

MS in Nutrition and Exercise Physiology with Emphasis in Nutritional Sciences

About the Program

The MS in Nutrition & Exercise Physiology with an emphasis in Nutrition and Metabolism offers both a thesis option and a nonthesis option.

The **thesis option** provides training in the distinct core nutrition knowledge described by the Graduate Nutrition Education Committee of the American Society for Nutrition: general research skills; structure and biochemical and metabolic functions of nutrients and other dietary constituents; food, diets, and supplements; nutritional status assessment; nutrition and disease; nutrition interventions and policies; and, analytical skills. Graduate students also receive training in laboratory research, seminar preparation and delivery, scientific writing, problem solving and research grant writing. The graduate program is administered by the Division of Food, Nutrition, and Exercise Sciences in association with the College of Agriculture, Food and Natural Resources, and the School of Medicine.

The **non-thesis** option is designed for students aiming to strengthen their preparation for health profession careers (i.e., allopathic and osteopathic medicine, dentistry, and physician assistant). This emphasis integrates advanced study of nutrition and metabolic health to equip students with the scientific foundation and practical skills needed to address chronic diseases and promote health. The curriculum, with its focus on clinically-relevant problems, emphasizes critical thinking, evidence-based practice, and interdisciplinary knowledge in areas such as clinical nutrition, exercise physiology, and metabolic disease prevention, preparing graduates to excel in health professions and contribute to innovative, preventative healthcare solutions.

Degree Requirements

The program consists of a total of 30 hours of credit beyond the bachelor's degree, of which 15 credits must be at the 8000 or 9000 level; no more than 40 percent of the 30-hour credit requirement can be satisfied by a combination of special investigations, Research, Readings and/or Problems courses. The master of science degree is awarded in part for the completion of a thesis. The thesis is based upon original research, that is student's own work and that demonstrates a capacity for research and independent thought is required. In addition, the graduate student must present their thesis research in a seminar that is open to the general faculty and successfully defend their thesis to their committee.

The minimum department course requirements for the master of science degree are:

AN_SCI 9442	Vitamins and Minerals	4
BIOCHM 7270 & BIOCHM 7272	Biochemistry and Biochemistry	6
NEP 7340	Human Nutrition II Lecture	3
NEP 8087	Masters Seminar in Nutritional Sciences and Exercise Physiology	1
NEP 8090	Masters Research in Nutritional Sciences and Exercise Physiology	4
NEP 8310	Nutritional Biochemistry of Lipids	3

Total Credits		30
Statistics		6
NEP 8340	Nutrition in Human Health	3

Thesis/Non-Thesis Requirements

The Nutrition and Metabolism Emphasis within the MS Nutrition and Exercise Physiology degree program offers a thesis or non-thesis option.

- Thesis Option: Students earning this degree must provide a written thesis, based upon original research, that is student's own work and that demonstrates a capacity for research and independent thought. In addition, the graduate student must present their thesis research in a seminar that is open to the general faculty and successfully defend their thesis to their committee.
- 2. Non-Thesis Option: This non-thesis, coursework-focused graduate program is designed for students aiming to strengthen their preparation for medical school or careers in health sciences. This option will equip students with the scientific foundation and practical skills needed to address chronic diseases and promote health, preparing graduates to excel in advanced health professions and contribute to innovative, preventative healthcare solutions. Students earning this degree will complete courses and learning experiences that will develop the student's knowledge in theoretical aspects of nutrition and metabolic health.

Admissions

Applicants to the Nutrition and Metabolism emphasis of MS in Nutrition and Exercise Physiology must have an average of B (3.0 GPA) or better in science courses (chemistry, biology, physics, biochemistry, mathematics, etc.) taken at an accredited institution.

TOEFL scores are required from international applicants. Entering students are expected to have undergraduate training (lecture and laboratory courses) in general and organic chemistry and biology; courses in biochemistry and human nutrition are also recommended.

Complete instructions on the application process can be found on the program's website: https://cafnr.missouri.edu/academics/degrees-programs/nutrition-and-exercise-physiology-graduate-studies/

Minimum TOFEL Scores

Internet-based test (iBT)	Paper-based test (PBT)
100	600

GRE Scores are no longer required by the department.