Twin Cities Campus

Nutrition Ph.D.

Food Science & Nutrition

College of Food, Agricultural and Natural Resource Sciences

Link to a list of faculty for this program.

Contact Information:

Department of Food Science and Nutrition, 225 Food Science and Nutrition Building, 1334 Eckles Avenue, Saint Paul, MN 55108 (612-

624-6753; fax: 612-625-5272) Email: fsgrad@umn.edu

Website: http://fscn.cfans.umn.edu/graduate-programs/nutrition/phd

• Program Type: Doctorate

- Requirements for this program are current for Fall 2016
- Length of program in credits: 52
- This program does not require summer semesters for timely completion.
- Degree: Doctor of Philosophy

Along with the program-specific requirements listed below, please read the <u>General Information</u> section of the catalog website for requirements that apply to all major fields.

Nutrition is the study of how nutrients, both essential and nonessential, affect health and all life processes. Consequently, nutrition is an extremely broad field that encompasses physiology, biochemistry, education, public health, and public policy. The nutrition graduate program is interdisciplinary. Advisers and financial support may come from any of the departments or schools in which nutrition graduate faculty reside, including the Department of Food Science and Nutrition (College of Food, Agricultural and Natural Resource Sciences); Division of Epidemiology (School of Public Health); Departments of Medicine, Surgery, Psychiatry, Lab Medicine and Pathology, and Family Medicine and Community Health (Medical School); Department of Kinesiology and Leisure Studies (College of Education and Human Development); Department of Biochemistry and Molecular Biology (University of Minnesota Duluth); University of Minnesota Extension; Hormel Institute (Austin, MN.); V.A. Medical Center and Park Nicollet Institute (Minneapolis, MN.).

Three subspecialty areas are offered in the doctoral degree program: human nutrition, nutritional biochemistry, and public health nutrition. Thesis work may be conducted locally or internationally in the laboratory, clinic, or field.

Students may spend a maximum of 8 years in the program.

Program Delivery

This program is available:

• via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants to the program need a bachelor's degree in any field or its international equivalent, along with demonstrated research ability such as a MS degree or publications.

Other requirements to be completed before admission:

A strong foundation in the biological and physical sciences is required. This background includes college mathematics, the equivalent of one semester of general chemistry, organic chemistry, general biology, biochemistry, physiology, and statistics. For the doctoral program, additional prerequisite courses include calculus and physics. If there is evidence that the applicant has a good background in the sciences, some of the prerequisites can be met after admission. The PhD program also requires the following nutrition courses, or equivalents, which may be completed after admission to the program: Principles of Nutrition (FSCN 1112), Life Cycle Nutrition (FSCN 3612), and Human Nutrition (FSCN 4612).

Applicants must submit their test score(s) from the following:

GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
- Internet Based Total Score: 79
- Internet Based Writing Score: 21
- Internet Based Reading Score: 19

- Paper Based - Total Score: 550

IELTS

- Total Score: 6.5

MELAB

- Final score: 80

Key to test abbreviations (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the <u>General Information</u> section of the catalog website.

Program Requirements

16 credits are required in the major.

12 credits are required outside the major.

24 thesis credits are required.

This program may not be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

PhD students are expected to obtain teaching experience through assisting with course instruction three times. Teaching experience is subject to the policies of the advisor's department or division.

Thesis work may be conducted in the laboratory, clinic, or field, either locally or internationally.

Required Coursework

Orientation Course

NUTR 8621 - Presentation Skills (1.0 cr)

Core Courses

NUTR 5625 - Nutritional Biochemistry (3.0 cr)

NUTR 5626 - Nutritional Physiology (3.0 cr)

NUTR 5622 - Vitamin and Mineral Biochemistry (3.0 cr)

Advanced Topics Courses

Take at least two courses from the following list after completing two semesters in the program:

NUTR 8620 - Advances in Nutrition (2.0 cr)

NUTR 8611 {Inactive}(2.0 cr)

Remaining Nutrition Coursework

Take at least 2 credits from the following:

NUTR 5627 - Nutritional and Food Toxicology (3.0 cr)

or NUTR 8xxx

Outside Coursework

PhD students must complete at least 12 credits outside the major, including at least one statistics course and at least one methods course.

Statistics Course

Take at least one statistics course from the following list. A different statistics course can be substituted with advisor approval.

PUBH 6450 - Biostatistics I (4.0 cr)

or PUBH 6451 - Biostatistics II (4.0 cr)

or PUBH 6414 - Biostatistical Literacy (3.0 cr)

or STAT 5021 - Statistical Analysis (4.0 cr)

Research Methods Course

Take one or more courses totaling at least two credits of research methods coursework from this list, or graduate-level methods coursework from another field with advisor approval.

ANSC 5091 - Research Proposals: From Ideas to Strategic Plans (3.0 cr)

NURS 8173 - Principles and Methods of Implementing Research (3.0 cr)

PUBH 6341 - Epidemiologic Methods I (3.0 cr)

PUBH 6617 {Inactive}(3.0 cr)

PUBH 6803 - Conducting a Systematic Literature Review (3.0 cr)

PUBH 6806 - Principles of Public Health Research (2.0 cr)

FSCN 4622 - Nutritional Toxicology, the basic science of diet-related toxicants (3.0 cr)

PUBH 6902 {Inactive}(2.0 cr)

PUBH 6903 *{Inactive}*(2.0 cr)
PUBH 6914 - Community Nutrition Intervention (3.0 cr)

Doctoral Thesis Credits

Take at least 24 credits of the following:

NUTR 8888 - Thesis Credit: Doctoral (1.0 - 24.0 cr)