry out the proposed study, write the thesis, and present the study results at the thesis defense. See **Table 3** for specific requirements.

Project Option without comprehensive exam: In MS Project option without comprehensive exam, the student's major advisor and two additional faculty members will assist the student in planning a project appropriate to the student's goals and in compliance with departmental and Graduate School

policies. The project may include literature reviews or other scholarly endeavors approved by their committee. See **Table 3** for specific requirements.

Table 3. Requirements for BNS MS Programs

MS Thesis Option[1]	MS Project Option[1]
NUTR 510 – Applied Human Nutrition (3)	NUTR 510 – Applied Human Nutrition (3)
NUTR 543[2] – Research Methods (3)	NUTR 543[2] – Research Methods I (3)
NUTR 610 – Vitamins and Minerals in Human Health (3)	NUTR 548 – Directed Study in Nutrition (3)
Graduate level statistics (3)	NUTR 610 – Vitamins and Minerals in Human Health (3)
NUTR 500 – Thesis (minimum 6)	BCMB 440[2] – General Physiology (3) or ANSC 520 – Animal Physiology (3-4 credit hours)
BCMB 440[2] – General Physiology or ANSC 520 – Animal Physiology (3-4 credit hours)	Graduate level statistics (3)
Other Courses[3] (8-9)	Other Courses[3] (12)

[1]In addition to the course work (30-31 credit hours required, depending on option), the student in the thesis program option must complete a thesis research project. A thesis proposal hearing is required prior to the beginning of the project. A thesis defense is required upon completion of the thesis. The student in the project option must complete a project, typically a literature review or other scholarly endeavors, as approved by their graduate advising committee.

[2]If necessary, appropriate substitutions for NUTR 543 and BCMB 440 can be taken, but must be approved by the graduate advising committee and the Director of Graduate Studies.

[3]Other Courses: Students may choose from the following list upon consulting with their graduate advising committee: NUTR 548 (variable credit hours), NUTR 549 (variable credit hours), NUTR 599 (3 credit hours), NUTR 618 (3 credit hours), NUTR 621 (3 credit hours), NUTR 626 (3 credit hours), NUTR 655 (3 credit hours), and any other NUTR coursework, as identified by their graduate advising committee and approved by the Departmental Director of Graduate Studies.

PhD Degree in Nutritional Sciences: BNS Concentration - PhD graduate students work closely with their major advisor and their graduate committee on an original, independent research project and completed dissertation. Doctoral study in the BNS concentration prepares the student for research and/or teaching positions in institutions of higher education, government, or industry. See **Table 4** and the current Graduate Catalog for overall University requirements.

Table 4. Requirements for BNS PhD

BNS PhD Required Coursework
NUTR 510 – Applied Human Nutrition (3)
*NUTR 543 – Research Methods (3)
NUTR 599 – Basic Training in Biomedical Research (3)
NUTR 610 – Vitamins and Minerals in Human Health (3)
NUTR 611 – Current Trends in Nutrition (3)
NUTR 621 – Physiological Basis for Diet and Disease (3)
NUTR 655 – Molecular Mechanisms and Signaling Pathways in Health and Disease (3)
An advanced research methods course that includes grant writing is required (2-3 credit hours)
Additional recommended courses at the graduate level to make up for any credit hour deficiencies as identified by faculty advisor and approved by the graduate advising committee and the Director of Graduate Studies; this may not apply to students who have completed a master's degree prior to beginning the doctoral program. The recommended courses are the following: • NUTR 626 – Life Course Nutrition (3) • BCMB 440 – General Physiology (3) • ANSC 520 – Animal Physiology (4) • BCMB 512 – Advanced Molecular Biology (3) • BCMB 524 – Computational Biology & Bioinformatics (3) • EPP 622 – Bioinformatics Applications (3)
Statistics (STAT), 6 graduate credit hours, or other appropriate statistics courses offered by other departments as identified by faculty advisor and approved by the graduate advising committee and the Director of Graduate Studies
NUTR 600 – Doctoral Research and Dissertation (24)

Additional Course Requirements
• At least 9 credit hours taken to fulfill requirements must be at the 600-level (exclusive of dissertation NUTR 600).
• A minimum of 24 credit hours of graduate coursework beyond the master's degree is required.
  ○ A minimum of 12 of these 24 credit hours must be graded A-F.
• Exceptionally well-prepared students with demonstrated superior achievement may enter upon completion of the baccalaureate degree, in which case a minimum of 48 credit hours of graduate coursework beyond the baccalaureate degree is required.
  ○ A minimum of 30 of these 48 credit hours must be graded A-F.

Non-Course Requirements • Successful completion of the comprehensive examination is required, as specified in the graduate handbook • Completion of an independent research project is required. • An open proposal hearing is required prior to beginning an independent research project. • An oral comprehensive examination is required upon completion of the dissertation.

*Appropriate substitutions for NUTR 543 or BCMB 440, if required, must be approved by the graduate advising committee and the Department Director of Graduate Studies.

THE COMMUNITY AND PUBLIC HEALTH NUTRITION (CPHN) PROGRAMS

COMMUNITY NUTRITION (CN) AND IMPLEMENTATION SCIENCE IN COMMUNITY NUTRITION (ISCN)

The Community and Public Health Nutrition (CPHN) program's mission is to promote an understanding of community and public health nutrition, including assessment, implementation, evaluation, and policy development for the health and well-being of individuals, families, and communities. The CPHN program's goals are as follows:

- Prepare community and public health nutrition leaders who are sensitive to the impact of culture and tradition in fulfilling nutrition needs of individuals, families, and communities, and, particularly, maternal and child populations.
- Provide nutrition research, instructional programs, and field experiences, that have a focus on community and public health nutrition, implementation science, and program evaluation.
- Integrate nutrition science, public health, and social/behavioral sciences across didactic and experiential curricula, research, community engagement, and service experiences to enhance the nutrition-related health of communities and the public.
- Enhance understanding of how social determinants influence nutrition-related health, and the importance of addressing structural issues to improve health.

Implementation Science considers how programs are implemented and evaluated. Students in the ISCN program study the methodologies and strategies that enable the adoption of evidence-based community nutrition research by nutrition practitioners and policymakers.

Community nutrition focuses on individual and interpersonal-level services, programs, and interventions that aim to improve health trajectories among individuals, families and/or priority groups in the community through changes in knowledge, self-efficacy, perceptions, and nutrition-related health behaviors.

Public health nutrition combines nutrition and public health evidence-based practices to develop programs and services and policy, systems, and environmental changes to improve health trajectories of communities and priority populations.

The CPHN Programs currently have the following degree options (though the 3rd, 4th, and 5th options are no longer enrolling students):

- BS/MS with a concentration in Community Nutrition (CN) (project without comprehensive exam option or course-only without comprehensive exam option);
- MS in Nutrition with a concentration in CN (thesis option or coursework only without comprehensive exam option);
- MS with a concentration in Public Health Nutrition (PHN) (thesis option or project option (includes a comprehensive examination);

- Dual MS-MPH, MS with a concentration in PHN and Master of Public Health (MPH) with a concentration in Community Health Education (CHE), Epidemiology (EPI), or Health Policy & Management (HPM);
- PhD in Nutritional Sciences with a concentration in Implementation Science in Community Nutrition (ISCN);
- PhD in Nutritional Sciences with a concentration in Community Nutrition (CN)

BS/MS Degree in CN: The CN BS/MS accelerated degree program is offered as a project without comprehensive exam option and course-only without comprehensive exam option. The project option should begin during students' undergraduate studies by enrolling in NUTR 493 with CPHN faculty. For each student in the program, a graduate committee composed of a minimum of three faculty members must be established before completion of Term 7, fall semester of the senior year. More information about the application process can be found in both the undergraduate and the graduate catalog.

MS in Nutrition: CN Concentration - A master's degree in Nutrition with the CN concentration from the University of Tennessee can lead to excellent careers and professional opportunities in the public, voluntary, and private health sectors. This degree prepares students to become experts in developing, implementing, and evaluating community nutrition programs. Students in this concentration will be trained in competencies needed to become a Certified Health Education Specialist (CHES) and to work in the community in a variety of roles, including as nutrition educators, WIC nutritionists, worksite health and wellness coaches, wellness program coordinators and settings that may include local and metropolitan health departments, community agencies, and in Extension programs, such as the Supplemental Nutrition Assistance Program Education Program (SNAP-Ed) or the Expanded Food and Nutrition Education Program (EFNEP). **Table 5** lists the requirements for the thesis option and for the coursework only without comprehensive exam option.

Table 5. Requirements for the CN MS Program – Thesis Option (33 credits) and Coursework only without Comprehensive Exam Option (30 credits)

CN MS Thesis	CN MS Coursework only w/out Comprehensive Exam
NUTR 500 – Thesis (6)	NUTR 503 – Community Nutrition Assessment (2)
NUTR 503 – Community Nutrition Assessment (2)	NUTR 504 – Community Nutrition Intervention and Evaluation (2)
NUTR 504 – Community Nutrition Intervention and Evaluation (2)	NUTR 507 – Introduction to Theories of Health Behavior Change (3)
NUTR 507 – Introduction to Theories of Health Behavior Change (3)	NUTR 510 – Applied Human Nutrition (3)
NUTR 510 – Applied Human Nutrition (3)	NUTR 514 – Advanced Community Nutrition Practicum (2)
NUTR 514 – Advanced Community Nutrition Practicum (2)	NUTR 520 – Data Analysis and Interpretation of Nutrition Outcomes (3)
NUTR 520 – Data Analysis and Interpretation of Nutrition Outcomes (3)	NUTR 540 – Public Policy in Action (3)
NUTR 540 – Public Policy in Action (3)	NUTR 543 – Research Methods (3)
NUTR 543 – Research Methods (3)	NUTR 626 – Life Course Nutrition (3)
NUTR 626 – Life Course Nutrition (3)	
Additional Course Requirements:	
Graduate level statistics course, 3 credit hours (recommended EDPY 577)	• Graduate level statistics course, 3 credit hours (recommended EDPY 577) • Elective, 3 graduate credit hours (recommend EDPY 533) • A required culminating experience is included within the NUTR 520 course
Non-Course Requirements:	
• Completion of a research project is required. • A proposal hearing is required prior to beginning the research project. • A thesis defense is required upon completion of the thesis.	A project, typically a review of the literature, is required for completion of the program.

PhD in Nutritional Sciences: ISCN Concentration (no longer enrolling new students) - PhD graduate students work closely with their major advisor and their graduate committee on an original, independent research project and completed dissertation. Doctoral study in the ISCN concentration prepares the student for research, teaching, and/or advanced-level practice in institutions of higher education, government, or the public and private sectors. See the current Graduate Catalog for overall University requirements. See **Table 8** for required coursework and non-coursework requirements.

Table 8. Requirements for ISCN Program

ISCN Required Coursework
NUTR 543 – Research Methods (3)
NUTR 624 – Public Health Nutrition Systems, Programs, and Services (3)
NUTR 626 – Life Course Nutrition (3)
NUTR 645 – Advanced Research Methods (2)
ESM 577 – Statistics in Applied Fields I (3) OR ESM 677 – Statistics in Applied Fields II
A minimum of 10 credits from the following list of approved electives or other courses approved by the graduate committee: • ESM 533 – Program Evaluation I (3) • ESM 560 – Evaluation Designs and Data Collection Methods (3) • KNS 535 – Health and Exercise Psychology (3) • KNS 635 – Physical Activity and Positive Health (3) • PUBH 650 – Dissemination and Implementation Science (3) • PUBH 656 – Comparative Theories in Health Behavior (3)
NUTR 600 – Doctoral Research and Dissertation (24)
Additional course at the graduate level to make up for any credit hour deficiencies (up to 24 credit hours) as identified by major advisor and approved by the Departmental Director of Graduate Studies; this may not apply to students who have completed a master's degree prior to beginning the Doctorate program.
Additional Course Requirements:

• At least 9 credit hours taken to fulfill requirements must be at the 600-level (exclusive of dissertation NUTR 600).
• A minimum of 24 credit hours of graduate coursework beyond the master's degree is required.
  ○ A minimum of 12 of these 24 credit hours must be graded A-F.
• Exceptionally well-prepared students with demonstrated superior achievement may enter upon completion of the baccalaureate degree, in which case a minimum of 48 credit hours of graduate coursework beyond the baccalaureate degree is required.
  ○ A minimum of 30 of these 48 credit hours must be graded A-F.

Non-Course Requirements:
• Completion of an independent research project is required. • An open proposal hearing is required prior to beginning the research project. • An oral comprehensive examination is required upon completion of the dissertation.

PhD in Nutritional Sciences: CN Concentration - PhD graduate students work closely with their major advisor and their graduate committee on an original, independent research project and completed dissertation. Doctoral study in the CN concentration prepares the student for research, teaching, and/or advanced-level practice in institutions of higher education, government, or the public and private sectors. See the current Graduate Catalog for overall University requirements. See **Table 9** for required coursework and non-coursework requirements.

Table 9. Requirements for CN Program (PhD)

PhD - CN Concentration - Required Coursework
NUTR 510 – Applied Human Nutrition (3)
NUTR 543 – Research Methods (3)
NUTR 610 – Vitamins and Minerals in Human Health (3)
NUTR 611 – Current Trends in Nutrition (3)
NUTR 624 – Public Health Nutrition Systems, Programs, and Services (3)
NUTR 626 – Life Course Nutrition (3)
An advanced research methods course that includes grant writing is required (2-3 credit hours)
Complete one (3 credit hours): • ESM 577 – Statistics in Applied Fields I (3) • ESM 677 – Statistics in Applied Fields II
Additional courses at the graduate level to make up for any credit hour deficiencies as identified by faculty advisor and approved by the Director of Graduate Studies; this may not apply to students who have completed a master's degree prior to beginning the doctoral program.
A minimum of 3 credit hours of electives approved by the students graduate committee.
NUTR 600 – Doctoral Research and Dissertation (24)
Additional Course Requirements:

• A minimum of 24 credit hours of graduate coursework beyond the master's degree is required.
  ○ A minimum of 12 of these 24 credit hours must be graded A-F.
• Exceptionally well-prepared students with demonstrated superior achievement may enter upon completion of the baccalaureate degree, in which case a minimum of 48 credit hours of graduate coursework beyond the baccalaureate degree is required.
  ○ A minimum of 30 of these 48 credit hours must be graded A-F.

Non-Course Requirements:
• Successful completion of the comprehensive examination is required, as specified in the graduate handbook. • An open proposal hearing is required prior to beginning an independent research project. • Completion of an independent research project is required. • An oral comprehensive examination is required upon completion of the dissertation.

CLINICAL NUTRITION AND DIETETICS (CND)

The Clinical Nutrition and Dietetics (CND) program concentration is the culmination of the ACEND-accredited Graduate Program in Nutrition and Dietetics (GP) that prepares graduates for careers in dietetics. The master's component of the program is a coursework only, non-thesis option, with a course-based capstone experience embedded within NUTR 520. The program integrates coursework with a minimum of 1,147 hours of embedded supervised experiential learning and is accredited to accept up to 20 students per year. Graduates are eligible to take the national credentialing examination to become Registered Dietitian Nutritionists (RDNs) and practice in a wide range of areas including general acute care practice with adults or children, specialty practice in diabetes, cancer, weight management and bariatrics, disordered eating, dialysis, sports nutrition, community nutrition, long-term care, management settings such as healthcare or higher education foodservice, and many others.

Students applying to or enrolled in the ACEND-accredited Graduate Program in Nutrition and Dietetics (Clinical Nutrition and Dietetics concentration) should refer to the Guide to ACEND-Accredited Nutrition and Dietetics Programs at The University of Tennessee regarding program-specific prerequisites and application procedures as well as policies and procedures specific to ACEND-accredited programs.

The mission of the ACEND-accredited Graduate Program in Nutrition and Dietetics (GP), which is the MS in CND, is to effectively integrate didactic and experiential learning in a program that culminates in a graduate degree that effectively prepares graduates for evidence-based nutrition and dietetics practice, practice-based research, and professional mentorship and leadership as RDNs in an interprofessional healthcare environment. Our program goals are as follows:

- Graduates will be prepared for effective evidence-based clinical nutrition and dietetics practice as credentialed Registered Dietitian Nutritionists.
- Graduates will be prepared to be effective members of an interprofessional healthcare team.
- Graduates will be prepared for mentoring and leadership roles in nutrition and dietetics.
- Graduates will be prepared to be active participants in practice-based research.

MS in Nutrition: CND Concentration: The MS degree with a concentration in CND is offered as an intensive coursework-only option with a course-based capstone experience embedded within NUTR 520. It is a two-year program that spans the senior year of undergraduate study followed by one year of full-time graduate study for those entering via the accelerated combined bachelor's/master's path. Alternatively, it can be completed in two years of graduate study by students entering the program from outside UT's undergraduate nutrition major with a concentration in dietetics. Courses are primarily face-to-face, and a majority are practicum-based, with students completing a minimum of 1,147 hours of supervised experiential learning throughout the program. These experiences are predominantly in clinical sites, including progressively independent experience in providing medical nutrition therapy through nutrition education and counseling to clients in River Valley Health clinics. Other major practicum experiences include hospital-based acute care, community and public health nutrition, and healthcare foodservice through various partnerships throughout the Knoxville area. Students also could focus on specialty practice as availability permits in areas including acute care

pediatrics, bariatrics, critical care, diabetes, dialysis, long-term care, disordered eating, food allergies, gastroenterology, oncology, and sports nutrition.

The CND concentration consists of 34 graduate credit hours beyond completion of program prerequisites and corequisites (see admissions information in the current graduate catalog). Students pursuing this degree will complete a research-related project as part of NUTR 520, which meets the course-based capstone requirement. Coursework for the graduate portion of the program is shown in **Table 10**.

Table 10. Requirements for the CND MS Program

CND MS Required Coursework
AGNR 480 – How to Feed the World (3)
NUTR 425 – Clinical Nutrition I Practicum (1)
NUTR 430 – Foodservice Management Practicum (1)
NUTR 503 – Community Nutrition Assessment (2)
NUTR 504 – Community Nutrition Intervention and Evaluation (2)
NUTR 506 – Clinical Nutrition II Practicum (2)
NUTR 513 – Community Nutrition Practicum (3)
NUTR 514 – Advanced Community Nutrition Practicum (2)
NUTR 516 – Clinical Practice Experience (4)
NUTR 520 – Data Analysis and Interpretation of Nutrition Outcomes (3) A required culminating experience is included within the NUTR 520 course
NUTR 525 – Clinical Nutrition III (2)
NUTR 526 – Clinical Nutrition Practicum III (3)
NUTR 527 – Advanced Clinical Practice and Mentorship (3)
NUTR 530 – Healthcare Foodservice Management (3)

STUDENT ASSOCIATION, HONOR SOCIETIES, AND PROFESSIONAL ORGANIZATIONS

STUDENT ASSOCIATION

Students are encouraged to join the Graduate Nutrition Student Association (GNSA) and at least one professional organization.

HONOR SOCIETIES

Graduate students may be eligible for one or more of the honor societies identified below (**Table 11**).

Table 11. Nutrition-Related Honor Societies

Society	Eligibility Criteria	Membership Process	Publications
Phi Kappa Phi	In upper 10% of candidates	Election by the membership for advanced degrees in college	Phi Kappa Phi FORUM
Sigma Xi	Evidence of research ability or potential	Nomination by member and recommendation by Admissions Committee and election by membership	American Scientist

PROFESSIONAL ORGANIZATIONS

Graduate students are encouraged to join at least one professional organization. Many of these organizations provide scholarships, travel funding, and other benefits to students (**Table 12**).

Table 12. Nutrition-Related Professional Organizations and Respective Journals

Organization Name	Common Name	Respective Journal(s)
Academy of Nutrition and Dietetics	*The Academy*	*Journal of the Academy of Nutrition and Dietetics (JAND)*
American Society for Parenteral and Enteral Nutrition	*ASPEN*	*Journal of Parenteral and Enteral Nutrition (JPEN)* *Nutrition in Clinical Practice (NCP)*
American College of Nutrition	*ACN*	*Journal of the American College of Nutrition (JACN)*
American Diabetes Association	*ADA*	*Diabetes; Diabetes Care*
American Public Health Association	*APHA*	*American Journal of Public Health (AJPH)*
American Society for Nutrition	*ASN*	*American Journal of Clinical Nutrition (AJCN);* *Journal of Nutrition (JN);*
International Society for Behavioral Nutrition and Physical Activity	*ISBNPA*	*The International Journal of Behavioral Nutrition and Physical Activity (IJBNPA)*
Society for Behavioral Medicine	*SBM*	*Annals of Behavioral Medicine* *Translational Behavioral Medicine*
Society for Nutrition Education and Behavior	*SNEB*	*Journal of Nutrition Education and Behavior (JNEB)*
The Obesity Society	*TOS*	*Obesity*

RESOURCES

General Student Resources	
College of Education, Health, and Human Sciences (CEHHS) website (cehhs.utk.edu/)	Office of Equal Opportunity & Accessibility (dae.utk.edu/eoa)
Coordinator of Student Services email (aka "Thesis/Dissertation Consultant")	Office of Graduate Admissions (gradschool.utk.edu/future-students/office-of-graduate-admissions/)
Counseling Center (studentlife.utk.edu/counselingcenter/)	Office of Innovative Technologies (oit.utk.edu)
	Office of Research, Innovation & Economic Development (ORIED) (research.utk.edu/oried/)
Graduate Catalog (tiny.utk.edu/grad-catalog)	Multicultural Student Life (studentlife.utk.edu/multicultural/)
Graduate School (gradschool.utk.edu)	Research Integrity & Assurance (research.utk.edu/research-integrity/)
Graduate School Forms (gradschool.utk.edu/forms-central)	The Pride Center (pridecenter.utk.edu)
Graduate Student Life (gradschool.utk.edu/graduate-student-life/)	Title IX website – Hosts annual Sexual Misconduct, Relationship Violence, and Stalking report (titleix.utk.edu/)
Graduate Student Senate (gss.utk.edu)	Student Conduct and Community Standards (studentlife.utk.edu/studentconduct/)
Graduation Deadlines (tiny.utk.edu/grad-deadlines)	Student obligations and appeals process (tiny.utk.edu/rights-obligations)
Nutrition Department website (cehhs.utk.edu/nutrition/)	Thesis and Dissertation Guidelines (gradschool.utk.edu/academics/graduation/theses-and-dissertations/)

International Students	
Center for International Education (international.utk.edu)	International House (ihouse.utk.edu)
Graduate Student Life (gradschool.utk.edu/graduate-student-life/)	ITA Testing Program (gradschool.utk.edu/future-students/office-of-graduate-admissions/ita-testing-program/)
Professional Development & Training	
Best Practices in Teaching Program (tiny.utk.edu/bpit)	Teaching and Learning Innovation (TLI) (teaching.utk.edu)
Center for Career Development & Academic Exploration (career.utk.edu)	UT CIRTL: Center for Integration of Research, Teaching, and Learning (teaching.utk.edu/utcirtl/)
Experience Learning (experiencelearning.utk.edu)	UT Libraries Information for Graduate Students (libguides.utk.edu/graduate)
Graduate and Professional Student Professional Development (gradschool.utk.edu/about-graduate-school/oiepe/gpspd/)	
Funding	
Costs and funding opportunities (gradschool.utk.edu/costs-and-funding/)	Graduate Student Senate Travel Awards (gss.utk.edu/gss-travel-awards/)
Financial Aid and Scholarships (onestop.utk.edu/scholarships-financial-aid/financial-aid/)	

REFERENCES

The Academy of Nutrition and Dietetics. Public Health and Community Nutrition. Accessed July 10, 2023.

https://www.eatrightpro.org/practice/practice-resources/public-health-and-community.

APPENDIX

POTENTIAL ELECTIVE GRADUATE COURSES

ANSC 520 – Animal Physiology (4 Credit Hours) Major body systems and interrelationships: nervous, muscle, blood, cardiovascular, kidney, respiratory, gastrointestinal, and endocrine. Concepts of metabolism, temperature regulation, and acid-base balance. *Recommended Background: General undergraduate coursework in anatomy and physiology. Registration Restriction(s): Minimum student level – graduate or permission of instructor.*

ANSC 571 - Design and Analysis of Biological Research (3 Credit Hours) Experimental design and procedures; selection of experimental units; analysis and interpretation of data; statistical models and contrasts, analyses of variance: covariates, treatment arrangements, mean separation and regression. *Cross-listed: (Same as Plant Sciences 571 and School of Natural Resources (SNR) 571.) Recommended Background: 3 hours of statistics. Registration Restriction(s): Minimum student level – graduate or permission of instructor.*

ANSC 625 – Mammalian Endocrinology (3 Credit Hours) Different endocrine glands and hormones of the body; hormone types, receptors, and methods of action; hormone signaling axes involved in growth, metabolism, reproduction, thyroid function, calcium homeostasis, inflammation and immune response, stress, and salt/mineral balance; importance of proper endocrine function for health and productivity of mammals; and key disorders associated with altered endocrine function. Primary scientific literature will be used to illustrate different topics. Students will actively participate in discussions of relevant journal articles. *Recommended Background: Physiology and or Biochemistry*. *Registration Restriction(s): Minimum student level – graduate or permission of instructor.*

ANSC 650 – Animal Immune Physiology (3 Credit Hours) Interaction of the immune system with other physiological processes such as reproduction, nutrition, and endocrine that influence whole animal systems. *Recommended Background: Graduate physiology course. Registration Restriction(s): Minimum student level – graduate or permission of instructor.*

BCMB 412 - Molecular Biology and Genomics (4 Credit Hours) Nucleic acids structure and DNA technology. Mechanisms of cell division, replication, transcription, translation, splicing, recombination, DNA repair and transposition, chromosome organization, DNA-protein interaction in gene regulation, genomic imprinting, epigenetics, RNA interference and genome evolution. *(RE) Prerequisite(s): Biology 240. Comment(s): Intended for biology majors in BCMB concentration but also open to biology majors in other concentrations. UG students: this course satisfies BCMB 402 requirement for biology majors in the BCMB concentration.*

BCMB 419 - Cellular and Comparative Biochemistry Lab (3 Credit Hours) Experiments on protein structure, protein function, nucleic acids, and membranes/organelles using chromatography, protein purification, electrophoresis, immunochemical, and recombinant DNA methodologies. *Contact Hour Distribution: 1 hour lecture, 2 hour lab; (RE) Prerequisite(s): BCMB 401.*

BCMB 422 - Computational Biology and Bioinformatics (3 Credit Hours) An introduction to the cutting-edge tools and approaches biologists and clinicians use to extract information from the vast amounts of genomic and proteomic data becoming available. Students gain hands-on experience with

computational biology tools such as data mining, protein structure manipulation and prediction, interaction network analysis, DNA sequence analysis, gene function analysis, R studio for statistics and data visualization, and dimensionality reduction for large datasets. Students apply these tools to biomedical research questions in course projects. *Contact Hour Distribution: 2 hours lecture and 2 hours lab. Recommended Background: BIOL 240; BCMB 412. Comment(s): Helpful if students have taken or are taking BCMB 412 but not necessary. Registration Restriction(s): Minimum student level — junior. Registration Permission: Consent of instructor.*

BCMB 440 - General Physiology (3 Credit Hours) Principles of cellular and organ-system animal physiology. *Credit Restriction: Students who receive a grade of C or better in BCMB 230 may not subsequently receive credit for BCMB 440. (RE) Prerequisite(s): Biology 160-159 or equivalent. Comment(s): It is recommended that students complete Physics 221-222 before enrolling in this course.*

BCMB 511 - Advanced Protein Chemistry and Cellular Biology (3 Credit Hours) Will focus on cellular structure and function at molecular and supramolecular level in progression: protein structure and function; membrane structure and function; bioenergetics and membrane proteins. *Recommended Background: Prior knowledge of cell biology and biochemistry. Registration Permission: Consent of instructor.*

BCMB 512 - Advanced Molecular Biology (3 Credit Hours) Regulation of nucleic acid expression and protein activity. Nucleic acid structure and function; replication and repair of nucleic acids; gene expression; protein synthesis; post-translational protein modification; mitosis and meiosis; cell cycle and cell growth. *Recommended Background: Prior knowledge of molecular biology and biochemistry and/or consent of instructor.*

BCMB 515 - Experimental Techniques I (3 Credit Hours) Introduction to key experimental and computational methodologies and instrumentation in biochemistry, molecular biology and cell biology with a focus on experimental design and data analysis. Students will learn how to choose appropriate experimental and/or analytical approaches to biological problems; design cellular, molecular, biochemical, and genomics experiments with appropriate controls; interpret quantitative results with appropriate visualization and statistical analyses; understand potential pitfalls in experimental design and approaches to troubleshooting. Team-taught lecture/demonstration format. *Comment(s): Primarily for departmental graduate students.*

BCMB 530 - Experimental Design and Analysis (3 Credit Hours) Development of skills in strategies of experimental design and interpretation of experimental results. Critical discussion of research articles illustrating issues in experimental design. Preparation of grant proposal in standard format to be read and discussed by class and by panel of faculty expert in area of proposal. *Registration Permission: Consent of instructor.*

CEM 504 – Descriptive and Applied Epidemiology (3 Credit Hours) Principles of epidemiology as well as historic and modern applications to human and animal diseases. Host-agent relationships, measurement of disease frequency, disease monitoring and control in human and animal populations, field investigations, animal health economics and production.

CEM 506 – One Health (3 Credit Hours) Online course that will address the link between human, animal, and environmental health. Each online module focuses on some aspect of “One Health” and may include topics such as emergency preparedness, zoonotic diseases, antibiotic resistance and food

safety, responsible pet ownership and the human-animal bond, and the effects of climate on disease prevalence. Methods of intervention and problem solving such as research design, program evaluation, community education, and policy analysis are also incorporated. *Registration Restriction(s): for seniors or graduate students only.*

CEM 525 - Research Ethics for the Life Sciences (1 Credit Hours) How good research conduct and knowing the rules of science can enable success in life science research. Bioethics is not a focus. *Cross-listed: (Same as Animal Science (ANSC) 525 and Plant Science (PLSC) 525.) Contact Hour Distribution: 1 hour. Registration Restriction(s): Minimum student level – graduate, or permission of instructor.*

CEM 541 - Cellular and Molecular Basis of Disease (3 Credit Hours) Disease at the molecular level. Changes in molecular events in cells that lead to disease and occur as a result of disease. Correlation with clinical and pathological states. Systems covered: neurological, structural, respiratory, circulatory, metabolic, endocrine, reproductive, and immunological. *(DE) Prerequisite(s): Biochemistry and Cellular and Molecular Biology 419 or equivalent.*

CEM 544 – Cancer Cell Biology (3 Credit Hours) Comprehensive discussion of the major mechanisms of cancer initiation, promotion, and progression at the molecular, cellular, and tissue level. Discussion will focus on regulatory networks involved in growth control and tissue organization such as cell cycle, apoptosis, signaling pathways, angiogenesis, inflammation, evasion of immunity, and tumor microenvironment, amongst others. Learners will become familiar with experimental approaches, technology, and animal models that are used to study cancer pathogenesis, treatment, and prevention. *Recommended Background: Advanced biology, including cell biology, molecular biology, biochemistry, microbiology, or genetics.*

FDSC 410 - Food Chemistry (3 Credit Hours) Reactions of water, proteins, lipids, carbohydrates, minerals, enzymes, vitamins, and additives in foods. *(RE) Prerequisite(s): Chemistry 260.*

KNS 531 - Biomechanics (3 Credit Hours) Fundamental knowledge of 2D and 3D biomechanical principles and applications in kinematics and kinetics, anthropometric models, instrumentation, signal processing and noise reduction, and related topics. *Recommended Background: Undergraduate biomechanics course and Physics 221 or equivalent.*

KNS 532 - Exercise Physiology (3 Credit Hours) Physiology of human performance: acute and chronic effects of exercise on metabolic, cardiac, pulmonary, and skeletal systems. *Contact Hour Distribution: 2 hours and 1 lab. Recommended Background: Human physiology or general physiology course and a general chemistry course.*

KNS 535 – Health and Exercise Psychology (3 Credit Hours) Critical examination of various aspects of health and exercise psychology including the psychological benefits of exercise (e.g., increased well-being) as well as the psychological pitfalls of too much exercise (e.g., exercise addiction, overeating, disordered eating behavior etc.). *Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of the instructor. Minimum student level – graduate.*

KNS 635 – Physical Activity and Positive Health (3 Credit Hours) Review of clinical, epidemiological, and experimental evidence concerning relationship and effects of exercise on health-related components of fitness. *(RE) Prerequisite(s): 480 or 532 and 567 or consent of instructor. Recommended*

Background: Elementary statistics course. Registration Restriction(s): Minimum student level – graduate.

LFSC 515 – Introduction to Genome Science and Technology I (1 Credit Hours) Introduction to research in genome science and technology concentration. *Grading Restriction: Satisfactory/No Credit grading only.*

LFSC 517 – Genomics and Bioinformatics (3 Credit Hours) Fundamentals of a new scientific discipline based on sequencing genomes (entire DNA) of individual organisms. Goals, principles, and types of genome analysis are covered in a traditional lecture course. Computational tools for genome analysis (bioinformatics) are presented in both lecture and hands-on (computer-laboratory) settings. *Cross-listed: (Same as Life Sciences 517.) Credit Restriction: Students may not receive credit for both 480 and 540.*

LFSC 520 – Genome Science and Technology I (4 Credit Hours) Overview of genomics, advanced genetics principles.

LFSC 521 – Genome Science and Technology II (4 Credit Hours) Analytical technologies and special techniques.

LFSC 615 – Journal Club in Genome Science and Technology (1 Credit Hours) Reading and discussion based on current literature. *Grading Restriction: Satisfactory/No Credit grading only. Repeatability: May be repeated. Maximum 12 hours. Registration Restriction(s): Minimum student level – graduate.*

MICR 594 – Grant Writing (3 Credit Hours) Readings and description of scientific ethics and grant writing.

NUTR 548 – Directed Study in Nutrition (1-3 Credit Hours) Advanced study in nutrition. *Repeatability: May be repeated. Maximum 6 hours. Registration Permission: Consent of instructor.*

NUTR 549 – Special Topics (1-3 Credit Hours) Recent advances in nutrition or food systems administration. *Repeatability: May be repeated. Maximum 6 hours. Registration Permission: Consent of instructor.*

NUTR 602 – Advanced Topics in Nutrition Science (1-3 Credit Hours) Comprehensive individual study and group discussion of topics related to current problems in nutrition. *Repeatability: May be repeated. Maximum 12 hours. (RE) Prerequisite(s): 512 or consent of instructor. Registration Restriction(s): Minimum student level – graduate.*

NUTR 655 – Molecular Mechanisms and Signaling Pathways in Health and Disease (3 Credit Hours): Signal transduction pathways and mechanisms whereby mammalian cells sense and respond to nutritional factors in their environment and transduce the signals into different physiological and genetic outcomes under normal healthy or disease conditions. Students enrolled in this class will acquire basic knowledge in molecular mechanisms of several human metabolic and non-metabolic diseases including obesity, diabetes, inflammatory bowel disease, fibrosis, and cancer. *Registration Restriction(s): Minimum student level – graduate.*

PLSC 561 – Statistics for Biological Research (3 Credit Hours) Application of statistics to interpretation of biological research. Notation, descriptive statistics, probability, distributions, confidence intervals, t- and chi-square tests, analysis of variance, mean separation procedures, linear regression and

correlation. *Credit Restriction: Students may not receive credit for both PLSC 561 and PLSC 461. Registration Restriction(s): Minimum student level – graduate.*

PSYC 580 – Research Design (3 Credit Hours) Developing questions, hypotheses, and research designs for empirical investigation in psychology. *Registration Permission: Consent of instructor.*

PUBH 536 – Research Methods in Health (3 Credit Hours) Research design, basic quantitative and qualitative research techniques and ethical considerations. Development of research skills, data collection instruments, and problem identification for research topic.

PUBH 650 – Dissemination and Implementation Science (3 Credit Hours) Examine theories, models, and frameworks of D&I science while building practical skill in formulating a D&I project, weighing project design choices, and components of a compelling proposal to communities, partners, and funders.

STAT 537 – Statistics for Research I (3 Credit Hours) Principles and application of statistical methodology, data collection and organization for descriptive, predictive, and causal research. Probability and probability distributions, point and interval estimation, forming and testing hypotheses using parametric and nonparametric inference methods. Introduction to designed experiments, regression, and correlation. Use of statistical software required. *Recommended Background: 1 year of undergraduate mathematics and 1 undergraduate statistics course. Registration Restriction(s): Minimum student level – graduate.*

STAT 538 – Statistics for Research II, Regression Modeling (3 Credit Hours) Theory and applications of simple and multiple linear regression including interpretation, diagnostics, model selection, model building strategies, prediction, and fundamentals of causal inference. Logistic regression theory, model building, testing and interpretation for binary and binomial response variables are also presented. Use of statistical software required. *(RE) Prerequisite(s): 537 or equivalent. Registration Restriction(s): Minimum student level - graduate.*

SOWK 519 – Foundations of Social Work Research (3 Credit Hours) A required generalist course. Includes the concepts and skills underlying social work research, including basic research terminology, the value of research in social work practice, research ethics, research with minoritized populations, problem formulation and conceptualization, measurement, research designs, sampling, quantitative and qualitative data collection and analytic techniques. *Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate. Registration Permission: Non-MSSW students may register with permission of program director.*

Any changes or additions needed to this handbook should be directed to the Department Director of Graduate Studies.