Twin Cities Campus

Nutrition B.S.

Food Science & Nutrition

College of Food, Agricultural and Natural Resource Sciences

- Program Type: Baccalaureate
- Requirements for this program are current for Spring 2021
- Required credits to graduate with this degree: 120
- Required credits within the major: 70 to 90
- Degree: Bachelor of Science

The nutrition major explores how nutrients and the foods from which they are derived aid the body in health, growth, and development. With major national and international concerns for how food and nutrition affect health and disease, registered dietitians and nutritionists have many career opportunities. Students choose one of three options: 1) nutrition studies, 2) the Didactic Program in Dietetics, or 3) nutritional science.

Students expecting to apply to an internship or graduate school should maintain a GPA of at least 3.00. A cumulative GPA of at least 3.30 is highly recommended.

The Didactic Program in Dietetics (DPD) is currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, Phone: 800-877-1600, Website: www.eatright.org.

Program Delivery

This program is available:

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

Admission Requirements

For information about University of Minnesota admission requirements, visit the Office of Admissions website.

General Requirements

All students are required to complete general University and college requirements including writing and liberal education courses. For more information about University-wide requirements, see the <u>liberal education requirements</u>. Required courses for the major or minor in which a student receives a D grade (with or without plus or minus) do not count toward the major or minor (including transfer courses).

Program Requirements

At least 18 upper division credits in the major must be taken at the University of Minnesota Twin Cities campus.

Foundation Courses

BIOC 3021 - Biochemistry (3.0 cr)

AECM 2421W - Professional and Oral Communication for Agriculture, Food & the Environment [WI] (3.0 cr)

or COMM 1101 - Introduction to Public Speaking [CIV] (3.0 cr)

BIOL 1009 - General Biology [BIOL] (4.0 cr)

ANSC 3301 - Human and Animal Physiology (3.0 cr)

or PHSL 3051 - Human Physiology (4.0 cr)

or BIOL 3211 - Physiology of Humans and Other Animals (3.0 cr)

VBS 2032 - General Microbiology With Laboratory (5.0 cr)

or MICB 3301 - Biology of Microorganisms (5.0 cr)

or FSCN 2021 - Introductory Microbiology (4.0 cr)

STAT 3011 - Introduction to Statistical Analysis [MATH] (4.0 cr)

Core Courses

All nutrition major students are required to complete these core nutrition-related courses.

FSCN 1112 - Principles of Nutrition [TS] (3.0 cr)

FSCN 2001 - A Food Systems Approach to Cooking for Health and the Environment (3.0 cr)

FSCN 3612 - Life Cycle Nutrition (3.0 cr)

FSCN 4612W - Advanced Human Nutrition [WI] (4.0 cr)

FSCN 4613 - Experimental Nutrition (2.0 cr)

FSCN 4614W - Community Nutrition [SOCS, DSJ, WI] (3.0 cr)

FSCN 4621 - Nutrition and Metabolism (4.0 cr)

Interdisciplinary Learning

Course in the core curriculum which satisfy requirements for interdisciplinary learning.

FSCN 1102 - Food: Safety, Risks, and Technology [CIV] (3.0 cr)

Experiential Learning

Course that fulfills the requirement for experiential learning.

CFAN 3096 - Making the Most of your Professional Experience (1.0 cr)

Upper Division Writing Intensive within the Major

Students are required to take one upper division writing intensive course within the major. If that requirement has not been satisfied within the core major requirements, students must choose one course from the following list. Some of these courses may also fulfill other major requirements.

Take 0 - 1 course(s) from the following:

- •FSCN 4614W Community Nutrition [SOCS, DSJ, WI] (3.0 cr)
- •FSCN 4612W Advanced Human Nutrition [WI] (4.0 cr)

Program Sub-plans

Students are required to complete one of the following sub-plans.

Didactic Program in Dietetics

The Didactic Program in Dietetics (DPD) provides excellent undergraduate preparation to meet the knowledge requirements delineated by the Academy of Nutrition and Dietetics (AND) for entry-level dietitians. The DPD training includes a strong science component of biological sciences, chemistry, and biochemistry courses appropriate for admission to graduate school. A liberal arts core and specialized courses in nutrition, nutritional biochemistry, clinical nutrition, food science, menu planning, and food service management provide depth and breadth. The mission of the University of Minnesota DPD is to prepare students for entry into and successful completion of supervised practice leading to eligibility for the CDR credentialing exam to become a registered dietitian nutritionist, a variety of employment opportunities related to food and nutrition, or graduate/professional programs.

Students who plan to become registered dietitians must apply to the DPD according to specified criteria. There is no difference in the required courses; however, only those students who are accepted into the DPD will receive a Verification Statement, which is needed to enter into a dietetic internship.

Didactic Program in Dietetics Courses

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FSCN 2512 - Food Customs and Culture [GP] (3.0 cr)
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FSCN 3614 - Nutrition Education and Counseling (4.0 cr)

FSCN 3731 - Food Service Operations Management Laboratory (2.0 cr)

FSCN 3732 - Food Service Operations Management (3.0 cr)

FSCN 4665 - Medical Nutrition Therapy I (3.0 cr) FSCN 4666 - Medical Nutrition Therapy II (3.0 cr)

FSCN 4667 - Dietetics Capstone and Interprofessional Education (1.0 cr)

FSCN 4732 - Food and Nutrition Management (3.0 cr)

MATH 1031 - College Algebra and Probability [MATH] (3.0 cr)

Chemistry Tracks

Chemistry

CHEM 1061 - Chemical Principles I [PHYS] (3.0 cr)

CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr)

CHEM 1062 - Chemical Principles II [PHYS] (3.0 cr)

CHEM 1066 - Chemical Principles II Laboratory [PHYS] (1.0 cr)

CHEM 2301 - Organic Chemistry I (3.0 cr)

or Chemistry for the Life Sciences

CHEM 1081 - Chemistry for the Life Sciences I [PHYS] (3.0 cr)

CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr)

CHEM 1082 - Chemistry for the Life Sciences II (3.0 cr)

CHEM 1086 - Chemistry for the Life Sciences II Laboratory (1.0 cr)

CHEM 2081 - Chemistry for the Life Sciences III (3.0 cr)

CHEM 2085 - Chemistry for the Life Sciences III Laboratory (2.0 cr)

Nutrition Studies

Nutrition major students who do not select either the DPD or nutritional science sub-plan may utilize the remainder of the 120 credits needed to graduate by specializing in an area of their choosing. Specialization can include regulatory nutrition, entrepreneurial nutrition, health/wellness/medicine, nutrition communications, and existing minor. Contact your academic advisor to discuss recommended course options.

Mathematics

MATH 1031 - College Algebra and Probability [MATH] (3.0 cr) or MATH 1142 - Short Calculus [MATH] (4.0 cr) or MATH 1271 - Calculus I [MATH] (4.0 cr)

Chemistry Tracks

Chemistry

CHEM 1061 - Chemical Principles I [PHYS] (3.0 cr)

CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr)

CHEM 1062 - Chemical Principles II [PHYS] (3.0 cr)

CHEM 1066 - Chemical Principles II Laboratory [PHYS] (1.0 cr)

CHEM 2301 - Organic Chemistry I (3.0 cr)

or Chemistry for the Life Sciences

CHEM 1081 - Chemistry for the Life Sciences I [PHYS] (3.0 cr)

CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr)

CHEM 1082 - Chemistry for the Life Sciences II (3.0 cr)

CHEM 1086 - Chemistry for the Life Sciences II Laboratory (1.0 cr)

CHEM 2081 - Chemistry for the Life Sciences III (3.0 cr)

CHEM 2085 - Chemistry for the Life Sciences III Laboratory (2.0 cr)

Upper Division Food Science and Nutrition Courses, 9 credits

Students must complete at least 9 credits of 3000-level or above FSCN or NUTR designated courses. Students cannot select a course that is already required for the program.

Take 9 or more credit(s) from the following:

- •FSCN 3xxx
- •FSCN 4xxx
- •NUTR 3xxx
- •NUTR 4xxx

Nutrition Science

The nutritional science option is for students planning to do graduate work in nutrition, related sciences, or professional programs such as medicine or dentistry.

Nutritional Science Courses

PHYS 1201W {Inactive}[PHYS, WI] (5.0 cr)

PHYS 1202W {Inactive}[PHYS, WI] (5.0 cr)

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

PSY 1001 - Introduction to Psychology [SOCS] (4.0 cr)

ANAT 3601 - Principles of Human Anatomy (3.0 cr)

ANAT 3602 - Principles of Human Anatomy Laboratory (2.0 cr)

BIOL 4003 - Genetics (3.0 cr)

or GCD 3022 - Genetics (3.0 cr)

MATH 1142 - Short Calculus [MATH] (4.0 cr)

or MATH 1271 - Calculus I [MATH] (4.0 cr)

MATH 1272 - Calculus II (4.0 cr)

FSCN 4112 - Food Chemistry and Functional Foods (3.0 cr)

or FSCN 4121 - Food Microbiology (3.0 cr)

or NUTR 5622 - Vitamin and Mineral Biochemistry (3.0 cr)

or NUTR 5624 - Nutrition and Genetics (2.0 cr)

CHEM 1061 - Chemical Principles I [PHYS] (3.0 cr)

CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr)

CHEM 1062 - Chemical Principles II [PHYS] (3.0 cr)

CHEM 1066 - Chemical Principles II Laboratory [PHYS] (1.0 cr)

CHEM 2301 - Organic Chemistry I (3.0 cr)

or CHEM 2302 - Organic Chemistry II (3.0 cr)

or CHEM 2311 - Organic Lab (4.0 cr)