HUMAN NUTRITION, PH.D.

The PhD in human nutrition is a three-year, 74-credit-hour program designed to align with the goals and objectives of the National Institutes of Health's National Center for Advancing Translational Sciences (NCATS). As such, the program supports the training and development of researchers and leaders in the field of nutrition by focusing on developing the skills needed to perform bench-to-bedside-to-community research. Graduates of the PhD in human nutrition will be experts in nutrition research methodologies and translational nutrition, thereby efficiently advancing the field of nutrition through research to improve human health.

In accordance with the goals of the National Institutes of Health NCATS to implement and promote translational science approaches that foster collaborative bench-to-bedside-to-community approaches, a student who has completed this doctoral program in human nutrition will demonstrate mastery of:

1) Translational nutrition – Demonstrate proficiency in nutrition techniques that are integrated across discrete areas of nutrition research methodologies into a cohesive research agenda that moves nutrition research from the laboratory to the patient/community.

2) Communication - Effectively communicate nutrition information, evidencing the ability to evaluate and interpret current research for presentation to the academic, scientific, and/or the lay community.

3) Nutrition research practice – Demonstrate an understanding of relevant laboratory analyses methodologies, metabolic assessment techniques, and statistical research methodologies appropriate for developing strong, competitive research proposals.

4) Independent research – Demonstrate the ability to support an independent career in research by successfully developing and implementing a research protocol, gathering data to effectively test the hypothesis (or hypotheses), and analyzing and interpreting the data.

5) Effective educators - Demonstrate skills of effective classroom presentation of nutrition-related information.

Application Deadline: February 1. Admission decisions for Fall term will be made in mid-February.

Contact Information: Before applying, it is recommended that you contact the director of the PhD Program in Human Nutrition, Dr. Linda Knol, at lknol@ches.ua.edu or 205-348-8129.

For additional information, please visit the program webpage at http://www.nhm.ches.ua.edu/phd-in-human-nutrition.html

Requirements for Admission:

Students may enter the program with either a bachelor's or master's degree in nutrition or a master's degree in a closely nutrition-related field.

Requirements for admission to the Ph.D. in Human Nutrition will be:

- A completed application, including a Statement of Purpose
- A current resume or curriculum vitae
- Three letters of recommendation from faculty or other health professionals capable of judging the applicant's ability to complete graduate work.
- Test Scores:
  - If a student has previously completed a Master's degree prior to beginning the Doctoral program and maintained a graduate GPA ≥3.5, their application will be considered without the need to submit a GRE score.
  - Students who have previously completed a Master's degree prior to beginning the Doctoral program with a graduate GPA of 3.3-3.49 may be considered for admission providing they also have a GRE score of ≥300. Upon admission, these students would need to receive permission to continue after the successful completion of 12 graduate hours.
  - Students with a Bachelor's degree will need to submit GRE scores. Minimum requirement for admission is a ≥300 on the GRE.
- If an applicant does not have a previous degree in nutrition, minimum prerequisite course work would include NHM 558 Nutr Prev Trtmt Chron Disease, NHM 561 Adv. Vitamins and Minerals, and NHM 562 Metabolism of Energy Nutrients. These would need to be completed in the first year of study. The sequencing of course offerings will be structured such that taking these prerequisites courses will not increase time to graduation nor will they require additional burden or heavier academic loads on the students in order to achieve a timely graduation.
- Additionally, if a student is admitted without having previously completed a Master's degree, they will need to complete NHM 509 Research Methods in Nutrition. The sequencing of course offerings will be structured such that taking prerequisites course(s) will not increase time to graduation nor will they require additional burden or heavier academic loads on the students in order to achieve a timely graduation.

Please see the link below for general Graduate School admission criteria.

See the Admission Criteria section of this catalog for more information.

Coursework

The Ph.D. in Human Nutrition requires completion of 74 graduate hours, including 21 hours of nutrition core classes, 12 hours of statistics, 17 hours of nutrition electives including up to 12 hours of non-dissertation research, and 24 hours of dissertation research.

- Students with a Master of Science degree in Human Nutrition from the University of Alabama may use the courses taken for the M.S. degree towards up to 9 hours of nutrition coursework in the Ph.D. program.
- Up to 12 hours of equivalent graduate nutrition coursework may be transferred in from a comparable Doctoral program to count towards completion of the Doctoral program requirements, providing those hours were not used towards completion of a degree at that institution.

Comprehensive Examination

Prior to the start of the fifth semester in residence (not including summer terms), students must successfully complete a comprehensive candidacy exam. This exam is taken in two phases - written and oral.

The written comprehensive examination is required of all candidates for the Ph.D. degree. The written exam will be offered in January and May of each year. This exam should be prepared for by individual study expanding on the content covered in five core courses: NHM 601 Contemp Research Nutrition Sci, NHM 602 Methods Integrat Nutr Assess,

NHM 603 Nutrition Intervention, NHM 625 Nutritional Epidemiology, and NHM 648 Secondary Analysis of Survey Data. The exam must be passed unconditionally before the student can defend his/her proposal and be advanced to candidacy.

Prior to taking the exam, students must have completed their core course requirements, and at least 75% of their other didactic course work. Students should NOT assume that "A" level performance in their coursework is adequate preparation for the comprehensive exam. Students must be registered for at least one semester hour of graduate work during the semester(s) in which the comprehensive exams are taken.

The written exam is graded by the graduate faculty in the Doctoral program.

- Each section of the exam will be graded by three nutrition professors for content, grammar, and organization of thought. Graders will be blinded to reduce bias. Answers within each section will be graded separately. Students may receive one of the following grades: pass (80% or better), contingency (78-80%), and fail. Insufficient depth or detail or incorrect content will not result in a passing grade.
- Students who pass all three sections of the written exam may progress to the oral exam.
- Students who receive a contingency grade on any section of the exam will be allowed to rework that section of the exam for a better grade. Contingency grades will need to be resolved within two weeks after initial exam feedback. Once any contingency grades are removed, the student may progress to the oral exam.
- Students who fail one or more sections will be allowed to retake those sections during the next available testing opportunity. **Only 1 retake is allowed.** Failure to successfully pass any part(s) of the examination retake will result in dismissal from the degree program and the Graduate School without confirmation of the degree.

The Comprehensive Exam will cover material outlined in the following core courses:

NHM 601 Contemp Research Nutrition Sci

NHM 602 Methods Integrat Nutr Assess

NHM 603 Nutrition Intervention

NHM 625 Nutritional Epidemiology

NHM 648 Secondary Analysis Survey Data

Upon successful completion of the written exam, students will develop and defend a dissertation proposal with the guidance of their mentor. The oral portion of the comprehensive exam will be graded by the dissertation committee members at the proposal defense.

Doctoral Dissertation

The Doctoral dissertation is designed to provide students with a significant research experience and the ability to demonstrate their mastery of research design, implementation, and knowledge dissemination. Once students have successfully completed academic coursework, their comprehensive exams, and successfully defended their dissertation proposal, they may then register for dissertation hours. The Doctoral dissertation committee should include a minimum of five graduate faculty members with at least three committee members from within the Department and one committee member from outside of the Department. This committee will work with the student to develop an appropriate timeline and to ensure the student meets all University standards for documentation and research protocols appropriate for their respective department, college, and graduate school.

The Doctoral dissertation requires the completion of 24 hours of dissertation credit. Each student will work closely with his/her Doctoral program chair and his/her Doctoral dissertation committee in the development of a dissertation proposal. Upon completion of the dissertation research, a draft of the written dissertation is to be submitted no later than 2 weeks before the planned oral dissertation defense. Notice of this defense is to be posted throughout the college and will be announced via e-mail to faculty and currently enrolled graduate students. The student's committee will be in attendance, as well as any faculty or students from the University who may wish to attend.

Human Nutrition, Ph.D.		**Hours**
Required Courses		
NHM 635	Adv Prac. in Post Sec. Diet Ed	3
NHM 601	Contemp Research Nutrition Sci	3
NHM 602	Methods Integrat Nutr Assess	3
NHM 603	Nutrition Intervention	3
NHM 691	Grant Writing Nutrition Res	3
NHM 695	Interpret Nutrition Research	3
NHM 625	Nutritional Epidemiology	3
NHM 648	Secondary Analysis Survey Data	3
Statistics Elective (600 Level)		12
Research Hours		
NHM 698	Non-Dissertation Research	1-12
NHM 699	Dissertation Research	24
Nutrition Electives		**17**
NHM 550	Advanced Community Nutrition I	
NHM 551	Adv. Community Nutrition II	
NHM 555	Maternal and Infant Nutrition	
NHM 556	Child and Adolescent Nutrition	
NHM 557	Childhood Obesity	
NHM 564	Nutrition in IPP	
NHM 565	ID Mgmt of Chronic Disease	
NHM 568	Nutrition for the Older Adult	
NHM 590	Special Prob Nutrition	
NHM 610	Nutr. and Health Disparities	
NHM 611	Nutritional Neuroscience	
Total Hours		**78-89**