

Nutritional Sciences

College of Family and Consumer Sciences

UNIVERSITY OF GEORGIA

2023-2024

DEPARTMENT OF NUTRITIONAL SCIENCES

College of Family and Consumer Sciences University of Georgia Athens, GA 30602

GRADUATE STUDENT HANDBOOK

Dr. Connie Rogers
Professor, Head
Department of Nutritional Sciences
crogers.nutrition@uga.edu

Dr. Anisa Zvonkovic
Dean
College of Family and Consumer Sciences
facsdean@uga.edu

PREFACE

The Graduate Student Handbook provides information concerning the procedures and policies within the Department of Nutritional Sciences and the Graduate School of the University of Georgia. This handbook supplements information from the Graduate School and expands upon the requirements outlined by the Graduate School and their application within the Department of Nutritional Sciences. The handbook is furnished for the benefit and guidance of all departmental graduate students. It is expected that all graduate students will read this manual carefully, follow its guidance, and retain it for future reference.

Additional information can be found in the **Graduate Bulletin** and at other web sites including:

- <u>www.grad.uga.edu</u> (Applications, forms)
- <u>www.fcs.uga.edu</u>

For more information contact:

Dr. Alex Anderson

Professor and Graduate Coordinator

Department of Nutritional Sciences

University of Georgia

100 Barrow Hall

Athens, GA 30602-3632

fianko@uga.edu

Dr. Connie Rogers

Professor and Department Head

Department of Nutritional Sciences
University of Georgia
280 Dawson Hall
305 Sanford Drive
Athens, GA 30602-3632

crogers.nutrition@uga.edu

TABLE OF CONTENTS

Graduate Faculty, Department of Nutritional Sciences	5
Introduction	<u>6</u>
Selection and Function of Committees	
MS Thesis	7
MS Non-Thesis	7
PhD	7
Programs of Study	<u>8-14</u>
PhD	8
MS Thesis	8
MS Non-Thesis	9
Completion of Graduation Requirements	9
Substitution for NUTR 6100	9
NUTR Graduate Courses Offered	9
Other Graduate Courses Offered	9-10
Graduate School Requirements	10
Additional Graduate Programs	10
Meeting Requirements for Dietetic Internship Program	10
Dietetic Internship Program Handbook	10
Verification Policy: Meeting ACEND Requirements for the Didactic Program in Dietetics	11
Combined coursework for Master's degree and Didactic Program in Dietetics coursework	12
Courses and GPA	13-14
Change in Degree Objective	14
Online Course Limit Policy	14
Oral and Written Exams	<u>15-17</u>
MS Thesis	<u>15</u>
MS Non-Thesis	
PhD	<u>15-17</u>
Thesis or Dissertation Proposal	18
Research Proposal Defense of Thesis/Dissertation Approval Form	19
Research Policies and Procedures	20
Laws, Regulations, and Policies	20
Ownership of Research Records	20
Misconduct in Research	20
Policy on Ownership and Publication of Data and Research Form	21
Format for Thesis or Dissertation	22
Manuscript Style	22
Copyright Release	22

Checklists	23-27
MS Thesis	23-24
MS Non-Thesis	24
MS Non-Thesis Online	24
PhD	<u>25-27</u>
General Information	28-30
Registration	<u>28</u>
Keys	<u>28</u>
Computer Lab	<u>28</u>
Assistance from Nutritional Science Staff	<u>28</u>
NUTR 6900/8900 Departmental Seminar	<u>28</u>
Expectations of Progress and Time Limits	<u>28</u>
Vacations	<u>29</u>
Financial Aid and University Employment	<u>29</u>
Assistantships	<u>29</u>
Course Loads	30
Grade Point Average	30
Graduate Student Organization (GSO)	30
Grievance Procedure for Graduate Students	30
Health Insurance	30
Reasons for Dismissal	30
Evaluations of Graduate Students and Graduate Assistants	31-33
Operating Procedures for MS Thesis and PhD Students	31
Graduate Research Assistants	32
Position Description	32
Standards of Performance	32
Performance Review Forms	32
Graduate Teaching Assistants	32-33
Nutritional Sciences TA Policy	32
Position Description	33
Standards of Performance	33
Performance Review Forms	33
Appendix A – Preapproved Statistical Design & Evaluation Courses	34
Appendix B – Preapproved Physiology Courses	35
Appendix C - Summary of Trends in Dietetics, Nutritional Sciences, and Culinary Science and Nutrition	<u>36-38</u>

Alex Anderson	Professor & Graduate Coordinator	100 Barrow Hall	fianko@uga.edu
Alison Berg	Associate Professor & Extension Nutrition & Health Specialist	202 Hoke Smith Annex	alisoncberg@uga.edu
<u>Tracey Brigman</u>	Clinical Associate Professor, Director FACS Education Program, Associate Director, National Center for Home Food Preservation	174 Dawson Hall	brigman@uga.edu
Ginnefer Cox	Assistant Professor	176 Dawson Hall	gocox@uga.edu
Sina Gallo	Associate Professor	209 Dawson Hall	sina.gallo@uga.edu
Silvia Giraudo	Associate Professor	250 Dawson Hall	sgiraudo@uga.edu
Arthur Grider	Associate Professor	171 Dawson Hall	agrider1@uga.edu
Sarah Henes	Assistant Professor, Extension Nutrition Specialist/UGA EFNEP State Coordinator	203 Hoke Smith Annex	sarah.henes@uga.edu
<u>Lauren Housley</u>	Clinical Associate Professor & Director of Dietetic Internship Program	271 Dawson Hall	lhousley@uga.edu
Joseph Kindler	Assistant Professor	281 Dawson Hall	kindlerj@uga.edu
Emma Laing	Clinical Professor and Director of Dietetics	390 Dawson Hall	emonk@uga.edu
Jung Sun Lee	Georgia Athletic Association Professor in Family and Consumer Sciences	143 Barrow Hall	<u>leejs@uga.edu</u>
Emily Noble	Associate Professor	129 Barrow Hall	emily.noble@uga.edu
Hea Jin Park	Associate Professor	151 Barrow Hall	hjpark@uga.edu
<u>Chad Paton</u>	Associate Professor	205 Food Science Bldg	cpaton@uga.edu
Robert Pazdro	Associate Professor	302 Dawson Hall	rpazdro@uga.edu
Connie Rogers	Professor & Department Head	280 Dawson Hall	crogers.nutrition@uga.edu
Elisabeth Lilian Sattler	Assistant Professor	2700 RC Wilson Pharmacy	lilian@uga.edu
Carla Schwan	Assistant Professor & Extension Food Safety Specialist	208 Hoke Smith Annex	carla.schwan@uga.edu

Revised June 2023 5

INTRODUCTION

Objectives of Graduate Program

The objective of our program is to prepare students to function as nutrition professionals, to meet the changing needs of society and industry, and to generate scholarly work in the areas of Nutritional Sciences. The University of Georgia is recognized for the quality of its graduate program in Nutritional Sciences. The program is well represented in national meetings, and graduates are placed in various positions such as research, teaching, and outreach with universities, medical schools, federal laboratories, industry, and dietetics. The primary emphasis of the program is the scientific basis of human needs for foods and nutrients, the metabolic responses to dietary change, and the interactions among genetics, nutrients and food consumption patterns on human health and well-being.

Research is conducted to test hypotheses in a variety of areas such as aging and nutrition; bone health; ingestive behavior, community and public health; food safety; basic and consumer functional foods; genetics and metabolism; maternal, infant, and childhood nutrition; obesity and related disorders; physical activity and sport; and stem cell/regenerative medicine. The program includes formal course work supportive of research and career objectives, active research in a problem area of mutual interest to the student and major professor, department seminars, and teaching assignments in the laboratory and classroom.

An **Internship in Dietetics** is also offered which enables a student to complete a graduate degree, as well as the requirements to become eligible for membership in the Academy of Nutrition and Dietetics and to take the registration examination. The Internship Program is currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) for the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, Illinois 60606-6995, 312-899-0040. Students admitted to our graduate program are not automatically admitted to our dietetic internship program. Students must apply using the online centralized internship application, DICAS, which may be accessed at https://portal.dicas.org. Applicants must also register online for computer matching at https://www.dnddigital.com and select dietetic internship priority choices in order to be considered for admission to the UGA Dietetic Internship Program. Contact Dr. Lauren Housley for more information at https://www.dnddigital.com and select dietetic internship priority choices in order to be considered

I. SELECTION AND FUNCTION OF COMMITTEES

The Major Professor is chairman of the student's Advisory Committee and is the student's primary source of advice on academic, scientific, and professional matters. The Major Professor will be involved with several graduate students and other matters, so it is the responsibility of the student to ensure adequate progress is being made toward graduation.

Advisory Committees are selected by the Major Professor in consultation with the student and approved by the Graduate Coordinator and Dean of the Graduate School. The Advisory Committee is charged with planning and approving the student's Program of Study, advising the student on required research skills, guiding the research projects, reading and approving the Thesis or Dissertation, and approving the Thesis or Dissertation defense, and approving the final examinations. The Advisory Committee will serve as the Examining Committee. Details for each degree are discussed below.

MS Non-Thesis students do not have an Advisory Committee.

The student should meet with the Advisory Committee (including the Major Professor) at least once every year. Plan this meeting early to avoid conflicts with course schedules, examinations, travel, and other conflicts.

If a member of the Advisory Committee is absent from campus for a long period during a critical phase of the graduate program, they may be replaced with the concurrence of the Major Professor and the remaining members of the Advisory Committee.

A. MS Thesis

The Advisory Committee consists of the Major Professor and two other members. The Major Professor and at least one other member of the Advisory Committee must be members of the Graduate Faculty. No more than one faculty member external to the Nutritional Sciences Department per committee is permitted. The names of the members of the Advisory Committee should be reported by the student electronically on the form G130 Advisory Committee. This form should be submitted before the end of the first semester of residence of a prospective candidate for the degree and must be submitted before the Program of Study.

B. PhD

The PhD Advisory Committee will consist of at least four members, including the major professor. There must be greater than 50% graduate faculty representation. At least two members of the Advisory Committee must be from the department. At least one member must be external to the department. The Advisory Committee, in consultation with the student, is charged with planning and approving the student's Program of Study, arranging the comprehensive written and oral examinations, advising the student on required research skills, approving the subject for the Dissertation, approving the completed Dissertation, and approving the defense of the student's research. The student should submit their Advisory Committee to the Graduate School via form G130 Advisory Committee in GradStatus before the end of their first year and before submitting the Program of Study. If the Advisory Committee contains non-UGA faculty, the student should submit a justification letter signed by their Major Professor along with the Graduate Coordinator and the faculty's curriculum vitae.

II. PROGRAMS OF STUDY

All students enrolled in the graduate program must submit a Program of Study form. The Program of Study is an official document of the Graduate School, which is completed by the student in GradStatus via Program of Study Form G138. The Major Professor, the student's Advisory Committee, the Graduate Coordinator, and the Dean of the Graduate School all approve the Program of Study in GradStatus. Graduate School policies concerning Programs of Study can be found on the Graduate School website. The student is encouraged to work closely with the Major Professor and Advisory Committee to plan a broad academic program involving coursework in several areas other than the area of intended specialization. The Program of Study should be submitted during the second semester of residence, and for PhD students, it must be submitted prior to admission to candidacy. It is only necessary to list the courses required by the degree program or by the Advisory Committee. For example, it is not necessary to list undergraduate dietetics courses on the Program of Study.

The Program of Study may be changed by filing a Recommended Change in Program of Study form. This form is to be signed by the Major Professor and Graduate Coordinator, then submitted to the Graduate Coordinator's Assistant for submission to the Graduate School via email for the Dean of the Graduate School's signature. Acceptable reasons for changes in the Program of Study are scheduling conflicts, unavailability of courses, or justified changes in the student's degree objectives.

Failure to submit a Program of Study approved by your Major Professor and Advisory Committee will delay your academic progress and may be grounds for dismissal from the graduate program. At least two NUTR courses listed on the Program of Study should be taken within the first year of the graduate program.

A. PhD Program of Study

A preliminary Program of Study, developed by the Major Professor and the Doctoral student and approved by the Advisory Committee, should be submitted to the Graduate Coordinator by the end of the student's first year of residence. The Program of Study should consist of 16 or more hours of 8000- and 9000-level courses in addition to research, dissertation writing, and directed study. A detailed list of program requirements can be found on the NUTR Graduate website PhD Program Requirements.

The Program of Study for a student who bypasses a Master's degree must contain 4 additional semester hours of graduate level coursework open only to graduate students in addition to 16 semester hours of 8000- and 9000-level courses. Doctoral research (9000), independent study courses, and dissertation writing (9300) are not counted in these 20 hours.

The final Program of Study should be submitted to the Graduate School six months before the comprehensive examination. Three hours must be dissertation writing (9300). A draft of the final Program of Study should be reviewed with the Major Professor and submitted to the Graduate Coordinator or Graduate Coordinator Assistant for verification. Once approved, the student will be notified and will submit the final Program of Study electronically via form G138 Program of Study in GradStatus. The final approvals will be completed electronically after submission.

B. MS Thesis Program of Study

MS Thesis students do not submit a preliminary Program of Study. They plan their Program of Study with their Major Professor and obtain approval from the Advisory Committee at the end of their first semester. Once approved, the student submits their Program of Study via Program of Study Form G138 in GradStatus. 12 credits must be in courses open only to Graduate Students. Master's Research (7000), Master's Thesis (7300) and Directed Research (7010) are not included in this requirement. A detailed list of program requirements can be found on the NUTR Graduate website MS Thesis Program Requirements.

C. MS Non-Thesis Program of Study

MS Non-Thesis students are assigned a Major Professor by the Graduate Coordinator and will work with their Major Professor to develop a Program of Study. MS Non-Thesis students do not submit a preliminary Program of Study. Once the Program of Study is completed, it is submitted electronically in GradStatus at <u>Program of Study Form G138</u> for approval by the Graduate Coordinator. Non-Thesis students are also required to take 12 hours of coursework open only to Graduate students. Master's Research (7000) and Directed Research (7010) are not included in this requirement. A detailed list of program requirements can be found on the NUTR Graduate website <u>MS Non-Thesis Program Requirements</u>.

D. Completion of Graduation Requirements

In accordance with the <u>Graduate School Bulletin</u>, all degree requirements must be completed within six years, beginning with the first registration for graduate courses in the Program of Study.

E. Substitution for NUTR 6100 Micronutrient Nutrition

If you have taken NUTR 4100 (Micronutrient Nutrition) as a UGA Undergraduate student or taken a comparable course at another institution, follow these procedures for course substitution:

For 6100 Substitutions from other Universities:

- Obtain course syllabus and provide to Major Professor/Major Advisor.
- If approved by Major Professor/Advisor, email formal request for course substitution to Graduate Coordinator and cc
 Major Professor/Advisor and Graduate Coordinator's Assistant. Provide course syllabus and transcript showing completed course with grade in that email request.

For 6100 Substitutions from UGA:

- Obtain approval by Major Professor/Advisor.
- If approved by Major Professor/Advisor, email formal request for course substitution to Graduate Coordinator and cc
 Major Professor/Advisor and Graduate Coordinator's Assistant. Provide transcript showing completed course with grade
 in that email request.

F. Graduate Courses offered in the Department of Nutritional Sciences

See the **UGA Bulletin** for course descriptions.

G. Departments Offering Courses of Interest to Students in Nutritional Sciences

Check the <u>UGA Bulletin</u> for a complete listing of courses offered by other departments including:

- Adult Education
- Animal and Dairy Science
- Animal Nutrition
- Anthropology
- Biochemistry and Molecular Biology
- Biology
- Biostatistics & Epidemiology
- Cellular Biology
- Educational Research
- Human Development & Family Science
- Exercise Science
- Food Science & Technology

- Genetics
- Gerontology
- Health Promotion & Behavior

Consult with your Major Professor, Advisory Committee, and the Graduate Coordinator for selection of courses that meet your career and research goals. Check with individual departments to verify prerequisite requirements and semesters offered.

H. Graduate School Requirements

All MS-Thesis and PhD students must take GRSC 7770 (Graduate Teaching Seminar) their first semester at UGA, for at least 1 credit. For more information, please see the GRSC 7770 Policy for more information.

Effective Fall 2022, all graduate students must take the GradFIRST Seminar (GRSC 7001) during their first year at UGA. This seminar is intended to help prepare all graduate students for success regardless of their discipline or background. This is a 1 credit course and must be listed on the Program of Study submitted in GradStatus. Most seminars will be offered each Fall semester with limited offerings during Spring to accommodate those students matriculating in Spring or those unable to take during Fall due to scheduling conflicts. More details can be found on the GradFIRST website.

*The GradFIRST requirement does **NOT** apply to students in the MS Nutritional Sciences Community Nutrition Emphasis online program*

I. Additional Graduate Programs

- Area of Emphasis in Nutrition for Sport and Exercise
- Certificate in Obesity and Weight Management
- School Nutrition Director Certification Program

J. <u>Meeting Requirements for Dietetic Internship Program</u>

Dietetic Internship Program Handbook

In addition to required coursework, the internship of 1200 supervised practice hours is required. Supervised practice is completed during Fall and Spring semesters, for two years (NUTR 7911). Additional hours are completed in the Nutritional Sciences Internship (NUTR 7910) which is done over two 10-week summer sessions with much of the work performed outside of Athens. Completion of the Internship Program (i.e., receipt of the Verification Statement) will be verified only after the graduate degree is completed.

Students in the MS/DI or PhD/DI program must seek the advice and counsel of Dr. Lauren Housley throughout their graduate study and plan their course work carefully. The list of courses below may be subject to change according to the requirements of the Academy of Nutrition and Dietetics. The minimum credit requirement for the MS degree is 31 hours, PhD is 46 hours. The 6 credits of NUTR 7910 and 8 credits of NUTR 7911 are in addition to those required for the graduate degree.

When doing the Nutritional Sciences Internship (NUTR 7910) in the summers you will NOT be eligible for an assistantship. However, if you received an assistantship the semester prior to or after your NUTR 7910 summer rotation, you may be eligible for the tuition waiver. For example, if you take NUTR 7910 Summer 2023 and have an assistantship in either Spring 2023 or Fall 2023, you may be eligible for the tuition waiver in Summer 2023. Check with the Graduate Coordinator to determine if you are eligible for a tuition waiver.

K. Verification Policy: Meeting ACEND Requirements for the Didactic Program in Dietetics

Please contact Dr. Emma Laing regarding this program at emonk@uga.edu or 706-542-7983 Office

Students who have obtained a bachelor's degree in a field other than Dietetics at a university accredited by a US regional institutional accrediting body, or foreign equivalent, and completed didactic program in dietetics (DPD) coursework at The University of Georgia to meet course specific ACEND knowledge requirements for registered dietitian nutritionists will be issued a DPD verification statement. Students must also receive at least a "C" grade in all DPD courses and in designated supporting sciences for the verification statement to be issued.

For graduate students completing this option, the DPD Director will evaluate the student's transcripts to determine which courses must be taken to meet DPD verification statement requirements. The director may allow course substitutions for some Nutritional Sciences related courses from other universities that contain the same course content as those offered by the Department of Nutritional Sciences at UGA. This will only be permitted if the course description and syllabus indicate that the course meets ACEND knowledge requirements covered by the required UGA course. However, this does not include courses required for the graduate degree.

L. Combined coursework for Master's degree and Didactic Program in Dietetics coursework (courses marked with * are graduate level only)

Principles of Human Anatomy, Physiology, Microbiology, Biology, Chemistry, and Biochemistry

- BIOL 1107/L
- CHEM 1211/L and CHEM 1212/L or equivalent general chemistry
- CHEM 2211/L or equivalent organic chemistry
- CBIO 2200/L and CBIO 2210/L or 2 graduate level Physiology courses or equivalent (*PHRM 6400, *PHRM 6500, *VPHY 6090, *VPHY 6100) (note: must demonstrate that courses have covered all organ systems)
- BCMB 3100 or graduate biochemistry (*BCMB 6000, BCMB 6120, BCMB 6010, BCMB 6020)
- MIBO 2500 (lab optional) or MIBO 3000 (lab optional) or MIBO 3500 or FDST 6030/L Food Microbiology

Nutritional Sciences courses

Many of these courses are sequenced, so they must be taken in the order shown below; if you already have certain 1st year courses, you may take 2nd year courses your first year

- NUTR 3600/L Food Principles with lab, (Fall only, Year 1)
- NUTR 3610/L Quantity Food Production with lab (Spring only, Year 1)
- NUTR 4070 or 6070 Research Methodology in Human Foods and Nutrition (not required for MS Thesis or PhD)
- NUTR 6100 Micronutrient Nutrition (Fall only, Year 1 or 2)
- NUTR 4500 Medical Nutrition Therapy-I (Fall only, Year 2)
- NUTR 4510 or 6510 Nutrition Related to the Human Lifecycle (Fall only) <u>OR</u> NUTR 4050 or 6050 Optimal Nutrition for the Lifespan (Fall only, Year 1)
- NUTR 4520 Clinical Nutrition Interventions (Spring only, Year 2)
- NUTR 4600E or 6600E Food and Nutrition Policy (Spring only, Year 1)
- NUTR 4660S or 6660S Food and Nutrition Education Methods (Fall and Spring)
- NUTR 4610 or 6610 Foodservice Procurement and Financial Management (Fall only, Year 2)
- NUTR 6400* Advanced Micronutrients (Fall only, Year 2)
- NUTR 6530 Medical Nutrition Therapy-II (Spring only, Year 2)
- NUTR 4540 or 6540 Public Health Nutrition (Spring only, Year 2)
- NUTR 4620 or 6620 Management of Foodservice Organizations (Spring only, Year 2)
- NUTR 4645 or 6645 Functional & Nutritional Properties of Foods (Fall only, Year 2)
- NUTR 5900 Professional Development in the Nutritional Sciences (Spring only, Year 1)
- NUTR 8900 Graduate level seminar course as required for graduate degree
- NUTR 8560* Proposal Writing (not required for MS Non-Thesis)
- Graduate level statistics* (e.g., BIOS 7010, BIOS 7020, STAT 6210, 6220, or ERSH 8310)
- Other courses as needed for degree completion

Failure to take the courses in this sequence will delay completion by one year or more. There must be a minimum of 12 credit hours of graduate-only courses. Research credits do not count.

Note: NUTR 6100 must be taken at the graduate level. NUTR 3600/L, 3610/L, 4500, 4520, and 5900 must be taken at the undergraduate level. Other Dietetics courses can be taken at the undergraduate or graduate level; however, check with your advisor and your committee members as they may recommend non-Dietetics courses for your graduate course electives.

Contact Dr. Emma Laing, emonk@uga.edu with any questions regarding course requirements to earn a DPD Verification Statement.

M. Courses and GPA

Graduate students are expected to maintain an overall average of 3.0 with no grade below a "C" in any course, including the research courses listed below. A "C-" is not considered as meeting degree requirements. According to <u>UGA Graduate School Policies</u>, "Students with a cumulative graduate course average below 3.0 for two consecutive terms are placed on academic probation by the Graduate School. They then must make a 3.0 or higher semester graduate average each succeeding semester that their overall cumulative graduate average is below 3.0. These students are no longer on probation when their cumulative grade average is 3.0 or above. If they make below a 3.0 semester graduate average while on probation, they are dismissed."

Unless your Instructor/Major Professor tells you otherwise in their syllabus for the research sources, below are the expectations for NUTR research courses (NUTR 7000, 7010, 7210, 7300, 9000, 9010, 9300 and related courses):

- Schedule and keep appointments with the instructor and/or Major Professor for the course
- Attend all required meetings with the research group, Major Professor, and/or Instructor, unless excused in writing by the Instructor/Advisor. Most Instructors/Advisors have mandatory weekly meetings with their staff and students.
- Set the hours with your Major Professor that you will be in the laboratory, community setting, and/or office.
- Prepare written reports that are technically accurate and grammatically correct for the Instructor/Advisor at least monthly. Some Instructors/Major Professors may require more or less reports, especially during the semesters when students are writing research proposals, manuscripts for journals or books, and/or their thesis or dissertation.
- Give an oral presentation to the Instructor/Major Professor that summarizes progress in the course. The minimum is one each semester, but some Instructors/Major Professors may require more frequent oral presentations, such as prior to a presentation at a professional meeting.
- Follow other written instructions for the course provided by the Instructor/Major Professor (e.g., syllabus)
- Adhere to the UGA Academic Honesty Policy.
- Failure to do all the above may result in receiving unsatisfactory grades of U, C-, D, or F. If you receive an unsatisfactory grade of U, C-, D, or F in a second course, you may be dismissed from the graduate program in the Department of Nutritional Sciences. Meet with your Major Professor and/or the Graduate Coordinator to make a written "plan for improvement."

After receiving an unsatisfactory grade(s), the graduate student may be given a warning about potential dismissal.

A sample warning letter about unsatisfactory grade in any courses:

"This is a warning letter to let you know that you received an unsatisfactory grade of "xx" in <u>name of course and #</u>. The reason you received this unsatisfactory grade is because of failure to do xx, as noted in the NUTR Graduate Handbook. Meet with your Major Professor and/or the Graduate Coordinator to make a written plan for improvement."

After the second unsatisfactory grade, the graduate student may be dismissed from the graduate program, even if the student's overall GPA is 3.0 or higher.

A sample dismissal letter because of unsatisfactory grade in second course:

"This letter is to inform you that because you have received unsatisfactory grades of U, C-, D and/or F in two courses, the NUTR Graduate Committee has scheduled a meeting on xx to discuss your potential dismissal from our graduate program."

Appeal procedures – If you receive a dismissal notice from the departmental graduate program, you may appeal the decision in the following order:

- 1. Departmental Graduate Committee
- 2. College Dean
- 3. UGA Graduate School

Note that the appeal to the Dean of the Graduate School must be received within 30 calendar days following receipt of notice of dismissal from the College Dean.

N. Change of Degree Objective

A student can request to change their degree objective from MS Thesis to PhD. Students must be enrolled in a graduate program for at least one to two semesters and have taken Nutritional Sciences core courses. The student must have the approval of their Major Professor, who is required to bring the request to the Graduate Committee for approval in the form of a letter. The letter will include an agreement to serve as the student's major advisor, specifics of the program change, and source of funding. This may include self-funding, as a change of degree objective does not include continuation of assistantship funding. If the committee approves the request, the student will submit a change of degree objective to the Graduate School through Form G136 in GradStatus. If the committee votes not to approve the change of degree objective, the request cannot be resubmitted. The student will have to complete their MS degree and then apply to the PhD program if they desire.

III. ORAL AND WRITTEN EXAMS

The student must be registered for at least 3 credits in NUTR 7000 for Master's thesis students and NUTR 9000 for PhD students during the semester in which the final oral examination takes place. The Thesis or dissertation should be given to the Advisory Committee at least two weeks prior to the final oral examination.

A. MS-Thesis

The Advisory Committee serves as the Oral Examining Committee for the MS. The final oral examination covers the Thesis and the Program of Study and is usually conducted during the semester the student completes their thesis. The emphasis is on the application of knowledge to problem solving. The student will submit Form G140 Approval Form for Master's Thesis and Final Oral Examination (for MS and MA) in GradStatus. The Graduate Coordinator's Assistant then assigns the form to the Major Professor and Advisory Committee. The Major Professor and the Advisory Committee indicate if the student passed or failed this examination on the form. The Graduate Coordinator's Assistant then assigns the form to the Graduate Coordinator for approval, and once approved, forwards it to the Graduate School.

B. MS Non-Thesis

MS Non-Thesis students will take a written cumulative exit exam with no oral component. The culminating exam will cover four topic areas, with one test per area. Each test will consist of 50 multiple choice, true/false, and/or matching questions per test. To be considered passing, the student must achieve a 75% average on the four topic tests with no one topic test being below 70%. The exam will be unsupervised and taken remotely. Each exam is timed at one hour each and students can take breaks between the exams. No outside materials may be used during the exam. Topic areas include NUTR 6400 as well as three other topics based on the NUTR coursework the student has taken. When the student notifies the graduate coordinator six months prior to taking the exam, the graduate coordinator will inform the student as to which topic areas will be selected based on their final Program of Study.

The culminating exam must be successfully passed to graduate. A student who does not pass any of the 4 topic tests in the exam may be allowed to re-take the previously failed test he/she did not pass after at least one week. If a student does not pass the exam on the second try, he/she may be dismissed from the program. Additionally, if a student passes the exam but does not graduate within 12 months, he/she may be required to repeat the examination. For exam information, please see the Graduate Coordinator.

C. PhD

Policies and Procedures in Conducting Comprehensive Examinations

As required by the Graduate School, all Doctoral students must pass a written and oral comprehensive examination to be formally admitted to candidacy. The PhD Comprehensive Examination consists of a written and oral part and is administered to determine if the candidate is qualified to continue for the Doctorate. The comprehensive examination should be held as soon as the Doctoral Advisory Committee feels that the student's qualifications for Doctoral work can be evaluated. The examination covers the Program of Study, and dissertation research, with an emphasis on the application of knowledge to problem solving.

- It is recommended that students take the comprehensive examinations at the end of their second year of Doctoral study. Refer to the Doctoral student checklist for scheduling and notifying the Graduate Coordinator about these exams.
- The purpose of the examination is to provide an opportunity for a) students to integrate and apply knowledge gained in their educational experience, and b) faculty to assess the ability of the student to integrate and apply knowledge in order to ensure that a student is qualified to be admitted to candidacy.

- If a faculty mentor feels that a student is not ready or qualified to take the comprehensive examinations, they should encourage the student to take additional course work or do additional reading or study in areas that may be deficient. In some cases, the faculty supervisor may suggest that the student change his/her degree objective to Masters. However, if the student wishes to take the exam, he/she may do so.
- The time of the written examination will be decided by the faculty advisor in consultation with the student and the
 Advisory Committee members. Refer to the Doctoral student checklist for scheduling and notifying the Graduate
 Coordinator about these exams.
- The written examination consists of sets of questions (covering content of your coursework, research area and interest of the committee member) submitted by each of the members of the student's Advisory Committee. Each Advisory Committee member will provide a set of 3 to 5 questions depending on their complexity. The student will have at least 2 hours to answer each of the questions given by the Advisory Committee members. Each question of the set of questions submitted by the Advisory Committee member should be designed to be answered in approximately 2 hours. The written examination should take place over the course of several days.
- All members of the Advisory Committee will review answers to questions. Copies of the answers will be given to all
 members of the Advisory Committee for evaluation before votes are taken. Each member of the Advisory Committee will
 cast a vote of "pass" or "fail" for the entire written exam. No more than one member of the Advisory Committee can cast a
 vote of "fail" for the student to pass the written exam.
- If a student receives two or more fail votes by the Advisory Committee on the written Comprehensive Examinations, they will be permitted to retake the exam one time. The Major Professor, along with the Advisory Committee will determine a time for the student to retake the exam which must be no later than 4 weeks from the first day of the initial exam.
- If the student receives two or more fail votes on the second attempt of the written Comprehensive Exam, they will not be admitted to candidacy and will be dismissed from the PhD program.
- If the student passes the written examination, he/she is eligible to take the Oral Comprehensive Examination. The Oral Comprehensive Examination could be a follow-up to the Written Examination where clarity is needed on the student's response, current Hot Topics in the student's focus area and other interests of Advisory Committee members. Refer to the doctoral student check list for scheduling and notifying the Graduate Coordinator about these exams. The exam usually lasts about 3 hours.
- Each member of the Advisory Committee will cast a vote of "pass" or "fail" for the oral exam. If a student receives two or more fail votes by the Advisory Committee, they will be permitted to take the exam one time. The Major Professor, along with the Advisory Committee will determine a time for the student to retake the exam which must be no later than 4 weeks from the day of the exam.
- If the student receives two or more fail votes on the second exam attempt, they will not be admitted to candidacy and will be dismissed from the PhD program.

• Students who pass the oral examination are eligible to be admitted to candidacy.

• Throughout these exams, the Major Professor should ensure that the forms documenting the votes for the written and oral exam are properly filled out and signed by the Advisory Committee members.

Reading of Dissertation

The Advisory Committee will judge the written presentation and the substance of the dissertation as to suitability for going on to the dissertation defense. The student, with guidance from their Major Professor will organize, edit, and rewrite the dissertation. A poorly written dissertation will be returned to the student and Major Professor. The task of accomplishing a substantive research project belongs to the student, Major Professor, and Advisory Committee; hence, a substantively weak dissertation will be returned as well to the student for further research and revisions.

Final Oral Examination and Dissertation Defense

Refer to the doctoral student checklist for scheduling and notifying the Graduate Coordinator about the final oral examination and dissertation defense. When aiming for a graduation date, the student should be sure that the Advisory Committee receives the dissertation with sufficient time to read it before the expected date of the final exam. The dissertation must be approved by the Major Professor before it is given to the other members of the Advisory Committee. The student's performance in the final oral examination defense will be judged by the Major Professor and Advisory Committee.

IV. THESIS OR DISSERTATION PROPOSAL

All MS/PhD students, except MS-NT and MS-online students, will take NUTR 8560 as part of the graduate curriculum requirements. In addition, the student's Advisory Committee will convene a separate Thesis or Dissertation committee meeting so that students can defend their research proposals with only the committee present. MS student's Thesis proposal defenses typically will be scheduled Spring semester their first year and PhD students prior to the end of their second or third years. The student's proposal defense of their Thesis or dissertation is intended to help the student and their advisor by soliciting feedback and suggestions from the committee and having the committee members indicate on the Research Proposal Defense Approval form if they find the research proposal acceptable, acceptable with revisions, or unacceptable. If the research proposal is found to be acceptable, the student will move forward with their research plan. If the research proposal is found to be acceptable with revisions, the student will be required to revise the proposal and respond to all committee members' comments and suggestions until the proposal is acceptable. If two or more committee members find the research proposal unacceptable, the student will create a new research project.

The Research Proposal should contain the items listed below:

- Abstract summary paragraph
- Introduction State the overall problem and objective or long-term goal of the proposed research
- Literature Survey Review the most essential previous work and describe the current research status of this subject
- **Hypotheses and specific aims** State the hypotheses to be tested and the specific aims
- **Rationale** Discuss the rationale behind your approach to hypothesis testing
- Methods and Procedures Describe the experiments you propose to do, and the methods employed to conduct these experiments. Specify the species of animals or human population you plan to use for each method and indicate the manner in which data will be collected, expressed and statistically evaluated. Conduct a power analysis to calculate the sample size needed (e.g., number of cell cultures, animals, and/or people needed in the study.)
- Discussion Discuss the potential significance of the proposed work and their relationship to the hypothesis. Discuss any
 novel ideas or concepts contained in your proposed research.
- **Estimated** budget This is a rough estimate of the expense that will be generated by your research. Specify what additional equipment, if any, must be purchased so that the proposed research may be conducted. Provide a budget that includes items such as salary for all personnel associated with the project, laboratory supplies, computer supplies, fees for care of animals, payments for human subjects, travel, and publication costs.
- Timeline Provide the dates during which the various steps of the proposed research will be completed.
- **Bibliography** References related to above items.

Research Proposal Defense of Thesis/Dissertation Approval Form

Student Name Proposed Title of Thesis/Dissertation				
Date				
Committee Member Name (Print)	Committee Member Signature	<u>Acceptable</u>	Acceptable with Revisions	<u>Unacceptable</u>
Graduate Coordinator signature]	Date		
Specific Comments				

Revised June 2023

Submit completed form to Graduate Coordinator's Assistant

V. RESEARCH POLICIES AND PROCEDURES

A. Laws, Regulations, and Policies

Numerous laws, regulations, and policies govern research. Failure to comply may jeopardize not only the individual research project but also the entire University research program. Policies include:

- 1. <u>Animal Care and Use:</u> Prior to ordering animals, an Animal Use Proposal Form must be submitted and approved. Contact information for the Director of Animal Care and Use Leanne Alworth, Director, 706-542-6084 alworth@uga.edu 210 Tucker Hall https://research.uga.edu/oacu.
- 2. <u>Biosafety:</u> Numerous regulations govern genetic engineering and research involving biohazardous agents. Contact information for the Director of Biosafety Office, Patrick Stockton, Director, 706-542-5563, pstock@uga.edu 310 East Campus Road http://research.uga.edu/biosafety.
- 3. <u>Human Subjects:</u> Research involving surveys, interviews, educational strategies, questionnaires, and review of medical or other records requires approval by the Institutional Review Board (IRB) <u>BEFORE</u> research is conducted. Students must have an approved IRB to conduct research with human subjects. Contact information for the Director of Human Subjects Office: Kim Fowler, Director, 706-542-5318 <u>kfowler@uga.edu</u> 210 Tucker Hall https://research.uga.edu/hrpp.
- 4. <u>Radiation Safety:</u> Faculty who use radioactive material must be licensed. Graduate students are encouraged to take the Radiation Safety Course. Information concerning this course, requirements and licensing procedures or assistance in handling radioactive materials may be obtained from the Radiation Safety Office, Esequiel Barrera, Director, 706-542-9373, ebarr@uga.edu https://research.uga.edu/safety/radiation.

B. Ownership of Research Records

Detailed written, computer, visual and/or audio records of procedures, experiments and scientific observations must be made. These materials are the property of the University of Georgia and must be left with the Major Professor upon completion of the graduate degree. Discuss these policies with your Major Professor and sign the form on the next page.

C. Misconduct in Research

The University of Georgia's policy to deal with misconduct in research is briefly summarized as follows. In its dedication to the ideal of truth, the University of Georgia pursues knowledge through research and transmits knowledge through teaching, publication, and public service. The spirit of mutual respect and a broad trust that all faculty members, staff members, and students share in this dedication are essential to the functioning of the University.

Misconduct in research means fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the research community for proposing, conducting, or reporting research. It does not include honest error or honest differences in interpretations or judgment of data. This definition is not intended to stifle creativity, to hinder the development of new empirical techniques, or to impede attempts to validate unconventional or revolutionary theories. Nor is it intended to bring within the policy those aspects of research that may form a basis for legitimate disagreement. <u>Individuals who want guidance concerning allegations should consult with their Major Professor, Graduate Coordinator, Department Head, Dean, or the Office of the Vice President for Research.</u>

Policy on Ownership and Publication of Research Data and Findings from Graduate Student's Projects

Department of Nutritional Sciences

The University of Georgia

Detailed written, electronic, visual and/or audio records of procedures, experiments, and scientific observations should be made during the collection and analysis of data. All data, notebooks, research records, electronic files, and related materials associated with data collection and analysis are property of the University of Georgia and must be left with the Major Professor upon completion of the graduate degree. The student may make copies of these materials for themselves.

Students are encouraged to copyright their Thesis or Dissertation to protect their intellectual property (see **UGA** policies)

Students are expected to produce publishable findings, to write their Thesis or dissertation in manuscript form and to submit their findings for publication either prior to or immediately following defense of their Thesis or dissertation (or graduation). If the results of a Thesis or dissertation are not submitted for publication within three months after the student graduates, then the Major Professor has the option to submit the results for publication with the Major Professor as the first author according to generally recognized standards of co-authorship (circulation of the manuscript draft to all co-authors including the former graduate student prior to submission, etc.). In some cases, the student and the faculty may agree that the Major Professor should serve as first author to expedite submission and publication of the results. In other cases, where the Major Professor must considerably re-analyze data and rewrite a manuscript, they have the option to become the first author, the student would still be co-author.

<u>It is the responsibility of the student</u> to provide their Major Professor with their contact information if they wish to be a co-author of a manuscript. Many journals require signatures of all authors at the time of manuscript submission. If the student does not provide the Major Professor with current contact information, then the right of authorship is forfeited.

The manuscript can be submitted for publication only with the approval of the Major Professor, unless the Major Professor indicates in writing that they do not wish to be a co-author. If the Major Professor elects to not be a co-author, then with the Major Professor's permission, another member of the student's Advisory Committee or another faculty member of the Department of Nutritional Sciences with expertise in the area should serve as a co-author.

Student's Name (print)	Signature	Date
Major Professor (print)	Signature	Date
Graduate Coordinator (print)	Signature	Date

VI. FORMAT FOR THESIS OR DISSERTATION

For complete information and the latest format specifications, please see the <u>UGA Graduate School website</u>.

All theses and dissertations must be submitted to the Graduate School in electronic format.

A. Journal Articles as Chapters (Manuscript Style)

In some departments, theses or dissertations may include, as chapters, articles that have been or will be submitted to scholarly journals. This style, also referred to as "manuscript style" has been approved by the Graduate School for use by all departments. However, students must have the approval of their departments to use the manuscript style for chapters in their theses or dissertations.

Manuscript format can be used when manuscript(s) prepared for publication are incorporated as chapters into the Thesis or dissertation. Otherwise, this format is like "A" above. One manuscript chapter is required for a Master's degree and at least two manuscript chapters are required for a dissertation. These manuscript style chapters are prepared according to the general guidelines of the journal to which the manuscript will be submitted, with some allowances made for requirements of the Graduate School. For example, different methods for the reference citations can be used in the various chapters, but the margin requirements of the Graduate School must be used. A reprint from a journal may not be used as a chapter. Complete information concerning this format is in the Graduate School Style Manual.

B. Copyright Release for Thesis and Dissertations

More and more Thesis and dissertations are being submitted to the Graduate School using the alternative manuscript style. This style includes articles that are published, accepted for publication, submitted for publication, or intended for publication. There is increasing concern over copyright issues related to the articles that have already been published or those accepted and being readied for press.

In response to this concern, the University of Georgia now asks that a statement of copyright release from the publisher for each published or accepted article be given to the Graduate School at the time that the Thesis/Dissertation is submitted in final form. An email from the publisher confirming copyright release is sufficient documentation. We will keep this release statement in the students' file as a part of their permanent record. Students are responsible for securing this release and they should begin the process of acquiring the copyright release very early in their Thesis/dissertation preparation. Final versions of theses and dissertations using this manuscript format will not be accepted until such copyright release has been provided.

VII. CHECKLISTS

It is ultimately the student's responsibility to meet all requirements on time for all degree objectives

Unless otherwise noted, all forms are electronically available and submitted through GradStatus. Check with the Graduate School in case any deadlines or forms have changed since this document was last revised.

A. MS-Thesis

- Advisory Committee members are selected by the Major Professor and the student. The Major Professor and at least
 one other member of the Advisory Committee must be members of the Graduate Program faculty. No more than one
 faculty member external to the Department of Nutritional Sciences per committee is permitted. The student submits
 Advisory Committee Form G130
 in GradStatus before the end of the first semester. This form must be submitted
 before the Program of Study can be submitted and approved.
- 2. The Program of Study should be discussed with the Advisory Committee at a meeting. The student can submit a tentative Program of Study via email to the Graduate Coordinator's Assistant to verify that all course requirements will be met. Once verified, the student submits Program of Study Form G138. The form should ONLY include courses required for degree completion by the department. Do not list undergraduate dietetic courses, dietetic internship courses, or other courses that do not apply to your degree objective requirements. Make sure to complete the form in its entirety, including any grades already awarded, whether the course is a Graduate level only course, and the correct intended semester and year the course was or will be taken in. Any incomplete and/or incorrect forms will be denied and sent back to the student for revisions. Once a correct form is received, the Graduate Coordinator's Assistant will submit it to the Major Professor, Advisory Committee, and Graduate Coordinator for department approval. The form will then go to the Graduate School for final approval. Programs of Study can be revised by submitting the Recommended Change in Program of Study Form which is NOT electronic, but a fillable PDF. Once completed and signed by the Major Professor and Graduate Coordinator, submit via email to the Graduate Coordinator's Assistant, who will submit to the Graduate School for final approval.
- 3. The student will discuss with their Major Professor the "Policy on Ownership and Publication of Research Data and Findings from Graduate Student's Projects found in this handbook. They will both sign the form, then students will then submit it to the Graduate Coordinator for his/her signature. The form will then go to the Graduate Coordinator's Assistant for retention in the student's academic file.
- 4. The students will submit their research proposal to the Advisory Committee. Proposal is presented and defended to the Advisory Committee. See Section IV for research policy details.
- 5. The student should submit the application for graduation electronically in Athena the first week of the term they intend to graduate in. See Important Dates & Deadlines. Students should also register for the FACS Convocation should they wish to participate. Notices will be sent via email to register.
- 6. Final Defense of Thesis (or Project) should be held at least 6 weeks prior to graduation and follow these steps:
 - a. At least 3 months prior to the intended defense date The student should confirm the date and time with their Major Professor and Advisory Committee. Allow 45 minutes for presentation, then 90 minutes for defense with the Advisory Committee.
 - b. At least 2 months prior to the intended defense date The student contacts the Graduate Coordinator's Assistant to schedule the room. Once the date, time, and location of the defense has been determined, the Major Professor should immediately notify the Graduate Coordinator and the Graduate Coordinator's Assistant.
 - c. **At least 4 weeks prior to the intended defense date** The student will submit the following information to the Graduate Coordinator's Assistant via email:
 - i. Student name
 - ii. 81x#
 - iii. Full names of Major Professor and Advisory Committee

- iv. Intended defense date
- v. Intended defense time
- vi. Location building and room number
- vii. Title of Thesis
- d. *At least 4 weeks prior to the intended defense date* The student will obtain approval from Major Professor that the Thesis appears ready for defense.
- e. At least 2 weeks prior to the intended defense date The student will submit Thesis to Advisory Committee. The Advisory Committee will approve or disapprove the Thesis (or project) as ready for the final defense. If the Advisory Committee disapproves of the Thesis (or project), then a meeting will be held to advise the student on how to proceed with completing the Thesis (or project). If the Advisory Committee approves the Thesis (or project), then the defense proceeds as planned at the scheduled date and time.
- f. The Major Professor serves as the chair and conducts the final oral examination.
- g. The student prepares and submits <u>Approval Form for Master's Thesis and Final Oral Examination (for MS and MA)</u> (G140) in GradStatus. Graduate Coordinator's Assistant will route to Advisory Committee, Major Professor, Graduate Coordinator, then to the Graduate School for approvals.
- 7. The student electronically submits Thesis to the Graduate School for preliminary format check (See Important Dates & Deadlines).
- 8. The student submits final copy of Thesis to the Graduate School for final approval.
- 9. All requirements for the degree must be completed and reported to Graduate School at least 2 weeks before graduation.

B. MS Non-Thesis

- 1. MS Non-Thesis students are assigned a Major Professor. The Program of Study should be discussed with the Major Professor. Students will submit Program of Study Form (G138) for approval by the Major Professor, Graduate Coordinator, and Graduate School. Do not list courses that are not required. Changes should be made via Recommended Change in Program of Study Form which is a fillable PDF and can be emailed to Graduate Coordinator's Assistant to obtain signatures and to submit to Graduate School.
- 2. The student should make an appointment to meet with the Graduate Coordinator at least 6 months prior to anticipated graduation to discuss cumulative exit exam content and procedure (See Section III B for exam details).
- 3. The student should submit their application for graduation electronically in Athena. See Important Dates & Deadlines.
- 4. All requirements for the degree must be completed and reported to Graduate School at least 2 weeks before graduation.

C. MS Non-Thesis Online

- MS Non-Thesis students are assigned a Major Professor. The Program of Study will be determined by your Major Professor
 with your input and submitted to the Graduate Coordinator or Graduate Coordinator Assistant for verification of
 requirements. Once verified, the Program of Study will be submitted online via <u>Program of Study Form (G138)</u> in GradStatus.
 It will be approved by the Major Professor, Graduate Coordinator, and the Graduate School. Any changes are requested via
 <u>Recommended Change in Program of Study Form.</u>
- 2. The student should submit the application for graduation in Athena by the end of the first week in the term intended to graduate. See <u>Important Dates & Deadlines</u>.
- 3. All requirements for the degree must be completed and reported to the Graduate School at least 2 weeks prior to graduation.

D. PhD Program

Students who enter the doctoral program with strong backgrounds and a Master's degree will usually require 3 to 4 years to complete all requirements. Students who enter the doctoral program in a new area of research for them without a Master's degree, and/or who change Major Professors or research areas will take at least 4 to 5 years to complete all requirements.

The major milestones for completing the doctoral degree are as follows:

Year 1

- Selection of Major Professor
- · Selection of Advisory Committee
- Preliminary Program of Study
- Conduct dissertation research (continue through Year 3)

Year 2

- Write and defend dissertation research proposal
- Pass written and oral comprehensive exams (End of Year 2 or early Year 3)
- Completion of coursework
- Conduct dissertation research
- Present research at professional meetings (continue through Year 3)

Year 3

- Continue/complete dissertation research
- Present research at professional meetings
- Defend dissertation research (Earliest is End of Year 3, but usually in Year 4)

Year 4

- Continue/complete dissertation research
- Present research at professional meetings
- Defend dissertation research

Students should meet with their Major Professor on a weekly basis, and their Advisory Committee at least once a year or more often as needed. The checklist below should be used to help document progress.

- 1. Selection of Advisory Committee The Advisory Committee should have four members: The Major Professor, two members of Nutritional Sciences Graduate Faculty, and one member that is not Nutritional Sciences faculty. If the student wishes to use non-UGA faculty as their fourth member, they must submit that faculty member's CV, as well as a justification letter from their Major Professor and signed by the Graduate Coordinator. These two documents are attached to the request within GradStatus. The student submits Advisory Committee Form G130 in GradStatus. Either the Graduate Coordinator or Graduate Coordinator's Assistant will approve and route to the Graduate School for final approval. If the student needs to make any changes to their Advisory Committee, they should submit another form, which will override their previous form.
- 2. Policy on Ownership and Publication of Research Data the student discusses this form (on page 16 of the handbook) with Major Professor. The student and Major Professor sign and submit to Graduate Coordinator's Assistant to obtain Graduate Coordinator's signature. The form is kept as a permanent record in the student's academic file.
- 3. **Preliminary Doctoral Program of Study** the student completes and signs this form in consultation with Major Professor at a meeting with their Advisory Committee. The form is submitted to the Graduate Coordinator by the end of Year 1.

- **4. NUTR 8900** PhD students must register for three credits of NUTR 8900 as follows: 2 credits in their first semester of Year 1, and one credit the semester they defend their dissertation. Students should make sure to register for 8900 in the semester they defend in the section with their Major Professor.
- 5. Research Proposal The student should submit the research proposal to the Advisory Committee during Spring of Year 2 while taking NUTR 8560. The student will meet with the Advisory Committee to defend the proposal. See Section IV for details and proposal approval form.
- 6. At least 6 months before Oral Comprehensive Examination Final Doctoral Program of Study Once
 Preliminary Program of Study is verified and approved, student submits Program of Study Form G138 in GradStatus. Graduate
 Coordinator's Assistant will review for accuracy and completeness. If both accurate and complete, the Graduate Coordinator's
 Assistant will submit to the Advisory Committee for approval, then to the Graduate Coordinator, then to the Graduate School.
- 7. Spring of Year 2/Summer of Year 2/Fall of Year 3 Oral and Written Comprehensive Examination the student takes written examination first. If successfully passed, the student takes the oral examination. At least four weeks prior to the oral examination, notify the Graduate Coordinator and Graduate Coordinator's Assistant via email with the following information:
 - a. Student's name
 - b. 81x#
 - c. Date of Oral Exam
 - d. Time of Oral Exam
 - e. Location (Building and Room #) Graduate Coordinator's Assistant can help with reserving a space
 - f. Full names of Major Professor and Advisory Committee members

The Graduate Coordinator's Assistant will submit Written and Oral Comprehensive Examination Form G168 in GradStatus to the Graduate School for approval. The Graduate School will then email Report of the Written and Oral Comprehensive Examination form to the Graduate Coordinator's Assistant, who will send it to the student's Major Professor. Major Professor will obtain "Pass" or "Fail" votes along with signatures of the Advisory Committee and return to the Graduate Coordinator's Assistant, who will submit to the Graduate School via email. Student should immediately inform Graduate Coordinator and Graduate Coordinator's Assistant of any changes in the schedule of the comprehensive exams.

- 8. Before submission of Report of Written and Oral Comprehensive Examination Form the student will submit Application for Admission to Candidacy for Doctoral Degrees Form G162 in GradStatus. The form will be routed to the Major Professor and then Graduate Coordinator for approval. The Graduate School will then inform the student that they have been accepted to candidacy via email.
- 9. Electronic Submission of Dissertations student should attend trainings for electronic submission of their dissertation
- 10. Copyright of Dissertation Student should obtain copyright clearance for any manuscripts published or in process. The Graduate School will not accept dissertations without copyright clearance from the publishers.
- **11. Graduation** The student should apply for graduation in the first week of the intended term of graduation.
- 12. Final Defense of Dissertation Steps
 - **a.** The student must register for one credit of NUTR 8900 with their Major Professor during the term in which they intend to defend and graduate.
 - **b.** At least 3 months before the intended defense date The student should confirm the time and date with the Major Professor and Advisory Committee. The defense date should be no later than 6 weeks prior to graduation. The presentation and defense take place on the same day, with the defense meeting following the presentation. Students should plan to present their dissertation research during a regularly scheduled departmental seminar. The student should communicate with the seminar coordinator to select an open week. The presentation will be about one hour, and the defense with the Advisory Committee will be about two.
 - c. At least 2 months before the intended defense date The student should contact Graduate Coordinator's Assistant to book a room for defense. Once the date, time, and location are established, the student should notify the Graduate Coordinator.

- **d.** *At least 4 weeks prior to intended defense date* The student should email Graduate Coordinator and Graduate Coordinator's Assistant with the following information:
 - i. Student Name
 - ii. 81x#
 - iii. Defense date
 - iv. Defense time
 - v. Building and Room # of Defense
 - vi. Title of Dissertation
 - vii. Full names of Major Professor and members of Advisory Committee

The Graduate Coordinator's Assistant will submit this information to the Graduate School via GradStatus on the Dissertation Defense Announcement Form G119.

- e. At least 3 weeks prior to the intended defense date— The student should confirm with Major Professor that dissertation is ready for defense. If ready, students should submit their dissertation to the Advisory Committee for approval. If approved, the defense will proceed as planned. If disapproved, the Advisory Committee will meet with the students to advise on how to proceed. The students will submit Approval Form for Doctoral Dissertation and Final Oral Examination G164 in GradStatus. The Graduate Coordinator's Assistant will assign the form to the Advisory Committee for "pass" or "fail" status. Once approved, it is routed to the Graduate Coordinator for approval, then to the Major Professor, then to the Graduate School.
- **f.** *Dissertation format check* The student will submit dissertation electronically to the Graduate School for preliminary format check via ProQuest. For more information regarding dissertation submission, please see Thesis & Dissertations Overview on the Graduate School website.
- **g.** *ETD Approval Form* once the dissertation is approved, the student will submit <u>ETD Submission Approval Form G129</u> in GradStatus.
- **h.** All degree requirements must be completed and reported to the Graduate School at least two weeks before graduation. Refer to <u>Important Dates & Deadlines</u> for specific dates.

VIII. GENERAL INFORMATION

A. Registration

Meet with your Major Professor to determine your schedule of classes. Once you have met with your Major Professor, complete any necessary override request forms online – <u>Nutritional Sciences Graduate Override Request Form</u>.

B. Keys

Students are to request keys from the Graduate Coordinator's Assistant, Lora Shue, in Room 280 Dawson Hall. Please make sure to know the room number when requesting keys.

C. Computer Lab

PC labs are available to all graduate students and are open Monday through Friday 8a-5p. Students may also check into procedures for use on nights or weekends. Printing kiosks are located around campus, including Dawson Hall, for printing.

D. Assistance from Nutritional Sciences Staff – Guidelines

- For printing class materials email Lora Shue ldshue@uga.edu completed materials with amount requested, and whether materials can be printed on both sides, stapled, etc. Please allow 2 business days to be completed, Lora will notify you and place materials in the mailbox of the course instructor for pickup.
- Purchase Orders/Travel & Expense Reports must be initiated in OneSource and submitted electronically. For assistance with travel and expense reports, please contact Lora Shue, ldshue@uga.edu; for assistance with purchase orders, please see the training materials distributed to all graduate students.
- Graduate School Forms most are electronic through <u>GradStatus</u> email Lora Shue <u>ldshue@uga.edu</u> for assistance
- Poster Printing If you need a poster printed for a conference or meeting, submit your request through
 Poster Printing Service Request Form G143 in GradStatus. This service is free of charge for Graduate
 Students only. Other suggestions include:
 - <u>Tate Student Center Print & Copy Services</u> 706-542-8493 <u>tatecopy@uga.edu</u>
 - <u>FedEx Office Print & Ship Center</u> 706-353-8755
 - Athens Blueprint & Copy Shop 706-548-0656 largeformatprints@athensblueprint.com
 - <u>PosterPresentations.com</u> 866-649-3004

E. NUTR 6900/8900 Departmental Seminar

Each graduate student (except for Masters Non-Thesis Online students) must attend all seminars every semester given by the Department of Nutritional Sciences whether the student is enrolled in NUTR 6900/8900. Seminars expose the graduate student to diversified areas of current research topics and help develop the student's communication skills and ability to report and interpret current events in Nutritional Sciences and research data.

F. Expectations of Progress and Time Limits

It is expected that a Master's degree be completed in two years; completion of any internship requirements may require additional time. The limit imposed by the Graduate School for completion of a Master's degree is six years. For PhD candidates, it is expected that all requirements be completed within four to five years; the time limit imposed by the Graduate School is six years to candidacy with five additional years for dissertation after candidacy from first registration.

G. Vacations

It is expected that MS Thesis and PhD graduate students will spend the majority of time during the semester breaks working on their research so that they can graduate in a timely manner.

H. Financial Aid and University Employment

1. For information regarding financial aid, visit the Office of Student Financial Aid website.

2. Assistantships

- a. Graduate School Assistantships Some assistantships/awards are granted on a university-wide competitive basis. The Graduate Committee nominates candidates for consideration for these assistantships/awards.
- b. College Assistantships Teaching assistantships and research assistantships are available from the college on a competitive basis. Students in the Master's degree programs are generally awarded two-year assistantships; PhD students are generally awarded four-year assistantships. Continuation of assistantships are contingent upon satisfactory academic progress, satisfactory performance and funding availability.
- c. Departmental Assistantships Teaching assistantships and research assistantships are available from the department on a competitive basis. Students in the Master's thesis degree programs are generally awarded two-year assistantships; PhD students are generally awarded four-year assistantships. Continuation of assistantships are contingent upon satisfactory academic progress, satisfactory performance and funding availability.
- d. Faculty Assistantships Some faculty may have their own funding for research assistantships. These assistantships are awarded to students that are interested in the faculty member's research and are also dependent on the merit of the student.
- e. Level of Support Assistantships range from 33% or 13 hours per week, 40% or 16 hours per week, or 50% or 20 hours per week. No student at UGA is allowed to work more than 20 hours per week if they are enrolled at least half-time. Students on assistantship are required to be enrolled for a minimum of 12 graduate credit hours in Fall/Spring semesters, and 9 graduate credit hours during Summer semester. Summer semester hours can total 9 over all sessions or can be taken during one session. Students must be on a minimum of 33%/13 hours in order to receive the tuition waiver.
- f. Scholarships Students are encouraged to seek out and apply for College of Family and Consumer Sciences scholarships, as well as industry scholarships. The Academy of Nutrition and Dietetics and The American Institute of Nutrition both offer scholarships.
- g. University Employment graduate students on assistantships are considered employees of the University. Any student on payroll can reach out to the Graduate Coordinator's Assistant and/or Business Manager with any payroll questions or issues. The Assistant to the Department Head can be contacted with any HR questions or issues.
- h. Other employment the department discourages employment in permanent positions for any full-time student actively pursuing a degree. Conflicts between job requirements and educational needs become particularly acute when the job is also in the University. For this reason, the Department does not hire students in technician or other classified positions.

I. Course Loads

Graduate Assistants who hold assistantships from 33% to 50% time are required to enroll in a minimum 12 graduate hours in Fall/Spring semesters and 9 graduate credit hours in Summer semester. To exceed the maximum course load (usually above 15 credit hours), the student must obtain written approval from the Major Professor and the Dean of the Graduate School. The Department Head or the Graduate Coordinator may sign the overload request in the absence of the Major Professor. Course audits will not be counted when considering maximum and minimum course load requirements. NUTR 7000/NUTR 9000 hours count as graduate credit hours in all semesters.

J. Grade Point Average

Graduate students are expected to maintain an overall average of a 3.0 with no grade below a "C" in any course, including research courses. A C- is not counted as meeting degree requirements. According to <u>UGA Graduate School Policies:</u> "Students with a cumulative graduate course average below 3.0 for two consecutive terms are placed on academic probation by the Graduate School. They then must make a 3.0 or higher semester grade average each succeeding semester that their overall cumulative graduate average is below 3.0. These students are no longer on probation when their cumulative graduate average is 3.0 or above. If they make below a 3.0 semester graduate average while on probation, they are dismissed."

K. Graduate Student Organization (GSO)

The GSO organizes academic, community, and social activities with graduate students in the Department of Nutritional Sciences. Recent activities include organizing weekly post-seminar lunches for the department, planning and hosting social events for graduate students, planning and implementation of graduate student recruitment events with departmental faculty, serve as graduate student representative on departmental committees, engage in outreach and service activities, and participation in professional organizations and conferences. To join, contact the current GSO president.

L. Grievance Procedure for Graduate Students

Grievance procedures can be found on the college's website.

M. Health Insurance

See Student Insurance & Employment.

N. Reasons for Dismissal

- Failure to submit a Program of Study approved by Major Professor and Advisory Committee.
- 2. Receive two unsatisfactory grades in any courses.
- 3. Make below a 3.0 semester graduate average while on probation.
- 4. Violate the academic honesty policy.
- 5. MS thesis or PhD students who do not have a faculty member willing to serve as their Major Professor after one year in program.
- PhD students who do not pass written or oral comps after two attempts (See policy in III, C).

IX. EVALUATIONS OF GRADUATE STUDENTS AND GRADUATE ASSISTANTS

Major Professors will conduct evaluations once per semester with their MS Thesis and PhD graduate students. The evaluations are used to provide the student feedback on their performance, to help the student progress in a timely manner, to provide a basis for allocation of assistantships, and to make decisions regarding the faculty's role as the student's major professor. Performance in the classroom, progress and accomplishments in research, participation as a member of the laboratory team and the student's overall attitude will be key factors addressed in a performance evaluation. If at any time, your Major Professor is not satisfied with your performance, they can elect to discontinue serving as your Major Professor. If this occurs, your CV will be circulated to faculty for consideration. If no faculty member agrees to serve as your major professor, you will be dismissed from the program.

Additionally, each MS Thesis and PhD graduate student, regardless of assistantship status, must complete an <u>Annual Progress Toward Degree</u> with their Major Professor each year. This form is due to the Graduate Coordinator's Assistant on or before January 15. Each student will also submit their <u>Elements Activity Summary</u> with this form.

A. Operating Procedures for MS Thesis and PhD students

- 1. All graduate students will be evaluated at least one time per semester but may be evaluated more often.
- 2. Graduate students will be evaluated using the form(s) attached at the end of this document. The form is developed by the College of Family and Consumer Sciences and will be submitted to the college HR department. The departmental Evaluation of Performance by Graduate Research Assistants form will be submitted to the department. Forms are due May 1 for Spring and December 15 for Fall. Evaluations may be submitted more often as deemed appropriate, which will become part of the student's records kept in the Department of Nutritional Sciences.
- 3. Evaluations will be monitored by the head of the department and will be made by the immediate supervisor(s) of the graduate student. Graduate students may be evaluated by more than one supervisor. For example, they may be evaluated by their Major Professor, the faculty member supervising their research duties, and/or the faculty member supervising their teaching duties.
- 4. Evaluation results must be reported in writing to graduate students and the report should identify strengths and weaknesses of their performance. Each evaluation document must be signed by the student, the faculty supervisor(s), the Graduate Coordinator, and the Department Head. The completed evaluation form should be sent to the Graduate Coordinator Assistant once the student and faculty supervisor(s) have signed for collection of the Graduate Coordinator and Department Head's signatures.
- 5. Graduate students have the right to respond to the evaluation; such a written response by the student should be received by the supervisor(s) within two weeks of the evaluation. There may be special circumstances or situations that require explanation or description or there may be a difference in opinion of work output or there may be reasons for grievance.
- 6. If significant improvement in performance is needed, then a written plan for that improvement should be devised by the graduate student and their immediate supervisor(s) within two weeks of the evaluation conference.
- 7. If the performance of a graduate student fails to improve in accordance with the plan, further action will be taken. In those situations, where continuance of a graduate assistantship would be detrimental to the effective operation of the academic unit, consideration will be given to terminating the assistantship.
- 8. When an assistantship is terminated, the student must be advised in writing of the termination of the assistantship and of the appeal procedures available.
- 9. Appeals of terminations, unless they include charges of discrimination, will be heard through channels established for academic decisions. The appeals must be in writing and must specify the grounds on which they are based.

B. Graduate Research Assistants

1. Position Description

The graduate research assistant position is designed to give assistance to a faculty research endeavor. The time commitment varies in relation to the percentage of the full-time appointment. The range is from 33% to 50%. Students with a 33%-time appointment are obligated to work at least 13 hours per week, 40%-time are obligated to work 16 hours per week, and 50%-time are obligated to work 20 hours per week.

Assigned duties will vary with the project and supervisor. Duties may include data collection and analysis, library research, animal care, laboratory analysis and other relevant responsibilities as indicated by supervisor.

2. Standards of performance:

- a. Recognizes and learns to solve problems encountered in the course of the assigned project.
- b. Develops a research focus.
- c. Communicates the progress of the research using effective written and oral skills.
- d. Makes steady progress towards meeting the degree course requirements and the Program of Study.
- e. Maintains a GPA of 3.0 or better
- f. Maintains an equitable cooperative attitude towards staff, faculty, and fellow students.
- g. Develops technical abilities and skills appropriate for project.
- h. Completes assigned tasks in a timely manner with due regard to accuracy and precision of work.
- Gives evidence of developing good work skills, i.e., dependability, integrity, honesty, initiative, enthusiasm, and independence in thought and deed.
- 3. **Performance Review Forms** all performance review forms are available at <u>FACS Performance Review</u>.

C. Graduate Teaching Assistants

Department of Nutritional Sciences Teaching Assistant (TA) Policy

All MS and PhD students whose assistantship is provided (partially or in full) by departmental and/or college funds (including start-up) will be required to serve as a Teaching Assistant each semester.

All MS and PhD students whose assistantships are provided from external/grant funding, funding from the Graduate School, or other sources of funding, cannot be assigned teaching assistantship responsibilities. These students, however, will be required to register for 1 credit of "teaching experience" through either NUTR 8560 Proposal Writing, or an otherwise approved course during one semester of their graduate degree program. When students register for this credit, they will be assigned to a course and will assist the Instructor of Record with teaching-related responsibilities. If a graduate student's funding changes from external to departmental/college, the student will be required to be a Teaching Assistant for all remaining semesters in their Program of Study.

This policy is effective November 2016 and applies to enrolled students in the Nutritional Sciences department graduate program on or after that date. The Graduate Coordinator will make TA assignments in consultation with the Department Head and assignments will be communicated by the Graduate Coordinator's Assistant. All students who are required to serve as a teaching assistant or who are required to register for NUTR 8560 or an approved alternative, are also required to enroll and complete GRSC 7770 Graduate Teaching Seminar. This should be taken before or concurrently with your first semester of your teaching assignment. International students may take LLED (ELAN) 7769 in place of GRSC 7770.

1. Position Description

Some Graduate Assistants help faculty with teaching, as well as managing and developing courses and course materials. The time commitment varies in relation to the percentage of the full-time appointment. The range is from 33% to 50% time. Students with a 33%-time appointment are obligated to work 13 hours per week, students with a 40%-time appointment are obligated to work 16 hours per week, and students with a 50%-time appointment are obligated to work 20 hours per week.

Assigned duties will vary with the course and with the faculty member supervisor. Duties may include providing designated lectures, assisting in exam construction, supervising undergraduate laboratory experiences, grading papers and exams, and providing general assistance in and out of the classroom for the particular needs of the course.

2. Standards of Performance

- a. Learns to solve problems relating to the instructional effort
- b. Develops teaching skills, which include organization and presentation of assigned subject matter.
- c. Communicates problems and progress of the course relating to the instructional effort using effective writing and oral skills.
- d. Makes steady progress towards meeting the degree course requirements and the Program of Study.
- e. Maintains a GPA of 3.0 or better.
- f. Maintains an equitable cooperative attitude towards staff, faculty, and fellow students.
- g. Completes assigned tasks in a timely manner with due regard to the needs of the faculty member and the students enrolled in the course.
- h. Gives evidence of developing good work skills, i.e., dependability, integrity, honesty, initiative, enthusiasm, and independence in thought and deed.
- i. Attendance at UGA Teaching Assistant Workshops.
- 3. Performance Review Forms all performance review forms are available at FACS Performance Review.

APPENDIX A

List of potential courses in Statistical Design and Evaluation for Nutritional Sciences MS Thesis & Ph.D. Students

Visit the **UGA Bulletin** for more details on each course. * Indicates Graduate Level only

Course Number	Course Title	Credit Hours	Description
BIOS 7010	Introductory Biostatistics I	3	Introductory statistics with applications to medical and biological problems. Topics to be covered include biostatistical design in health research, data collection and management, and introductory concepts and methods of statistical data analysis.
BIOS 7020	Introductory Biostatistics II	3	Introduction to a variety of statistical tools with applications in public health and the biological sciences, including survey sampling, multiple regression, experimental design, categorical data analysis, logistic regression, and survival analysis. Motivating examples will be drawn directly from the literature in health, biological, medical, and behavioral science.
ERSH 6300	Applied Statistical Methods in Education	3	Techniques for describing and summarizing data for educational research studies. Applications of the standard normal distribution and the use and interpretation of standard scores. Inferential statistics for one and two population studies including means, proportions, and correlations.
ERSH 8310	Applied Analysis of Variance Methods in Education	3	Experimental design and the analysis of data from experiments, including orthogonal analysis of variance for single and multifactor designs, randomized block, repeated measures, and mixed models. Computer applications and reporting results using APA style.
ERSH 8320	Applied Correlation and Regression Methods in Education	3	Nonexperimental and quasi-experimental research studies, including simple and multiple regression techniques, nonorthogonal analysis of variances, correlation techniques, and analysis of covariance.
ERSH 8350	Multivariate Methods in Education	3	Discriminant analysis, multivariate analysis of variance, canonical correlation analysis, and cluster analysis. Relating research questions to methods, conducting computer analyses, interpreting computer printouts, and critiquing analysis reports.
ERSH 8360	Categorical Data Analysis in Education	3	Categorical data analysis with emphasis on practical applications in educational research and on the use of computing packages for analysis of such data. Topics include contingency table analyses, generalized linear models, logistic regression, and loglinear models. These techniques are applied to data sets from educational research.
STAT 6210	Introduction to Statistical Methods I	3	First course on statistics emphasizing applications in social and behavioral sciences. Covers elementary topics, one and two sample inference, simple linear regression, some categorical data analysis. Uses point-and-click software.
STAT 6240	Sampling and Survey Methods	3	Design of finite population sample surveys. Stratified, systematic, and multistage cluster sampling designs. Sampling with probability proportional to size. Auxiliary variables, ratio and regression estimators, non-response bias.
STAT 6315	Statistical Methods for Researchers	4	Basic statistical methods through one- and two-sample inference, regression, correlation, one-way analysis of variance, analysis of covariance, and simple methods of categorical data analysis. The course emphasizes implementation and interpretation of statistical methods. Statistical software (SAS) is integrated into the course.
STAT 6430	Design and Analysis of Experiments	3	Theory and methods for constructing and analyzing designed experiments are considered. Basic concepts in the design of experiments, ANOVA, completely randomized designs, complete and incomplete block designs, cross-over designs, factorial designs, split-plot experiments, non-regular designs, designs for generalized linear models, online experiments, global optimization, computer experiments, and space-filling designs will be covered.
STAT 8090	Statistical Analysis of Genetic Data	3	Methods for analysis of genetic data, with an emphasis on gene mapping. Topics include quantitative genetics, covariance between relatives, estimation of genetic parameters, detection of genetic linkage in crosses and natural populations, association mapping, and QTL mapping. Emphasis on fitting models, estimating parameters, and making inferences based on genetic data.
STAT 8200	Design of Experiments for Research Workers	3	Methods for constructing and analyzing designed experiments are considered. Concepts of experimental unit, randomization, blocking, replication, and orthogonal contrasts are introduced. Designs include completely randomized design, randomized complete block design, Latin squares design, split-plot design, repeated measures design, and factorial and fractional factorial designs.
BIOS(STAT) 8220	Clinical Trials	3	Drug development and FDA approval procedures; randomization; blindness; phase I-IV clinical trials; multicenter trials; bioequivalency; sample size determination; design and analysis; cross-over design; repeated measurements design; survival analysis; meta-analysis.

APPENDIX B

PhD students are required to take 3 credits of Physiology, Biochemistry, or Cell Biology. The following courses are preapproved Physiology courses that will fulfill this requirement. Other Physiology courses may be used with approval.

Visit the <u>UGA Bulletin</u> for more details on each course. * Indicates Graduate Level Only

Course Number	Course Title	Credit Hours	Description
NUTR 6590	Metabolism and Physiology of Energy Balance and Obesity	3	The mechanisms involved in regulating food intake and energy balance. Nutritional, endocrine, genetic, and epigenetic processes and their impact on obesity will be covered. Specific attention will be given to human obesity.
KINS 6690/L	Neuromuscular Physiology	4	Mechanics, energetics, and motor unit recruitment during skeletal muscle contraction; regulation of energy metabolism during exercise; mechanisms underlying oxygen delivery to muscle during exercise
VPHY (KINS) 7690/L	Skeletal Muscle and Mitochondria Physiology	4	This advanced muscle physiology course will focus predominantly on the biology of mitochondria and the physiology of one cell type in which the mitochondria live, skeletal muscle. Topics and discussions will range from mitochondrial biogenesis during skeletal muscle adaptation to mitochondrial dysfunction in diseases such as aging, diabetes, and Alzheimer's.
*KINS 7310/L	Clinical Exercise Physiology	4	Provides knowledge and skills necessary for conducting diagnostic and functional cardiopulmonary evaluations and conditioning programs for chronically diseased patients with an emphasis on the cardiopulmonary patient.
*KINS 7330/L	Metabolic and Cardiorespiratory Aspects of Exercise	4	Metabolic and cardiovascular-respiratory responses to exercise and adaptations to training, with emphasis on applications to human physical performance and fitness.
*KINS 8300	Exercise, Obesity, and Cardiometabolic Disorders	3	Advanced study of mechanisms responsible for exercise-induced effects on cardiovascular and metabolic health through reading and discussion of current research literature.
*KINS 8420	Muscle Energetics and Oxygen Transport During Exercise	3	Reading and discussion of current topics in skeletal muscle biochemistry and oxygen transport relating to exercise. Topics will include contractile protein energetics, ATP production pathways, blood flow to muscle, and oxygen delivery. Emphasis will be placed on acute changes with exercise, and plasticity of skeletal muscle in response to increases and decreases in physical activity.
*PHRM 6400	Human Physiology I	4	Physiology of the human body with emphasis on the central nervous system, autonomic nervous system, and digestive system.
*PHRM 6450	Human Physiology and Pathophysiology I	6	Physiology and pathophysiology of the human body with emphasis on cellular function, the immune system, the nervous system, including the special senses. Diseases of each of these systems will be covered in detail. Additional emphasis will be placed on reviewing current scientific literature emphasizing recent advances in both fields.
*PHRM 6500	Human Physiology II	4	Human physiology of the cardiovascular, renal, endocrine, respiratory, immune, and reproductive systems, including selected topics in integrated physiological regulation. Directed literature studies in human physiology.
*PHRM 6560	Human Physiology and Pathophysiology II	6	Human physiology and pathophysiology of the endocrine, muscle, gastrointestinal, cardiovascular, renal, and respiratory systems.
VPHY 7111	Principles of Physiology I	4	Veterinary professional and graduate training in general physiology.
VPHY 7112	Principles of Physiology II	3	Veterinary professional and graduate training in general physiology. This is a lecture-based course with additional reading and reports required for graduate student credit.
*VPHY 6090	Comparative Mammalian Physiology	3	The animal body as a single functioning organism, including neurophysiology, cardiovascular, and respiratory physiology.
*VPHY 8000	Cardiovascular Physiology	2	Advanced study of current concepts in cardiovascular physiology.
*VPHY 8010	Mammalian Cell Physiology	3	The physiology of the mammalian cell.
*VPHY 8120	The Molecular Basis of Renal Physiology	2	Current concepts in fluid-electrolyte physiology and renal function.
*VPHY 8400	Neurophysiology	3	The nervous system stresses cellular physiology of the nervous system and how changes in cellular physiology impact behavior.
VPHY 8600	Current Topics in Synaptic Physiology	3	An overview of synaptic structure/function followed by in-depth discussions and analyses of current and emerging topics in synaptic physiology. Open to graduate students from multiple disciplines with interests in neurotransmission. Although not required, a previous graduate course in physiology or neuroanatomy will be beneficial.

APPENDIX C

Summary of Trends in Dietetics, Nutritional Sciences, and Culinary Science and Nutrition

Trends in Dietetics

Employment of registered dietitian nutritionists (RDNs) and nutrition professionals is projected to grow 7% from 2021 to 2031 according to the Bureau of Labor Statistics website, which is the average for all occupations. The role of food in preventing and treating chronic diseases, such as diabetes, is well known. More nutrition professionals will be needed in the workforce to provide care for patients with various medical conditions and to advise people who desire to improve their overall health.

The Accreditation Council for Education in Nutrition and Dietetics (ACEND®) of the Academy of Nutrition and Dietetics has outlined the following expectations of a Master's-level graduate:

- Demonstrate leadership skills, including actively engaging in mentoring others (scholarship of Teaching);
- Integrate problem-solving/critical thinking skills throughout their professional life (scholarship of Application);
- Synthesize independent thoughts/critique within their field of expertise (scholarship of Application);
- Enter any employment setting and demonstrate confidence in their ability to grow, work independently and be a member of an interprofessional team (scholarship of Integration);
- Ability to do independent and collaborative research/inquiry and apply research/evaluation methodology to topic of interest (scholarship of Discovery);
- Continue to learn and develop skills as new knowledge/new research data become available (scholarship of Discovery); and
- Provide expertise as to how the dietetics field applies to public policy, global health, strategic thinking, etc. (scholarship of Application)

Trends in Dietetics to be Addressed in the Curriculum

- Geriatric care- the role of nutrition in healthy aging and nutrition care for diseases that increase with age
- Pediatric nutrition- knowledge of evidence-based programs to reduce childhood obesity epidemic, knowledge of neonatal nutrition, nutrition care for the infant in the Neonatal Intensive Care Unit and for those with metabolic disorders
- New areas of focus related to disease prevention and management: nutrition-genetics interactions, the impact
 of gut microbiota on health, evidence-based obesity prevention and management and new research on obesityrelated diseases
- Strong knowledge of community nutrition services and linkages with other public health programs; emphasis
 on food security and sustainability
- Food science principles, food safety and food/nutrition regulation
- Management skills including strong communication skills, technological competency, financial
 management skills, decision making skills and ability to manage human resources
- Informatics: Increased need for understanding of data management and statistics for management of services
- Enhanced research skills
- Use of new technologies for client communication
- Cultural competency to meet the needs of increasingly diverse clients
- Interdisciplinary teaming graduates must work across health care disciplines and beflexible

Trends in Nutritional Sciences

Nutritional Sciences students are interested in the following careers in healthcare: 1) physician assistant, 2) physician, and 3) pharmacist. A growing number of students have joined this major in the last two years with an interest in becoming a physical therapist, dentist, or registered nurse. Most of these career choices are expected to grow over the next decade. Physician assistant and physical therapist careers are growing at a much faster than average rate. These careers are the fastest growing interests among Nutritional Sciences students. Overall, these projections predict optimal career opportunities for Nutritional Sciences students for the next several years.

Source: Bureau of Labor Statistics

Career Prospect I: Physician Assistant-

Job Outlook, 2021 - 2032
 28% (Much faster than average)

Career Prospect II: Physicians and Surgeons

• Job Outlook, 2021 - 2031 3% (Slower than average)

Career Prospect III: Pharmacist

• Job Outlook, 2021 - 2031 2% (Slower than average)

Career Prospect IV: Physical Therapist

• Job Outlook, 2021 - 2031 17% (Much faster than average)

Career Prospect V: Dentist

• Job Outlook, 2021 - 2031 6% (Faster than average)

Career Prospect VI: Registered Nurse

• Job Outlook, 2021 - 2031 6% (Faster than average)

Trends in Culinary Science and Nutrition

Food Industry:

Culinary Science focuses on the blending of food science and the culinary arts and that prepares individuals to work as research chefs and related research and development positions in the food industry. The program examines the functions of ingredients in foods and food products. Students learn how to conduct analytical evaluation of foods, including color, pH, viscosity, and moisture content. Sensory characteristics (appearance, aroma, taste, flavor, texture) which impact consumer acceptance of food products when ingredients are modified or removed are also examined. Students learn to apply this knowledge to the selection, preparation, and processing of food in commercial and industrial environments. Increased consumption of more fresh and refrigerated foods rather than processed foods.

- Change in eating behaviors due to demographics and specific lifestyles.
- Diets and diet habits are driving the market (nutrition labeling of calories to lose or maintain weight, etc.).
 Consumers are also continuing to experiment with alternative eating styles such as exclusion diets due to food restrictions, intolerances or allergies.
- Organic and "natural" foods. Trend in buying more local and organic products.
- Whole food nutrition. Fiber and whole grain foods is still a trend on the rise.
- Reassessment of snacking options- consumers are looking for healthier options for snacks.
- The industry is also reformulating existing products
- Breakfast Increase healthy choices and ethnic flavors for breakfast (chipotle, chutney, etc.)
- New cuisines. Globalization and availability of new ingredients, spices and flavors have influenced consumers; there is an increase in consumption of new gourmet products especially if they have additional nutritional benefits (ex. Quinoa).
- Handmade recipes vs. cook-less meals. Traditional family recipes are being revamped focusing on less
 complicated preparation steps. Packaged meals and kits, oven baking and take-and-bake products are
 still popular amongst consumers.

Restaurants and Fast-Food Trends:

The trend for restaurants is to obtain fresh products, coming from local farmer's market when possible; posting calories to menus, offering alternative healthier sides; counting on mobile technology for ordering, marketing and loyalty programs. Health minded consumers favor restaurants that customize orders, so they may choose healthy options as an alternative to traditional fast food chains.