

Human Nutrition (HMNT)

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Degrees Awarded

Ph.D. in Human Nutrition (AFLSPH-HMNT)

Program Description: The doctoral program in Human Nutrition develops future leaders in human nutrition who are equipped to address complex nutrition and human health issues through interdisciplinary engagement in learning and discovery. Objectives of the program include providing interdisciplinary education and training in human nutrition and nutritional sciences and preparing students for careers conducting nutritional science research in academic, government, healthcare, or industry settings.

Requirements for Ph.D. in AFLS with Human Nutrition Concentration

Prerequisites to Degree Program: A Master of Science degree is desirable. A student with a Bachelor of Science and an exceptional record in academics and/or research may be approved for admission to the Ph.D. program in Agricultural, Food and Life Sciences if the Graduate Student Concentration Admissions Committee of the desired concentration deems them qualified and approval is granted by the AFLSPH Steering Committee. A student admitted to the University of Arkansas, pursuing an M.S. and in good academic standing may apply to be admitted to the doctoral program and forgo completing the M.S. degree if so approved by the AFLSPH Steering Committee and the AFLSPH Graduate Concentration Admissions Committee. A minimum grade point average of 3.00 (on a 4.00 scale) on previous college-level course work is required.

Admission Requirements for Entry: To be considered for admission, a student must submit a letter of intent, along with the application for admission indicating the desired degree concentration, areas of interest and career goals. Official transcripts of all previous college-level course work must be submitted. Three letters of recommendation are required. These letters should address the character and academic capability of the applicant. Applications will first be reviewed by the AFLSPH Steering Committee which will assign the student to the appropriate Graduate Student Concentration Admissions Committee for review. The Concentration Admissions Committee will make the final determination of admittance into the AFLSPH program and the concentration.

Requirements for Doctor of Philosophy Degree: The Ph.D. program in Agricultural, Food and Life Sciences requires a minimum of 72 credit hours after a Bachelor of Science or Bachelor of Arts degree or a minimum of 42 hours after a Master of Science or Master of Arts degree.

General course requirements for each degree candidate are arranged on an individual basis by the Faculty Adviser, the Graduate Advisory Committee and the candidate in accordance with guidelines of their concentration. Alternate courses may be selected at the discretion of the committee.

All students must complete 6 hours of elective course hours and 2 hours of seminar. One seminar must be a research proposal presentation and the other must be an exit seminar presenting the dissertation research results. All students must complete 18 hours of doctoral dissertation hours. Students entering the doctoral program with only a B.S. or B.A. must also complete an additional 30 hours (to reach the 72 hour post B.S./B.A. requirement). Students must satisfactorily pass written and oral candidacy examinations covering their discipline and supporting areas. These examinations must be completed at least one year before graduation. Each candidate must complete a doctoral dissertation on an important research topic in the concentration field. The specific problem and subject of the dissertation is determined by the faculty adviser, the student and the Graduate Advisory Committee. A dissertation title must be submitted to the dean of the Graduate School at least one year before the dissertation defense. Provisional approval of the dissertation must be given by all members of the Graduate Advisory Committee prior to the dissertation defense. Students must pass the oral defense and examination of the dissertation given by the Graduate Advisory Committee. A student cannot be approved for conferral of the doctoral degree until after completion of all coursework, written and oral candidacy exams, the defense passed and dissertation accepted by the Graduate School and an application for the degree has been filed with the Registrar's Office and the fee paid.

Additional Concentration Requirements

In addition to the general requirements for the Ph.D. program in Agricultural, Food and Life Sciences, students in the Human Nutrition Concentration must also complete:

NUTR 51003	Nutrition Research Design and Methodology	3
NUTR 51103	Advanced Nutrition I	3
NUTR 52303	Advanced Nutrition II	3
CHEM 58403	Biochemistry II	3
	Graduate-level Statistics	6
	Choose three (3) hours from the following:	3
	FDSC 64403 Metabolism of Xenobiotics	

FDSC 6020V Special Topics

Total Hours**21**

Completion of the AFLS Ph.D. with a concentration in Human Nutrition does not meet the eligibility requirements to become a registered dietitian nutritionist (RDN). The Commission on Dietetic Registration requires a minimum of a master's degree plus the completion of supervised practice hours. The commission requires that individuals complete the supervised practice hours in programs accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) for this purpose. This is not provided by the University of Arkansas.

In addition to the prerequisites to the AFLS Ph.D. program, applicants are required to have earned credit in the following:

- Introductory Biology (3 credits)
- Physiology (human; 3 credits)
- Biochemistry (3 credits)
- Nutrition (human; 3 credits)
- Statistics (3 credits)

Students entering the graduate program who do not have an undergraduate degree in nutrition or closely related field with training and experience will be required to take the following additional courses:

- CHEM 58103 Biochemistry I
- NUTR 52203 Nutrition During the Life Cycle

Courses

NUTR 51003. Nutrition Research Design and Methodology. 3 Hours.

This course focuses on topics such as nutrition research terminology, nutritional epidemiology methods, and experimental scientific methods, technologies, and issues involved in understanding and conducting studies on the relationship between human diet and disease. Evaluation of experimental scientific methods include problem identification, research design, preparation and evaluation of experimental research results and outcomes including techniques in the areas of physiology and biochemistry as related to nutrition and metabolism. This course also helps students refine their scientific writing and presentation skills, and introduces hypothesis and proposal development in the nutritional sciences. Prerequisite: Graduate students only. (Typically offered: Spring)

NUTR 51103. Advanced Nutrition I. 3 Hours.

This course will cover nutritional, physiological, and biochemical aspects of carbohydrate, protein, and lipid metabolism in humans and their implications in health and disease. Skills will be developed in critically assessing, interpreting, and presenting research literature on the roles of these macronutrients in human health, and in disease prevention and treatment. Prerequisite: CHEM 38103 and NUTR 32003. (Typically offered: Fall)

NUTR 52203. Nutrition During the Life Cycle. 3 Hours.

Study of normal nutrition emphasizing quantitative needs for nutrients as functions of biologic processes that vary during stages of the life cycle. Nutritive needs during pregnancy and childhood are emphasized with some attention to nourishing aging and elderly adults. Factors that affect food choices and eating behavior are also considered. Lecture 3 hours per week. Prerequisite: Graduate standing and consent of instructor. (Typically offered: Fall)

NUTR 52303. Advanced Nutrition II. 3 Hours.

This course will cover nutritional, physiological, and biochemical aspects of vitamins and minerals in humans, their functions and roles in metabolism, and their implications in health and disease. Skills will be developed in critically assessing, interpreting, and presenting research literature on the role of these micronutrients in human health and on supplementation of micronutrients for disease prevention and treatment, including herbal supplements. Prerequisite: NUTR 51103. (Typically offered: Spring)

NUTR 52403. Community Nutrition. 3 Hours.

Identifying, assessing, and developing solutions for nutritional problems encountered at the local, state, federal, and international levels. Lecture 3 hours per week. Graduate degree credit will not be given for both NUTR 42403 and NUTR 52403. (Typically offered: Spring)

NUTR 52603. Medical Nutrition Therapy I. 3 Hours.

Principles of medical nutrition therapy with emphasis on Nutrition Care Process, and the pathophysiology and current standards of practice for diseases and disorders. Lecture 3 hours per week. Prerequisite: Graduate standing and consent of instructor. (Typically offered: Fall)

NUTR 52703. Medical Nutrition Therapy II. 3 Hours.

Principles of medical nutrition therapy with emphasis on the Nutrition Care Process, and the pathophysiology and current standards of practice for diseases and disorders. Lecture 3 hours per week. Prerequisite: NUTR 52603. (Typically offered: Spring)