TABLE OF CONTENTS

WELCOME FROM THE FACULTY ..................................................................................................................3
INTRODUCTION ........................................................................................................................................4
PURPOSE OF THE HANDBOOK ..................................................................................................................4
I. DEPARTMENT MISSION, VISION, AND CORE VALUES RELATED TO DIVERSITY ...............................5
II. GENERAL DUTIES AND RESPONSIBILITIES OF FACULTY AND ALL GRADUATE STUDENTS ..........6
III. FACULTY ...........................................................................................................................................7
IV. GENERAL POLICIES ..........................................................................................................................9
V. MASTER’S BYPASS ...............................................................................................................................16
VI. NUTRITION GRADUATE PROGRAMS .................................................................................................17
  BIOMEDICAL NUTRITION SCIENCE ...............................................................................................17
  CLINICAL NUTRITION and DIETETICS .......................................................................................18
  COMMUNITY NUTRITION ...............................................................................................................18
VII. STUDENT ASSOCIATION, HONOR SOCIETIES, AND PROFESSIONAL ORGANIZATIONS .............20
VIII. LINKS TO PERTINENT GRADUATE STUDENT WEB PAGES ......................................................22
IX. APPENDICES ....................................................................................................................................23
  1. Potential Elective Graduate Courses for Nutrition Graduate Students ...........................................23
  2. Policy for the Administration of Graduate Assistantships .............................................................28
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 values 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, clinical nutrition, and community and public health nutrition. In addition, we engage in our own research and policy efforts, and thus we recognize our responsibility to introduce graduate students to the highest circles of professionalism in the discipline, which includes scholarship, public involvement, and evidence-based applied practice.

We warmly welcome you to the Graduate Program in the Department of Nutrition at UT. This 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 which apply to your graduate school experience. Each concentration area has also developed a program-specific document which includes additional relevant policies and guidelines. These include the concentration-specific guide to Biomedical Nutrition Science, ACEND-accredited Nutrition and Dietetics Programs at the University of Tennessee (Clinical Nutrition and Dietetics concentration), and the Community and Public Health Nutrition Concentrations Handbook. These documents are also available on the Nutrition Department website.

The degree programs that are covered in this Handbook include the MS and PhD in Nutrition (with degree tracks in Biomedical Nutrition Science, Clinical Nutrition and Dietetics, and Public Health Nutrition/Community Nutrition) and the Dual MS-MPH degrees. 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 the major professor.

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 facilitate the process.
INTRODUCTION

This Graduate 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 nutrition 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, Healthand Human Sciences and UT. Because this Graduate Student Handbook (hereafter referred to as the Handbook) is revised annually, it contains information that is more current than the UT 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 professor.

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 University of Tennessee Graduate Catalog, Graduate Student Appeals, and Graduate Student Assistantships.

All issues related to graduate administration are overseen by the Departmental Director of Graduate Studies, Dr. Guoxun Chen. Graduate program administrative details are overseen by the Graduate Program Coordinator, Ms. Pam Cash. Specific questions related to Public Health Nutrition or Community Nutrition should be directed to the Director of the Public Health Nutrition Graduate Program, Dr. Marsha Spence. Specific questions related to Clinical Nutrition and Dietetics and 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. General concerns may also be directed to the Department Head, Dr. Brynn Voy.
I. DEPARTMENT MISSION, VISION, AND CORE VALUES RELATED TO DIVERSITY

A. General Mission: The Department of Nutrition seeks to promote an understanding of the science of nutrition for the enhancement of the physiological and social well-being of individuals, families, and communities. This is accomplished primarily through research and education.

B. Vision: Achieve national recognition in academic excellence as a leading research and graduate program which prepares professionals to assume leadership roles in nutrition sciences, dietetics, and public health nutrition.

C. Core Values:
   • supports the continuous quest for academic achievement through teaching, research, and service through collaboration among diverse faculty, staff, students, communities, families, and youth.
   • believes in the development of tomorrow’s leaders, who are culturally competent, represent an array of diverse populations, and can work collaboratively with underrepresented\(^1\) groups, upon entering the workforce.
   • believes that the classroom is a safe environment, which welcomes individuals from diverse backgrounds and promotes ideas and discourse around issues of diversity in which all ideas are respected, met with open-minds, and are void of preconceived notions.
   • is committed to fostering professionals who are dedicated to the elimination of health disparities\(^2\) through identifying quality preventive and treatment services and improving underrepresented populations’ access to enhanced education through student and faculty led research using University, community, and government resources for the benefit of the scientific community and as a means of positively affecting healthcare that will benefit society.

D. Nutrition Philosophy: Nutrition is the systematic study of the science of nutrition from the cellular level to the application of nutrition principles in policy development, clinical and community practice, and evaluation.

---

\(^1\) “Underrepresented groups refer to, but are not limited to, groups based on race, ethnicity, geographic location, gender, disability status, etc. who are underrepresented in a field of study.” Progress on the 2005-2010 National Plan for Maternal and Child Health Training (p.3). Maternal and Child Health Bureau. October 2010. Accessed on August 3, 2019. Available at: https://www.aucd.org/docs/lend/mchtraining_progress05-10_report.pdf.

\(^2\) Elimination of Health Disparities as defined by Healthy People 2030: “…a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.” Healthy People 2030. Accessed on July, 29, 2022.
II. GENERAL DUTIES AND RESPONSIBILITIES OF FACULTY AND ALL GRADUATE STUDENTS

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.
III. FACULTY

*Faculty Eligible to Direct Graduate Study & Research Interest Areas*

Department of Nutrition faculty members serve as major professors and/or on committees for graduate students. Faculty have a variety of research and outreach areas of interest. Table 1 provides a list of faculty who are eligible to direct graduate study, along with their contact information and research interests and/or outreach 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 Students & Research Interest Areas

<table>
<thead>
<tr>
<th>Faculty, Position, Contact Information</th>
<th>Research Interest Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmed Bettaieb, PhD* Assistant Professor 865-974-6267 <a href="mailto:abettaie@utk.edu">abettaie@utk.edu</a></td>
<td>Research in Dr. Bettaieb’s laboratory focuses on the molecular and genetic mechanisms contributing 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 aiming at reducing the overall burden of these diseases. This is achieved using cellular, biochemical, gene knockout and system biology approaches (for more information please visit the laboratory website).</td>
</tr>
<tr>
<td>Guoxun Chen, PhD* Associate Professor 865-974-6257 <a href="mailto:gchen6@utk.edu">gchen6@utk.edu</a></td>
<td>Both macronutrients and micronutrients contribute to the development of metabolic diseases such as obesity and diabetes. The long-term goal of my research is to understand the molecular mechanisms by which micronutrients such as vitamin A regulate glucose, lipid and protein metabolism at cell and whole-body levels. Currently, we use both in vivo (animals) and in vitro (cell lines and biochemical samples) models to study the roles of vitamin A in the modulation of insulin (a hormone) actions in the control of metabolism in the liver, muscle and adipose tissues and cells, and in the development of metabolic diseases.</td>
</tr>
<tr>
<td>Jiangang Chen, MD, MPH, PhD* Adjunct Associate Professor 865-974-5041 <a href="mailto:jchen38@utk.edu">jchen38@utk.edu</a></td>
<td>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 many hormone-responsive diseases, including prostate and breast cancers.</td>
</tr>
<tr>
<td>Sarah Colby, PhD, RDN* Associate Professor 865-974-6248 <a href="mailto:scolby1@utk.edu">scolby1@utk.edu</a></td>
<td>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).</td>
</tr>
<tr>
<td>Faculty, Position, Contact Information</td>
<td>Research Interest Areas</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-------------------------</td>
</tr>
</tbody>
</table>
| **Dallas Donohoe, PhD***  
Associate Professor  
865-974-6238  
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. |
| **Melissa Hansen-Petrik, PhD, RDN, LDN**  
Clinical Associate Professor  
865-974-6264  
phansen@utk.edu | Optimal educational approaches for training future clinical nutrition and dietetics professionals. |
| **Katie Kavanagh, PhD, RDN, LDN, CLC***  
Associate Professor  
865-974-6250  
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. |
| **Kathleen Price, PhD, RDN, LDN**  
Clinical Assistant Professor  
865-974-9764  
kprice34@utk.edu | Outcomes data collection in the clinical practice setting to determine effectiveness of medical nutrition therapy |
| **Hollie Raynor, PhD, RDN, LDN***  
Professor  
865-974-6259  
braynor@utk.edu | Lifestyle interventions, designed to improve eating and leisure-time 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  
mspence@utk.edu | School and community-based interventions to prevent childhood overweight/obesity and promote healthful environments using novel methods, i.e., positive youth development, peer leadership, coaching, and active parental engagement and advocacy training. Access to healthful foods and improving food security among maternal and child populations and on college campuses. |
| **Ling Zhao, MD, PhD***  
Professor  
865-974-1833  
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. |

*These faculty have permission to direct doctoral students*
IV. GENERAL POLICIES

Faculty, graduate students, and staff are accountable for the policies and procedures detailed in these documents.

Admission - General Procedure

University graduate student admission requirements can be found on the Office of Graduate Admissions website. Information regarding special admission categories, such as non-degree, conditional, probationary, or readmission, also can be found in the UT Graduate Catalog. Students applying to the Clinical Nutrition and Dietetics concentration (ACEND-accredited Graduate Program in Nutrition and Dietetics), the 5-year BS/MS program in Biomedical Nutrition Science concentration or 5-year BS/MS program in the Community Nutrition concentration should refer to the Nutrition Department Website regarding program-specific prerequisites and application procedures.

Orientations

Information on the University’s graduate student orientation can be found here. In addition, the Department of Nutrition hosts an orientation for all new graduate students prior to classes beginning each Fall semester. Programs may host concentration-specific orientations for new respective students around the same time. Further, all incoming graduate students are strongly encouraged to participate in the Interactions that Make a Difference: Increasing Cultural and Linguistic Awareness, Knowledge, and Skills workshop prior to classes beginning, in support of the Department’s commitment to linguistic competence and diversity.

Liability Insurance, Substance Abuse, & 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/research projects that involve direct contact with the public (i.e., concurrent or block field experiences, courses with service-learning components and/or practicum courses included in the accredited dietetics program) to have the following assurances prior to participation:

1. Liability insurance
2. Tennessee Bureau of Investigation background check
3. 10-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 Fall 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. 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.

**Initial Enrollment**

Upon arrival at UT, graduate students should report to the Graduate Program Coordinator, **Ms. Pam Cash**, to complete an information card for the Departmental file. The faculty advisor identified on the student’s letter of admission has been carefully selected based on 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 professor under most circumstances. If a student wishes to discuss a change with their major professor to change advisors or concentrations, 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.

1. Both the advisee and the major professor have responsibilities in the advising process. The responsibilities of the advisee are as follows:
   a. Contact the major professor to schedule an appointment prior to registration for classes for the subsequent semester.
   b. Consult the University registration webpage and the timetable of classes.
   c. Consult the University Graduate School webpage. This site provides information on procedures. Students have found the Graduation Information for Graduate Students and Steps to Graduation helpful.
   d. Notify the faculty advisor/major professor and the Graduate Program Coordinator of any change in address or telephone number.

2. Responsibilities of the major professor are as follows:
   a. Schedule advising appointments when contacted by the advisee.
   b. 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 and policies.
   c. Provide guidance to the advisee on selection of committee members.
   d. Assist the advisee in meeting Graduate School requirements and deadlines.
   e. Provide guidance in the development of a research project as appropriate for concentration and program.
   f. Coordinate written and/or oral examinations, as required by the specific concentration and programs in which the advisee is a candidate.
General Requirements for Completion of Degrees

For a complete description of minimal requirements, see the current Graduate Catalog for Degree Program Requirements. Additional academic policies and requirements can be found here.

Ethics and Integrity

The Department of Nutrition takes 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 and data are the property of UT and must not be removed from the University

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 the University of Tennessee. 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 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, 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 professor. Ms. Laura Clayton and Kristiana Hunt can help with both travel requests and arrangements in Concur.

Please follow the following steps for travel request, arrangement, and reimbursement:

Fill out and submit the “Nutrition Travel Request” form (See Appendix) to Ms. Clayton via lclayto3@utk.edu
1. Make Ms. Clayton and Hunt your delegates in Concur. (See Appendix for steps to delegate in Concur)
2. Ms. Clayton will work with you to book trips whenever possible.
3. Keep all your receipts while traveling.
4. When you return, give your receipts and a summary of your expenses to Ms. Clayton to enter in Concur.
5. She will enter your expenses in Concur.
6. You will then submit it to Concur once you are notified by Ms. Clayton.

Research Projects and Studies with 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](https://www.citiprogram.org). IRB training completed as classwork meets this requirement. 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 [IRB website](https://research.utah.edu/irb) regarding working with human subjects. This includes, for example, guidelines for use of the iMedRIS electronic review system and critical documents used in the IRB review process. 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](https://research.utah.edu/irb) for the Nutrition Department or CEHHS directly, and your major professor 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 within the [Policy on Programs with Minors](https://research.utah.edu/irb). Your major advisor will guide you through this process.

Research Projects and Studies with Animals

All research projects or studies that involve the use of animals must be reviewed by the University's [Institutional Animal Care and Use Committee (IACUC)](https://research.utah.edu/animals). There are no exemptions to this requirement. The UT IACUC training sign up and enrollment for occupational health program (OHP) can be found by logging in as UT Community at the IACUC site. Your faculty research advisor will guide you through this process.

Research Projects and Studies involving Human Cells, Infectious Agents, Recombinant DNA or Biological Fluids

These research projects and studies require approval of the [Biosafety Program](https://research.utah.edu/biosafety) as well as completion of specific biosafety training. More information can be found [here](https://research.utah.edu/biosafety). Your faculty research advisor will guide you through this process.
Research involving Radioactive Materials and/or Radiation Sources (including x-ray)

Research projects of this nature require approval and training from the Radiation Safety Department. 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 (IX. APPENDICES 2). 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 and tuition waiver, mandatory fee, health insurance (if at least a 25% appointment), and differential tuition, if applicable.

a. Graduate Teaching Assistants (GTA) and Their Responsibilities

Graduate Teaching Assistants are appointed for a one-semester term, with a performance review at the end of each semester, and with renewals possible as per the procedures outlined in “Application Procedure” in the next section. Note that the renewals are not guaranteed. GTAs without prior college teaching experience are required to participate in the GTA Orientation offered each fall by the Graduate School. Students appointed to teaching assistantships will receive information on the seminar from the Graduate School. GTAs assist with courses and are supervised by the faculty members who are responsible for the specific courses. A waiver of tuition and the maintenance fee plus payment of health insurance and a stipend are provided by the University and Department. However, some program fees and special course fees associated with enrollment are not covered by the GTA compensation. GTAs must maintain at least a B average and be full-time graduate students to retain eligibility for department-supported assistantships.

i. GTA Responsibilities - Students should discuss these responsibilities with the faculty in charge of their specific GTA position.

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
b. Graduate Research Assistants (GRA) and Their Responsibilities

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 Department Head when department funds are used) and contingent on sufficient sources of funding.

The primary functions of GRAs in research are as follows:

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

Graduate Research Assistants observe official University holidays. Depending on the funding source, the GRA’s tuition, maintenance fee, health insurance premium, and stipend are paid by the funding source. Students receiving a GRA offer should carefully review what is included in their offer letter.

**Assistantship Application Procedure**

The Departmental assistantship application priority deadline for GTA/GRA funding for the following academic year for new applicants to the graduate program is January 15. Students already enrolled in the graduate program who wish to apply for GTA/GRA funding or students who are already receiving financial assistance who want to apply for continued funding must complete the application for a GTA and a non-grant-funded GRA for current graduate students in Nutrition by December 15.

GTA/GRA awards are made by May. Late applications (applications received after the December 15 deadline (current students) or the January 15 deadline (new applicants) 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 faculty 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 March 1 for the following year and the process with current form can be found here: Scholarships | Office of Advising and Student Services (utk.edu).

General information on financial assistance is also available from the Cost and Funding from UT Graduate School. 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. The Graduate Record Examination (GRE) may be required by external funding sources but is not required for admission to departmental programs.

**Evaluation Procedure**

The evaluation procedure for funding awarded through the Department Graduate Assistantships is as follows:

a. Applications are reviewed by the departmental Graduate Committee.

b. The Graduate Committee meets to rank applicants for assistantships.

c. The Graduate Committee makes recommendations to the Department Head on allocations of assistantships.

d. Selected Graduate Assistantship recipients are contacted by the Graduate Student Coordinator (Ms. Pam Cash) by email to see if they remain interested in receiving the type of financial assistance for which they are offered.

e. 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.

**Alumni**

After completion of a degree, alumni are urged to notify the University, College, and Department of name, 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.
V. MASTER’S BYPASS

Master’s Bypass Procedures

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.

Master’s Bypass 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:

a) Satisfactory completion of all pre-requisite courses necessary for admission into themaster’s program with a B or better,

b) An undergraduate GPA of 3.5 or better upon completion of the bachelor’s degree,

c) Previous research experience in private or public settings.

Master’s Bypass Criteria and Procedures for Enrolled Master’s Students

Students who enter any nutrition graduate program as a master 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:

a) An average GPA of 3.5 or better after completion of at least 18 credit hours, excluding independent or directed study courses.

b) 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 professor, and cc’ing all committee members, the Director of Graduate Studies, and the Department Head. If a student is in the MS-MPHdual 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 (who, at this writing, is a member of the Biomedical Nutrition Science faculty), the Public Health Nutrition Program Director, 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 render 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.
VI. NUTRITION GRADUATE PROGRAMS

The Department’s graduate degrees at the Master and Doctoral levels can be completed with an emphasis in one of three concentrations:

Biomedical Nutrition Science (MS or PhD)

Those interested in biomedical nutrition sciences emphasize cellular and molecular laboratory-based approaches.

Clinical Nutrition and Dietetics (MS)

Those interested in clinical nutrition and dietetics complete over 1200 hours of supervised experiential learning through a series of introductory to advanced practicum courses in clinical nutrition, community nutrition, and foodservice management culminating in eligibility to take the national RDN credentialing exam.

Community Nutrition and Public Health Nutrition (MS or PhD)

Those interested in community and public health nutrition emphasize public health and social/behavioral sciences and education.

BIOMEDICAL NUTRITION SCIENCE

The Biomedical Nutrition Science (BNS) concentration focuses on the biochemical, cellular, genetic, and molecular basis of the role of diet in optimizing health and in preventing and treating chronic diseases, such as obesity, diabetes, cancer, and cardiovascular disease. 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.

Research in the BNS program area is directed towards optimizing diet for the prevention and management of the 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.
The Biomedical Nutrition Science concentration has the following degree options

- BS/MS in Biomedical Nutrition Science (BNS)
- MS in Biomedical Nutrition Science (BNS; thesis or project without comprehensive examination option)
- PhD in Biomedical Nutrition Science (BNS)

Students applying to or enrolled in the Nutrition Department’s Biomedical Nutrition Science concentration should refer to the *Guide to Biomedical Nutrition Science Graduate Program* regarding program-specific policies, procedures, and coursework.

CLINICAL NUTRITION and DIETETICS

The Clinical Nutrition and Dietetics (CND) program concentration in combination with undergraduate prerequisite coursework, meets ACEND accreditation requirements such that graduates earn a M.S. degree and are eligible to take the national credentialing examination to become Registered Dietitian Nutritionists (RDNs).

The mission of the Clinical Nutrition and Dietetics program concentration (CND), as the graduate degree component of an ACEND-accredited Graduate Program in Nutrition and Dietetics (GP), 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 to optimize the nutritional health of individuals, families and communities. Our program goals are as follows:

- The integrated didactic and experiential learning curriculum will prepare graduates for effective evidence-based clinical nutrition and dietetics practice as credentialed Registered Dietitian Nutritionists.
- The program will prepare graduates to be effective members of an interprofessional healthcare team.
- The program will prepare graduates for mentoring and leadership roles in nutrition and dietetics.

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.

COMMUNITY NUTRITION

The Community Nutrition program’s mission is to promote an understanding of community and public health nutrition, including assessment, implementation, policy development, and assurance, for the enrichment of the physiological and social well-being of individuals, families, and communities.
The Community Nutrition program’s goals are as follows:

- Prepare community and public health nutrition leaders who are sensitive to the impact of cultural diversity in fulfilling nutrition needs of individuals, families, and communities, and, particularly, maternal and child populations;
- Develop 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 and education across didactic and experiential curricula, research, community engagement, and service;
- Ensure excellence in education and training through evaluation of the curriculum, instructional quality, and concurrent and block field experiences at regular intervals;
- Expand cooperative relationships with federal, state, and local health agencies and the public and private sectors to foster public health nutrition research and program evaluation; and
- Provide and evaluate continuing education interventions for public health nutritionists and other professionals, including registered dietitian/nutritionists, community health education specialists, and maternal and child health personnel.

The Community Nutrition concentration has the following degree options:

- **MS/BS in community nutrition (CN; thesis or project option)**
- **MS-MPH Dual degree in public health nutrition and public health**
  - MS in PHN; thesis or project option; project option includes comprehensive examination
  - MPH in CHE, EPI, or HPM tracks; includes comprehensive exam)
- **MS in community nutrition (CN; project-only; no comprehensive examination)**
- **MS in public health nutrition (PHN; thesis or project options; project option includes comprehensive examination)**
- **PhD in community nutrition (Implementation Science in Community Nutrition; ISCN)**

All degree options in the Community Nutrition concentration have a focus on preparing students to become experts in developing, implementing, and evaluating community nutrition programs. Requirements, and sample timeline, for each degree option are described below.

Students applying to or enrolled in the Nutrition Department’s Community Nutrition concentration should refer to the Guide to Community Nutrition Graduate Program regarding program-specific policies, procedures, and coursework.
VII. STUDENT ASSOCIATION, HONOR SOCIETIES, AND PROFESSIONAL ORGANIZATIONS

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

B. Honor Societies
   Graduate students may be eligible for one or more of the honor societies identified below (Table 2).

<table>
<thead>
<tr>
<th>Society</th>
<th>Eligibility Criteria</th>
<th>Membership Process</th>
<th>Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phi Kappa Phi</td>
<td>In upper 10% of candidates</td>
<td>Election by the membership for advanced degrees in College</td>
<td>Phi Kappa PhiFORUM</td>
</tr>
<tr>
<td>Sigma Xi</td>
<td>Evidence of research ability or potential</td>
<td>Nomination by member and recommendation by Admissions Committee and election by membership</td>
<td>American Scientist</td>
</tr>
</tbody>
</table>

C. 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 3).

<table>
<thead>
<tr>
<th>Organization Name</th>
<th>Common name</th>
<th>Respective Journals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academy of Nutrition and Dietetics</td>
<td>The Academy</td>
<td>Journal of the Academy of Nutrition and Dietetics (JAND)</td>
</tr>
<tr>
<td>American Society for Parenteral and Enteral Nutrition</td>
<td>ASPEN</td>
<td>Journal of Parenteral and Enteral Nutrition (JPEN)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nutrition in Clinical Practice (NCP)</td>
</tr>
<tr>
<td>American College of Nutrition</td>
<td>ACN</td>
<td>Journal of the American College of Nutrition (JACN)</td>
</tr>
<tr>
<td>American Diabetes Association</td>
<td>ADA</td>
<td>Diabetes; Diabetes Care</td>
</tr>
<tr>
<td>American Public Health Association</td>
<td>APHA</td>
<td>American Journal of Public Health (AJPH)</td>
</tr>
<tr>
<td>American Society for Nutrition</td>
<td>ASN</td>
<td>American Journal of Clinical Nutrition (AJCN); Journal of Nutrition (JN); Nutrition in Clinical Practice (NCP)</td>
</tr>
<tr>
<td>Organization Name</td>
<td>Common name</td>
<td>Respective Journals</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>International Society for Behavioral Nutrition and</td>
<td>ISBNPA</td>
<td>The International Journal of Behavioral Nutrition and</td>
</tr>
<tr>
<td>Physical Activity</td>
<td></td>
<td>Physical Activity (IJBNPA)</td>
</tr>
<tr>
<td>Society for Behavioral Medicine</td>
<td>SBM</td>
<td>Annals of Behavioral Medicine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Translational Behavioral Medicine</td>
</tr>
<tr>
<td>Society for Nutrition Education and Behavior</td>
<td>SNEB</td>
<td>Journal of Nutrition Education and Behavior (JNEB)</td>
</tr>
<tr>
<td>The Obesity Society</td>
<td>TOS</td>
<td>Obesity</td>
</tr>
</tbody>
</table>
## VIII. LINKS TO PERTINENT GRADUATE STUDENT WEB PAGES

<table>
<thead>
<tr>
<th>Student Resources</th>
<th>International Students</th>
<th>Professional Development &amp; Training</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>o College of Education, Health, and Human Sciences (CEHHS) website (<a href="https://cehhs.utk.edu/">https://cehhs.utk.edu/</a>)</td>
<td>o Center for International Education (international.utk.edu)</td>
<td></td>
<td>o Costs and funding opportunities (tiny.utk.edu/grad-funding)</td>
</tr>
<tr>
<td>o Counseling Center (counselingcenter.utk.edu)</td>
<td>o International House (ihouse.utk.edu)</td>
<td></td>
<td>o Financial Aid and Scholarships (onestop.utk.edu/financial-aid)</td>
</tr>
<tr>
<td>o Graduate Catalog (tiny.utk.edu/grad-catalog)</td>
<td>o ITA Testing Program (tiny.utk.edu/ita-testing)</td>
<td></td>
<td>o Graduate Student Senate Travel Awards (<a href="https://gss.utk.edu/gss-travel-awards/">https://gss.utk.edu/gss-travel-awards/</a>)</td>
</tr>
<tr>
<td>o Graduate School (gradschool.utk.edu)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Graduate School Forms (gradschool.utk.edu/forms-central)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Graduate Student Life (gradschool.utk.edu/graduate-student-life/)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Graduate Student Senate (gss.utk.edu)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Graduation Deadlines (tiny.utk.edu/grad-deadlines)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Nutrition Department website (<a href="https://nutrition.utk.edu/">https://nutrition.utk.edu/</a>)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Office of Equity and Diversity (oed.utk.edu)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Office of Graduate Admissions (gradschool.utk.edu/admissions)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Office of Graduate Admissions (gradschool.utk.edu/admissions)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Office of Information Technology (oit.utk.edu)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Office of Multicultural Student Life (multicultural.utk.edu)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Office of Research Integrity &amp; Assurance (research.utk.edu/compliance)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o The Pride Center (pridecenter.utk.edu)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Sexual Misconduct, Relationship Violence, and Stalking (sexualassault.utk.edu)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Student Conduct and Community Standards (studentconduct.utk.edu)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Student obligations and appeals process (tiny.utk.edu/rights-obligations)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Thesis/Dissertation Consultant (gradschool.utk.edu/thesesdissertations)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IX. APPENDICES

1. Potential Elective Graduate Courses for Nutrition Graduate Students

  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** (Associated Term: Spring): (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.)
  Recommended Background: 3 hours of statistics.

- **ANSC 620 – Mammalian Physiology** (Associated Term: ?) (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 625 – Mammalian Endocrinology** (Associated Term: ?) (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

- **ANSC 635 – Animal Immune Physiology** (Associated Term: Spring) (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** (Associated Term: Fall/Spring): (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.

- **BCMB 419 - Cellular and Comparative Biochemistry Lab** (Associated Term: Fall/Spring): (2 Credit Hours) Experiments with enzymes, nucleic acids, and membranes and organelles. Chromatography, kinetics, hybridization, sequencing, and immunocinical methods. (RE) **Prerequisite(s):** 401.

- **BCMB 422 - Computational Biology and Bioinformatics** (Associated Term: Spring): (3 Credit Hours) Topics include Internet biological resources and databases; bioinformatics tools of analyzing and comparing sequences for nucleic acids and proteins; computational structural biology tools for analyzing protein 3D structures and functions; application of computational tools in drug design. **Contact Hour Distribution:** 2 hours lecture and 2 hours lab. (RE) **Corequisite(s):** 401. **Registration Restriction(s):** Minimum student level — junior or graduate student. **Registration Permission:** Consent of instructor.

- **BCMB 440 - General Physiology** (Associated Term: Fall): (3 Credit Hours) Principles of cellular and organ-system animal physiology. (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** (Associated Term: Fall): (3 Credit Hours) Cellular structure and function at molecular and supramolecular level in progression: protein structure and function; membrane structure and function; bioenergetics and membrane proteins. (RE) **Corequisite(s):** 510. **Recommended Background:** Prior knowledge of cell biology and biochemistry. **Registration Permission:** Consent of instructor.

- **BCMB 512 - Advanced Molecular Biology** (Associated Term: Spring): (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** (Associated Term: Fall): (2-4 Credit Hours) Introduction to modern experimental methodology and instrumentation in biochemistry, molecular biology, and cell biology, including cell culture; spectrophotometry; microscopy; nucleic acid purification and analysis; protein assays; enzyme purification; electrophysiology; computer analysis of nucleic acid and protein sequences. Team-taught lecture/demonstration format. **Repeatability:** May be repeated. Maximum 6 hours. **Comment(s):** Primarily for departmental graduate students.

- **BCMB 530 - Experimental Design and Analysis** (Associated Term: Spring): (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** (Associate Term: Fall) *(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** (Associate Term: Spring) *(1 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** (Associated Term: Fall): *(1 Credit Hours)*

- **CEM 541 - Cellular and Molecular Basis of Disease** (Associated Term: Fall): *(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. Correlation with clinical pathological states. (DE) Prerequisite(s): Biochemistry and Cellular and Molecular Biology 419 or equivalent. Prerequisite(s): Biochemistry and Cellular and Molecular Biology 419 or equivalent.

- **CEM 544 – Cancer Cell Biology** (Associated Term: ) *(3 Credit Hours)* Comprehensive discussion of the major mechanisms of cancer initiation, promotion, and progression. Emphasizes experimental approaches, signaling pathways, technology, and animal models that are employed to study cancer. Students are expected to learn about common laboratory techniques in cancer research, apoptosis/cell cycle, and the following as they relate to cancer: alternative splicing, signaling pathways, inflammation, chemo/dietary prevention, animal models, pathobiology, PET/CT imaging, genetics, lipids, radio-oncology, metastasis/angiogenesis, and obesity. Recommended Background: Advanced biology, including cell biology, molecular biology, biochemistry, microbiology, or genetics.

- **FDSC 410 - Food Chemistry** - (Associated Term: Spring) *(3 Credit Hours)* Reaction of water, proteins, lipids, carbohydrates, minerals, enzymes, vitamins, and additives in foods. *(RE) Prerequisite(s): Chemistry 110 or 260.*

- **KNS 531 - Biomechanics** (Associated Term: Fall): *(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** (Associated Term: Fall): (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** (Associated Term: Spring): (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 565 - Advanced Physiology of Exercise** (Associated Term: Spring): (3 Credit Hours) Systematic study of skeletal muscle and metabolism related to acute exercise and physical training: lectures, discussions of major scientific reviews, and appropriate laboratory experiments. *(RE) Prerequisite(s):* 480 or 532.

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

• **LFSC 517 - Genomics and Bioinformatics** (Associated Term: Spring): (3 Credit Hours) Cross-listed: (Cross listed with Microbiology 540.) 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.

• **LFSC 520 - Genome Science and Technology I** (Associated Term: Fall): (4 Credit Hours) Overview of genomics, advanced genetics principles.

• **LFSC 521 - Genome Science and Technology II** (Associated Term: Spring): (4 Credit Hours) Analytical technologies and special techniques.

• **LFSC 615 - Journal Club in Genome Science and Technology** (Associated Term: Fall/Spring): (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** (Associated Term: Fall) (3 Credit Hours) Readings and description of scientific ethics and grant writing.

• **NUTR 548 - Directed Study in Nutrition** (Associated Term: Fall/Spring/Summer): (1-3 Credit Hours) Advanced study in nutrition. *Repeatability:* May be repeated. *Maximum 6 hours*
- **NUTR 549 - Special Topics** (Associated Term: Fall/Spring): (1-3 Credit Hours) Recent advances in nutrition or food systems administration. *Repeatability: May be repeated. Maximum 6 hours.*

- **NUTR 602 - Advanced Topics in Nutrition Science** (Associated Term: Spring): (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.*

- **NUTR 655 Molecular Mechanisms and Signaling Pathways in Health and Disease** (Associated Term: Fall): (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.

- **PLSC 561 Statistics for Biological Research** (Associate Term: Fall): (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.

- **PSYCH 580 – Research Design** (Associated Term: Fall) (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** (Associated Term: Fall) (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.

- **STAT 537 – Statistics for Research I** (Associated Term: Fall) (3 Credit Hours). Principles and application of statistical methodology, integrated with considerable use of major statistical computing system. Probability and probability distributions, forming and testing hypotheses using parametric and nonparametric inference methods. Matrix-based simple linear regression and correlation. *Credit Restriction: Students may not receive credit for both 537 and 531.*
  *Recommended Background: 1 year of undergraduate mathematics and 1 undergraduate statistics course.*

- **STAT 538 – Statistics for Research II** (Associated Term: Spring) (3 Credit Hours). General linear model as applied to multiple regression and analysis of variance. Diagnostic and influence techniques. One-way, factorial, blocking, and nested designs, preplanned versus post-hoc contrasts. Random factors and repeated measures. *(RE) Prerequisite(s): 537 or 532.*

- **SOWK 519 – Foundations of Social Work Research** (Associated Term: Spring) (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.

2. Policy for the Administration of Graduate Assistantships

Graduate Education and the Role of Assistantships

Graduate education is designed to transform the individual from a student to a knowledgeable practitioner or professional scholar. A well-conceived and executed program facilitates this transformation. Graduate assistantships can provide experiences to enhance professional development while working with a faculty mentor.

Note: In this section when graduate assistant is not capitalized (except in headings), reference is to all types of graduate assistantships at UT.

The graduate assistant is both a student and an employee. As a student, the graduate assistant is expected to perform well academically to retain the assistantship. The student should be counseled and evaluated regularly by a faculty mentor to help develop professional skills. As an employee, the graduate assistant is expected to meet teaching, research, and/or administrative obligations. The graduate assistant works under the supervision of experienced faculty and/or professional staff members and receives in-service training. In sum, the graduate assistant receives financial support for graduate study by contributing to the teaching and/or research mission of the university.

Graduate students placed on assistantship must be currently enrolled in graduate study as fully admitted degree-seeking students. Graduate students in non-degree or transient student status are not eligible to be placed on assistantship.

What is an Assistantship?

An assistantship is a financial award to a graduate student for part-time work in teaching, administration or research while pursuing study toward an advanced degree. Appointments are normally on a one-quarter to one-half time basis (25 percent or 50 percent full-time equivalent, FTE). The appointment may be for either nine or twelve months. In addition to the stipend, Graduate Teaching Assistants, Graduate Teaching Associates, Graduate Assistants, Graduate Research Assistants and Graduate Research Associates are entitled to a waiver of some fees for the period of appointment in accordance with university policy. University fees include a maintenance fee (required of all students), tuition (additional for out-of-state students), and various other fees (some of which are mandatory). The waiver of fees for assistantships applies to maintenance and tuition fees only; it does not include any other fees (see information about fees in Finances of Graduate Education). Graduate assistants must pay the University Programs and
Services Fee and all other mandatory fees, even if they have a waiver of fees (tuition and/or maintenance). For Graduate Research Assistants the maintenance fee is paid by institutional funds or a granting agency and is in addition to the stipend paid. For a list of all fees, see information provided at One Stop Student Services website.

Maintenance fees and tuition waivers apply to appointments at a 25 percent FTE or higher. Additionally, all graduate assistants are provided student Health Insurance.

Types of Assistantships

All departments are obligated to follow university guidelines for graduate assistants.

Graduate Assistant

Graduate Assistants are appointed to perform various types of duties other than those related directly to teaching or research. Most commonly, these duties relate to administrative functions of the university. Whenever possible, Graduate Assistant positions should relate to the student’s academic program and contribute to their education and professional development.

Graduate Research Assistant and Associate

Graduate Research Assistants /Associates perform duties in support of university research, which may or may not relate directly to the students’ thesis/dissertation. A student appointed as a GRA works under the direct supervision of a faculty mentor. Research assistantships may be financed through funds from gifts, grants, contracts, state appropriations designated for research, or the university’s internally sponsored programs. Department heads are responsible for assuring that GRAs receive ample opportunities to make continuing progress toward their degrees. Some departments provide a path for promotion to Graduate Research Associate.

Graduate Teaching Assistant

Graduate teaching assistants work under the direct supervision of faculty members and may be assigned only duties related directly to instruction. These 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 clerical in nature.

In consultation with the supervisor, the graduate teaching assistant works to gain teaching skills and an increased understanding of the discipline.

Graduate Teaching Associate

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. 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. See the section Qualifications of Graduate Teaching Associates.

Work Assignments and Related Factors

Work assignments for each type of assistantship should be as specific as possible and should be developed to reflect both the needs of the department and each graduate assistant’s obligation to make satisfactory progress in the program. Therefore, to the extent possible the work assignment should appropriately reflect teaching hours, office hours, hours to be spent performing research or other specified tasks. Such specifications should be provided in writing at the time the offer is made.

In situations where the work assignment cannot be specifically described or must be changed from an initial assignment, the graduate assistant should clearly be informed in writing before agreeing to, or continuing in, the assignment. The normal number of hours for conducting an assignment should be mutually understood by the graduate assistant and immediate supervisor.

An important part of each graduate assistant’s work assignment is the fostering of professional development. Such development plus variations in departmental needs may result in differences in the number of hours per week for carrying out assignments.

Thus, weekly work assignments, when specified, are done in terms of averages. For a one-fourth (25 percent FTE) appointment, the graduate assistant’s average work time should not exceed 10 hours per week. For a one-half (50 percent FTE) appointment, the average number of hours should not exceed 20 hours per week. Appointments exceeding 50 percent FTE must have prior approval of the Dean of the Graduate School, excluding summer term. For percentage efforts not covered by those appointments above, the normal work time per week will be prorated.

Students holding a one-half (50 percent FTE) time assistantship normally should enroll in at least 6 credit hours during the semesters of the assistantship. A one-fourth time (25 percent FTE) graduate assistant normally should take at least 9 credit hours during the semesters of the assistantship. **A student must be enrolled in at least 9 credit hours to be considered full-time for federal financial aid purposes, even if the student has an assistantship.**

The student’s academic home unit is responsible for implementing these policies, regardless of the assignment or responsible account. It is therefore essential that the home unit be notified by any other unit employing the student of any assistantship awarded at the time of its initiation or renewal.

The maximum number of years that a graduate student can be appointed to a graduate assistantship is three years as a master’s student, five years as a doctoral student, or eight years in doctoral programs in which students enter with a baccalaureate degree only. Departments or programs may impose stricter limits. Requests for an extension beyond the maximum periods of time here specified must be made in writing by the academic unit to the Dean of the Graduate School. Established time limits for completion of graduate programs — six years for a master’s program and eight years for a doctoral program — also apply to all graduate assistants.

Qualifications of Graduate Teaching Associates
UT is regionally accredited by Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). This accreditation requires an institution to justify and document the qualifications of its faculty members (see Section 6, Faculty of the Principles of Accreditation, December 2017). In the Faculty Credentials Guidelines published by SACSCOC, they provide guidance on minimum educational experience required to teach undergraduate, graduate, and professional level courses.

- For those who teach general education and other courses in baccalaureate studies, the instructor must have a minimum of 18 graduate credit hours in the teaching discipline. Therefore, those graduate students appointed as Graduate Teaching Associates should be able to meet this guideline.
- SACSCOC also stipulates that these graduate students should have direct supervision by a faculty member experienced in the teaching discipline, regular in-service training, and planned and periodic evaluations.
- SACSCOC also requires those teaching graduate and post-baccalaureate coursework to have the earned doctorate/terminal degree in the teaching discipline or related discipline.

The above requirements do not apply to graduate teaching assistants engaged in assignments such as assisting in laboratory sessions, teaching physical education activities, attending, or helping prepare lectures, grading papers, keeping class records, and conducting discussion groups.

**Implementation of the SACSCOC 18 Credit Hour Guideline at UT**

For those graduate teaching associates who will be the instructor of record, the appropriate department head / school director must ask the student to complete the Graduate Student Transcript Authorization form and submit it to the Office of the Provost. This provides the Office of the Provost permission to obtain transcripts supplied during application to Graduate Admissions and the UT transcript. The official transcript should show the 18 graduate credit hours or other documentation must be submitted that supports exceptions (i.e., licensure, CV with experiences outlined, etc.) of Graduate Teaching Associates. For other teaching personnel (non-tenure-track and tenured/tenure-track faculty), the credentials will be collected at the time the person joins the university.

**Accepting or Declining an Assistantship**

The UT adheres to the following Resolution by the Council of Graduate Schools. Acceptance of an offer of financial support (such as a graduate scholarship, fellowship, traineeship, or assistantship) for the next academic year by a prospective or enrolled graduate student completes an agreement that both student and graduate school expect to honor. In that context, the conditions affecting such offers and their acceptance must be defined carefully and understood by all parties.

Students are under no obligation to respond to offers of financial support prior to April 15; earlier deadlines for acceptance of such offers violate the intent of this Resolution. In those instances, in which a student accepts an offer before April 15, and subsequently desires to withdraw that acceptance, the student may submit in writing a resignation of the appointment at any time through April 15. However, an acceptance given or left in force after April 15 commits the student not to accept another offer without first obtaining a
written release from the institution to which a commitment has been made. Similarly, an offer by an institution after April 15 is conditional on presentation by the student of the written release from any previously accepted offer. It is further agreed by the institutions and organizations subscribing to the above Resolution that a copy of this Resolution or a link to the URL should accompany every scholarship, fellowship, traineeship, and assistantship offer.

Evaluation and Supervision of Graduate Assistants

Departments employing graduate assistants will conduct an annual evaluation of each assistant. The results of the evaluation are made available to the assistant and placed in the student’s departmental record. Appropriate follow-up also should occur. The evaluation, review with the assistant, and follow-up should focus not only on assistant-related work being done but should be preparatory for future employment, thus providing professional growth. In most cases, a graduate assistant’s supervisor shares the results of the evaluation with the assistant and takes appropriate follow-up action.

In cases where corrective measures must be taken to remediate deficiencies, the graduate assistant should be notified in writing of the issues and recommended action to solve the problem(s). Situations leading to dismissal for cause must be described in writing to the assistant being dismissed. This letter should be written by the supervisor with a copy to the department head. In cases where the graduate assistant feels that university-related factors (facilities, working conditions, improper supervision, etc.) have had negative effects on specific aspects of job performance, a letter to the supervisor would be appropriate.

The immediate supervisor for each graduate assistant is to be identified as early as possible, usually no later than four weeks prior to the commencement of the assistantship. If there will be more than one supervisor per graduate assistant, the specific tasks to be performed for each and the role each supervisor will play (e.g., which one will initiate the evaluation process) should be identified.

The reporting lines within each department should be clearly indicated to graduate assistants. Thus, each graduate assistant should know that the immediate supervisor is the person to whom first contact is to be made in job related questions/directions; followed in turn by a general departmental/school/college supervisor of graduate assistants (where one exists), the Director of Graduate Studies, department head, dean of the college, and the Dean of the Graduate School.

Orientation and Training of Graduate Assistants

A systematic plan of orientation and training of all graduate assistants, regardless of their appointment, is a must. Such orientation and training may be done at the department, college, and/or university level. All supervisors should provide orientation and training specific to the responsibilities of the assistantship. Assistance is available through Teaching and Learning Innovation, the Graduate School, the Office of Research and Engagement, University Libraries, Office of Information Technology, and the Center for Global Engagement.
Supervisors of graduate assistants are responsible for notifying graduate assistants about departmental and college policies on attendance at the various professional development and training programs. Specific required training (e.g., sexual harassment, FERPA, IRB) will be associated with job responsibilities.

Rights of Graduate Assistants

As specified in the HR0105 Employment Status, a student is, “One viewed by the university as being at the university primarily to be enrolled in academic courses.” Thus, the first priority of all graduate assistants must be satisfactory progress in their scholastic academic program. At the same time, acceptance of an assistantship is predicated on the belief that satisfactory progress can be concurrently achieved in work assignments and scholastic academic programs.

Collaborative efforts between graduate assistants and their supervisors should be focused on the goal of satisfactory performance in both these areas.

Graduate assistants are classified as student employees. As stated in HR0105 Employment Status, in addition to fee waivers, graduate assistants are entitled to workers’ compensation (see HR0397 Worker’s Compensation).

Graduate student assistantship appointments (Graduate Assistants, Graduate Teaching Assistants, Graduate Teaching Associates and Graduate Research Assistants) are of two types: academic year (9-month) and twelve month or other. On occasion, to meet the needs of the department / school, students may be placed on an assistantship for one semester.

Academic Year Appointments

Students on academic year appointments for the fall and spring semesters receive 12 equal monthly payments for the nine months of service and a waiver of fees for three terms semesters (including the summer). Students appointed to an academic year appointment beginning in the spring term 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 a fee waiver is provided for spring and summer semesters. Graduate students on academic year appointments have no assistantship responsibilities in the summer semester.

Twelve-Month Appointments

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, a waiver of fees is provided only for those semesters included within the appointments (i.e., a waiver of fees for the 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).

Graduate assistants who are performing satisfactorily may be reappointed up to the maximum time limit as stated above under Work Assignments and Related Factors. In situations where the demands of the department do not call for a job to be continued,
reappointment may not be made. In cases where a department has a rotational plan for assistantships, graduate assistants likewise may not be reappointed. Students should consult with the department concerning the maximal length of the appointment.

In all cases of appointment and reappointment, the supervisor is responsible for notifying the graduate assistant as early as possible. When an assistantship is not to be renewed, the graduate student should be notified in advance. In most cases, this notice must be given no later than one month prior to the end of the appointment. Specific reasons for not renewing the contract should be given (e.g., discontinuation of the program or grant, significant neglect of duty, unsatisfactory academic performance or progress toward a degree, non-compliance with university policies, etc.). In cases where an assistantship is for one year only, the student should be told this at the time of appointment. In some circumstances, graduate assistants may be given a conditional appointment such as an appointment in which funding of a grant is pending.

As students, graduate assistants’ rights and responsibilities as students are defined in the Student Code of Conduct. In cases where graduate assistants feel that they have a legitimate complaint about any aspect of carrying out their assignments (work hours, duties assigned, pay, work conditions, etc.), they have a right to pursue all established channels to resolve the conflict. In the order that follows, students should speak to their immediate supervisor, the Director of Graduate Studies, the appropriate department head/school director, the appeals committees in the home unit or college, and the dean of the college involved. If the student feels that a resolution should be sought beyond the department/school/college level, the Dean of the Graduate School should be contacted.

Termination of a Graduate Student on an Assistantship

The process for terminating a graduate student on an assistantship is outlined in the Hilltopics Student Handbook under Campus Policies & Procedures. See section entitled Termination of Student Employees.

These students are considered “contract employees” since they have a written contract (offer letter) with the University providing employment for a specified period. A contract employee may be terminated during the term of his or her employment for gross misconduct or inadequate job performance.

When contemplating student employee termination, the supervisor should first contact the department head. Assuming the department head agrees with this assessment, the Dean of the Graduate School should be informed of the decision. The Dean of the Graduate School (or designee) will provide guidance on the termination process. The department and Graduate School will inform the appropriate Vice Chancellor of the decision to terminate the student and the reasons for termination.

The Vice Chancellor will then notify the student in writing of the reasons for their immediate termination (or suspension) and of their right to request a hearing. If a hearing is scheduled, the department will need to provide evidence for the decision to terminate.

Please see more detailed information on the Hilltopics website listed above.

3. Nutrition Conditional Admission Form (for 5-year BS/MS degree)

4. Committee Formation Form