Biobehavioral Nutrition and Wellness

Program Director: Douglas “Doug” R Moellering, PhD, MS

The B.S. in Biobehavioral Nutrition and Wellness program prepares students for entry into the nutrition and wellness workforce in many types of organizations, including nutrition and healthcare, universities, hospitals, food and nutrition providers, insurance agencies, corporations, or for graduate and professional study in health professions, including further study in Nutrition Sciences, Dietitian Education track. Students go on to become health and wellness educators, medical or health services managers, and clinical research staff, to name just a few exciting careers, and find positions in a wide range of private and public industries. You will learn about nutrition and wellness in this program, including the biological processes and behaviors within the science of nutrition and wellness’s role in health, wellbeing, and disease prevention.

The UAB Nutrition Sciences Department has all resources you need to tailor your studies to the areas of nutrition and wellness that most interest you, including active clinical practices, research labs, and two NIH-funded interdisciplinary research centers – the UAB Nutrition and Obesity Research Center (NORC) and the UAB Diabetes Research Center (DRC). Our faculty have a wealth of expertise in nutrition-related areas, including lifecycle, metabolism, genetics, diabetes, obesity, cancer, aging, cardiometabolic disease, cardiovascular disease, personalized disease prevention, data analysis, and telehealth. If you would like to pursue a master’s degree or PhD after graduation, you will be well prepared for any nutrition sciences or allied health program you choose.

Program Admission

The UAB Office of Undergraduate Admissions accepts applications to the Biobehavioral Nutrition and Wellness program at any time. Students may begin the program at the start of any full academic term. Information and the online application for freshman, transfer, returning, and non-traditional admissions is available at https://www.uab.edu/students/admissions/apply.

Students intending to enroll in the Biobehavioral Nutrition and Wellness program must meet all undergraduate admission and academic requirements for UAB and the School of Health Professions.

Entering freshmen are admitted directly to the Biobehavioral Nutrition and Wellness program through the UAB Office of Undergraduate Admissions. Admission to the program from high school requires graduation from an accredited high school with a grade point average (GPA) of 2.5 or higher on a 4.0 scale. Transfer admissions from another college or university and UAB students changing their declared major to Biobehavioral Nutrition and Wellness must have an overall GPA of 2.5 or higher and an institutional GPA of 2.5 or higher, if applicable.

Academic Requirements

The minimum overall and institutional GPA required for admission to the program (2.5) must be maintained for continued enrollment throughout the program. A student whose GPA falls below the minimum will be allowed two semesters to recover before dismissal from the major. A student who is dismissed from the Biobehavioral Nutrition and Wellness major in such a manner may reapply once the student has raised his or her overall and institutional GPA to the program or track minimum. A letter grade of C or higher is required for each course in the program curriculum.

Course Requirements

The Biobehavioral Nutrition and Wellness degree requires a total of 120 semester hours.

Requirements Hours
MA 106 Pre-Calculus Trigonometry (Or Higher) 3
CH 115 General Chemistry I 3
CH 116 General Chemistry I Laboratory 1
BY 123 Introductory Biology I 4
BY 123L Introductory Biology I Laboratory 0
CH 235 Organic Chemistry I 3
CH 236 Organic Chemistry I Laboratory 1
BY 261 Introduction to Microbiology 4
BY 261L Introduction to Microbioloy Laboratory 0
BY 115 Human Anatomy 4
BY 116 Introductory Human Physiology 4
CHHS 141 Personal Health & Wellness 3
PY 107 Psychology of Adjustment 3
HRP 101 Experience the University Transition 2
NTR 121 Well Being and You 3
NTR 201 Healthy People, Healthy Planet 3
NTR 222 Nutrition and Health 3
NTR 232 Lifecycle Nutrition 3
NTR 300 Nutrition Communication: From Science to Consumer 3
NTR 320 Nutrition and the Consumer 3
NTR 330 Nutrition and Metabolism 3
NTR 420 Nutritional Genetics 3
NTR 421 Nutrition Assessment and the Nutrition Care Process 3
NTR 433 Health and Wellness in the Information Age 3
NTR 444 Nutrition in Wellness and in Chronic Disease 3
NTR 450 Translational Research in Biobehavioral and Nutrition Science 3
NTR 490 Capstone Experience in Biobehavioral Nutrition and Wellness 3
Electives 13

Contact Information

For more information about the Bachelor of Science in Biobehavioral Nutrition and Wellness, contact
Biobehavioral Nutrition and Wellness Program Manager - BNW@uab.edu

Biobehavioral Nutrition and Wellness
Department of Nutrition Sciences
Telephone: (205) 934-3006
http://www.uab.edu/bnw (http://www.uab.edu/bnw/)

Bachelor of Science in Biobehavioral Nutrition & Wellness

Requirements Hours
University Core Courses
Area I: Written Communication 6
Area II: Humanities and Fine Arts 12
CMST 101 Public Speaking
Proposed Program of Study for a Major in Biobehavioral Nutrition and Wellness

**Freshman**

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<th>First Term</th>
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<td>EH 102</td>
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<td>MA 106</td>
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<tr>
<td>CH 116</td>
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<td>NTR 121</td>
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<td>HRP 101</td>
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**Sophomore**

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<tr>
<td>NTR 222</td>
<td>3 NTR 320</td>
<td>3</td>
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<tr>
<td>PY 107</td>
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<tr>
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Core Area II or Area IV (based on sequence) 3

**Junior**

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<td>NTR 232</td>
<td>3 NTR 330</td>
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<td>CMST 101</td>
<td>3 NTR 421</td>
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<tr>
<td>CHHS 141</td>
<td>3 Core Area IV (based on sequence)</td>
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<td>Approved Statistics Course</td>
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**Senior**

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<tr>
<td>NTR 444</td>
<td>3 NTR 490</td>
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<td>NTR 433</td>
<td>3 NTR 450</td>
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<td>NTR 420</td>
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<td>Elective</td>
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<td>Total Hours</td>
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Total credit hours: 120

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1. Choose one of the following: HCM 360, MA 180, PY 216, or QM 214 and QM 215

**Minor in Nutrition Sciences**

The Department of Nutrition Sciences offers a minor option for undergraduate students matriculating in programs in the School of Health Professions. Interested students from other schools may be admitted upon approval from the NTR minor program director. The Nutrition Sciences minor requires completion of 18 semester hours of course work, maintenance of a 2.5 GPA overall, and no grade lower than a C in minor courses.

**Requirements**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NTR 222</td>
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<td>NTR 232</td>
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<td>NTR 330</td>
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<td>Choose 9 Hours of Elective Coursework From the List Below</td>
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<td>NTR 320</td>
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<td>NTR 420</td>
<td>Nutritional Genetics</td>
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<td>NTR 421</td>
<td>Nutrition Assessment and the Nutrition Care Process</td>
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<td>NTR 500</td>
<td>Communications in Nutrition</td>
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<td>KIN 405</td>
<td>Sports Nutrition</td>
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<td>ANTH 319</td>
<td>Food and Culture</td>
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<td>Approved Research Experience Course</td>
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<td>Total Hours</td>
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**Courses**

**NTR 121. Well Being and You. 3 Hours.**

Exploration of social, environmental, and cultural influences on eating and activity habits; mindfulness and coping skills to improve health, well-being, and resilience.
NTR 201. Healthy People, Healthy Planet. 3 Hours.
Influence of individuals, community, government, and earth on mental, emotional, and physical well-being; design of community programs and interventions in a holistic ecological framework.

NTR 220. Contemporary Issues in Nutrition. 3 Hours.
Contemporary Issues in Nutrition is designed for non-health professional majors and will be particularly beneficial to those in education, communications, and business fields of study.

NTR 222. Nutrition and Health. 3 Hours.
Introduction to principles of nutrition; essential nutrients and their relation to growth, maintenance, and optimal functioning of the body; dietary recommendations to promote wellness and prevent chronic disease.

NTR 225. Promoting Nutrition and Wellness for Healthy Communities. 3 Hours.
This course will introduce students to one of the most critical health issues in the US today—poor nutrition, unhealthy life styles and their consequences including the epidemic of obesity. Students will learn about the diverse range of individuals impacted by this issue and will discover the range of prevention, education and support services that are offered. This course will cover the following aspects of unhealthy lifestyles/poor nutrition: history and systemic causes, education and prevention, including policy and advocacy. The course is also designed to present a multicultural perspective on the issues and students will be encouraged to engage in service-learning in the field, read literature, listen to speakers and interact with individuals representing a range of ages, genders, ethnicities and socioeconomic status.

NTR 232. Lifecycle Nutrition. 3 Hours.
Role of nutrition and dietary factors on the growth, development, and maintenance of health throughout the human life cycle. Nutritional guidelines/recommendations, special nutritional needs, physiology, and nutritional health concerns for each stage of the human lifecycle, from preconception through adulthood and aging.
Prerequisites: NTR 222 [Min Grade: C]

NTR 300. Nutrition Communication: From Science to Consumer. 3 Hours.
Interpreting nutrition research, including study designs and statistics, to develop nutrition messages and education materials using various media.
Prerequisites: NTR 222 [Min Grade: C]

NTR 320. Nutrition and the Consumer. 3 Hours.
Contemporary nutrition topics that affect consumers, such as dietary supplements, food additives, food safety, food, genetically modified organisms in foods & integrative medicine. Techniques to communicate nutrition information to consumers.
Prerequisites: NTR 222 [Min Grade: C]

NTR 330. Nutrition and Metabolism. 3 Hours.
Metabolism and functions of nutrients after mixed meal intakes, including USDA MyPlate, low-carbohydrate or low-fat diets; biosynthesis of vitamins and co-factors and whole food sources; human requirements for energy, amino acids, minerals, and vitamins; food fortification; current human nutritional challenges and diseases.
Prerequisites: NTR 222 [Min Grade: C]

NTR 420. Nutritional Genetics. 3 Hours.
How behavioral practices, environmental influences, and genetic makeup interact to influence individual preferences and responses to foods. Models to incorporate the interaction of these factors in developing potential strategies to prevent disease and achieve better nutritional health.

NTR 421. Nutrition Assessment and the Nutrition Care Process. 3 Hours.
Introduction to the Nutrition Care Process (NCP), a systematic approach to providing high-quality nutrition care. The NCP provides a framework for critical thinking and decision making. Gain factual knowledge, learn to apply course material through case study application, and explore fundamental principles in medical nutrition related content areas.
Prerequisites: NTR 222 [Min Grade: D]

NTR 433. Health and Wellness in the Information Age. 3 Hours.
Using technology and informatics skills to find, evaluate, and share accurate information to provide the best care to patients, clients, and the community.
Prerequisites: NTR 222 [Min Grade: C]

NTR 444. Nutrition in Wellness and in Chronic Disease. 3 Hours.
Mechanisms underlying chronic diseases; role of nutrition and other health behaviors in prevention and treatment.
Prerequisites: NTR 330 [Min Grade: C]

NTR 450. Translational Research in Biobehavioral and Nutrition Science. 3 Hours.
Development of skills in accurately translating scientific evidence from basic through clinical research and implementation studies into actionable messages for the public.
Prerequisites: NTR 222 [Min Grade: C]

NTR 475. Special Topics in Biobehavioral Nutrition and Wellness. 1-4 Hour.
Exploration of current issues in Biobehavioral Nutrition and Wellness.

NTR 490. Capstone Experience in Biobehavioral Nutrition and Wellness. 3 Hours.
Capstone experience integrating and applying the biobehavioral nutrition and wellness body of knowledge in a comprehensive group project.