Biobehavioral Nutrition and Wellness

Program Director: Eric P. Plaisance, PhD, FACSM

The B.S. in Biobehavioral Nutrition and Wellness program curriculum 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 nutrition'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 here.

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 2.75 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 2.75 or higher and an institutional GPA of 2.75 or higher, if applicable.

Academic Requirements

The minimum overall and institutional GPA required for admission to the program (2.75) 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.

Contact Information

For more information about the Bachelor of Science in Biobehavioral Nutrition and Wellness, contact:

Biobehavioral Nutrition and Wellness (BNW)
Department of Nutrition Sciences
Telephone: (205) 975-2984
BNW Program

Bachelor of Science in Biobehavioral Nutrition & Wellness

Requirements		Hours
Blazer Core Curriculum		
Local Beginnings		**3**
HRP 101	Experience the University Transition	
Academic Foundations		**15**
Writing		
Quantitative Literacy		
Reasoning		
Communicating in the Modern World		
Thinking Broadly		**20**
History and Meaning		
Creative Arts		
Scientific Inquiry		
Humans and their Societies		
City as a Classroom		**3**
Support Courses (C or better required)		**29**
CH 117 & CH 118	General Chemistry II and General Chemistry II Laboratory	
CH 235 & CH 236	Organic Chemistry I and Organic Chemistry I Laboratory	
BY 261 & 261L	Introduction to Microbiology and Introduction to Microbiology Laboratory	
BY 115	Human Anatomy	
BY 116	Introductory Human Physiology	
CHHS 141	Lifelong Health & Wellness	
Approved Statistics [1]		
Approved Human Behavior, Psychology, Sociology, or Anthropology Course [2]		
Major Courses		**39**
NTR 121	Well Being and You	
NTR 201	Healthy People, Healthy Planet	
NTR 222	Nutrition and Health	
NTR 232	Lifecycle Nutrition	
NTR 300	Nutrition Communication: From Science to Consumer	
NTR 320	Nutrition and the Consumer	
NTR 330	Nutrition and Metabolism	
NTR 420	Nutritional Genetics	
NTR 421	Nutrition Assessment and the Nutrition Care Process	
NTR 433	Health and Wellness in the Information Age	
NTR 444	Nutrition in Wellness and in Chronic Disease	
NTR 450	Translational Research in Biobehavioral and Nutrition Science	
NTR 490	Capstone Experience in Nutrition Sciences	

General Electives	**11**
Total Hours	**120**

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

[2] Choose one of the following: PY 107, PY 305, SW 315, PUH 204, SOC 280

Proposed Program of Study for a Major in Biobehavioral Nutrition and Wellness

Freshman

First Term	Hours	Second Term	Hours
EH 101	3	EH 102	3
MA 106	3	BY 123	4
CH 115	3	BY 123L	0
CH 116	1	NTR 201	3
NTR 121	3	PY 101	3
HRP 101	3	CH 117	3
		CH 118	1
	16		**17**

Sophomore

First Term	Hours	Second Term	Hours
CH 235	3	NTR 320	3
CH 236	1	NTR 330	3
NTR 222	3	BY 115	4
Thinking Broadly - Creative Arts	3	Thinking Broadly - Creative Arts	3
City as a Classroom	3	Academic Foundations - Reasoning	3
Approved Human Behavior, Psychology, Sociology, or Anthropology Course	3		
PY 107			
PY 305			
SW 315			
PUH 204			
SOC 280			
	16		**16**

Junior

First Term	Hours	Second Term	Hours
BY 116	4	NTR 300	3
NTR 232	3	NTR 421	3
CMST 101	3	Thinking Broadly - History and Meaning	3
CHHS 141	3	BY 261	4
Approved Statistics Course	3	BY 261L	0
	16		**13**

Senior

First Term	Hours	Second Term	Hours
NTR 444	3	NTR 490	3
NTR 433	3	NTR 450	3
NTR 420	3	Thinking Broadly - History and Meaning	3
Approved Physics or Electives	6-7	Approved Physics or Electives	6-7
	15-16		**15-16**

Total credit hours: 124-126

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 Nutrition Sciences 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		Hours
NTR 222	Nutrition and Health	3
NTR 232	Lifecycle Nutrition	3
NTR 330	Nutrition and Metabolism	3
Select elective coursework from the list below		9
NTR 300	Nutrition Communication: From Science to Consumer	
NTR 320	Nutrition and the Consumer	
NTR 420	Nutritional Genetics	
NTR 421	Nutrition Assessment and the Nutrition Care Process	
KIN 405	Sports Nutrition	
HRP 415	Mentored Research in the Health Professions	
Approved research experience course		
Total Hours		**18**

Nutrition and Dietetics Certificate

Program Description

The Nutrition and Dietetics Certificate is an optional undergraduate certificate program that is available only to students enrolled in the BS in Biobehavioral Nutrition and Wellness (BNW) program. The BS in BNW with the Nutrition and Dietetics Certificate has been granted candidacy accreditation as a Didactic Program in Dietetics (DPD) by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). Students who receive the BS in BNW degree with the Nutrition and Dietetics Certificate are eligible to apply for a dietetic internship and graduate program in nutrition and wellness, leading to eligibility for the Commission on Dietetic Registration (CDR) credentialing exam to become a Registered Dietitian Nutritionist (RDN).

Program Mission Statement

To prepare graduates for entry into supervised practice and graduate programs in nutrition and wellness, leading to eligibility for the Commission on Dietetic Registration (CDR) credentialing exam to become a Registered Dietitian Nutritionist, through a comprehensive curriculum design that promotes effective communication, innovative leadership and application of evidence-based practices to support quality health and wellbeing of individuals and communities.

Certificate Program Pre-Requisites

Pre-Requisite Requirements

BNW major students who are interested in pursuing the Nutrition and Dietetics Certificate must have successfully completed (grade C or higher) the following BNW degree courses that are prerequisite requirements for certificate courses:

- **English:** EH 101 (3 credit hours) and EH 102 (3 credit hours)
- **Math:** MA 106 or higher (3 credit hours)
- **Chemistry:** CH115 or higher (3 credit hours) and lab (1 credit hour) and CH 117 or higher (3 credit hours) and lab (1 credit hour) and CH235 or higher (3 credit hours) and lab (1 credit hour)
- **Nutrition:** NTR 121 Well Being and You (3 credit hours), NTR 201 Healthy People, Healthy Planet (3 credit hours), and NTR 222 Nutrition and Health (3 credit hours)
- **Biology:** BY 123 or higher (4 credit hours) and lab (0 credit hours)
- **Psychology:** PY 101 (3 credit hours) and approved Human Behavior, Psychology, Sociology, or Anthropology course (3 credit hours)

BNW major students who are interested in pursuing the Nutrition and Dietetics Certificate must be currently enrolled in or have successfully completed (grade C or higher) the following BNW degree requirements when applying to the certificate program:

- **Nutrition:** NTR 320 Nutrition and the Consumer (3 credit hours) and NTR 330 Nutrition and Metabolism (3 credit hours)
- **Human Anatomy:** BY 115 (4 credit hours)

GPA Requirements

Students enrolled in the BS in BNW program and have a 3.0 GPA are eligible to apply for the Nutrition and Dietetics Certificate. Once admitted into the Nutrition and Dietetics Certificate program, a student must maintain academic good standing in the BS in BNW program to remain in the Nutrition and Dietetics Certificate program. A student whose GPA falls below 2.75 will be allowed two semesters to recover before dismissal from the program.

Prior Learning and Transfer Credit Policy

Credit will not be awarded for prior learning experiences. Only courses deemed equivalent courses by the Transfer Evaluation Team in the UAB Office of Enrollment are accepted as transfer courses at UAB.

Certificate Application Process

BS in BNW students are eligible to apply for the Nutrition and Dietetics Certificate during spring term of their sophomore year. Students must be enrolled as full-time students (at least 12 credit hours per semester) to apply for the certificate program. Students will apply to the certificate program through an internal application system.

Typical Biobehavioral Nutrition and Wellness degree and Dietetics Certificate Curriculum

Freshman

First Term	Hours	Second Term	Hours
Academic Foundations: Writing	3	Academic Foundations: Writing	3
Academic Foundations: Qualitative Literacy	3	PY 101	3
HRP 101	3	CH 117	3
CH 115	3	CH 118	1
CH 116	1	BY 123	4
NTR 121	3	BY 123L	0
		NTR 201	3
	16		**17**

Sophomore

First Term	Hours	Second Term	Hours
City as a Classroom	3	Thinking Broadly: Creative Arts	3
Thinking Broadly: Creative Arts	3	Academic Foundations: Reasoning	3
NTR 222	3	BY 115	4
CH 235	3	NTR 320	3
CH 236	1	NTR 330	3
*Approved Human Behavior, Psychology, Sociology, or Anthropology Course	3		
*PY 107, PY 305, SW 315, PUH 204, SOC 280, ANTH 319			
	16		**16**

Junior

First Term	Hours	Second Term	Hours
Academic Foundations: Communicating with the World	3	Thinking Broadly: History and Meaning	3
BY 116	4	BY 261	4
CHHS 141	3	NTR 300	3
*Approved Statistics Course	3	NTR 355	4
NTR 232	3	NTR 421	3
HCM 306	2		
	18		**17**

Senior

First Term	Hours	Second Term	Hours
NTR 420	3	HCM 316	3
NTR 444	3	HCM 330	3
NTR 450	3	Thinking Broadly: History and Meaning	3
NTR 455	4	NTR 433	3

NTR 480	2 NTR 490	3
	15	**15**

Total credit hours: 130

Course Registration

Students must register for all courses for which they wish to earn undergraduate credit. The UAB class schedule is accessible via BlazerNET located at www.uab.edu/blazernet. Students are able to register for courses and adjust their schedule by adding and dropping courses through the end of the drop/add period which is denoted on the Academic Calendar.

Program Completion Requirements

The following is an overview of the main steps required to earn the BS in Biobehavioral Nutrition and Wellness (BNW) degree with the Nutrition and Dietetics Certificate:

- Maintenance of good academic standing (minimum 3.0 GPA);
- Completion of 130 credit hours (21 credit hours included in Nutrition and Dietetics Certificate program);
- Conferring of degree.

Award of Verification Statement

Upon successful completion of ACEND program requirements and conferring of degree, students receive a Verification Statement signed by the Nutrition and Dietetics certificate program director. Students will then be eligible to apply to an ACEND-accredited supervised practice program. Verification Statements will be retained by the Department of Nutrition Sciences indefinitely.

Contact Information

For more information, contact

Mrs. Carleton Rivers
Department of Nutrition Sciences
Telephone: (205) 934-3223
Email: meadows4@uab.edu (meadows4@uab.edu)

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 heath, well-being, and resilience. This course meets the Blazer Core Humans & Their Societies requirement with a flag in Wellness/Wellbeing.

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. This course meets Blazer Core Humans and their Societies with a flag in Wellness/Wellbeing.

NTR 211. Herbs and Spices in Nutrition, Health, and Wellness. 3 Hours.
Herbs and spices have been components of human diets via culinary traditions for thousands of years. This course will provide an overview of herbs and spices, with a focus on approximately two dozen popular seasonings. Evidence-based evaluations of health and wellness claims will be considered alongside the dietary and culinary benefits of herb and spice use.

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. This course meets Blazer Core Curriculum Humans & their Societies with a flag in Wellness/Well-being.

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 355. Food Science and Food Systems. 4 Hours.
Introduction to the functionality of major food groups and role of foods as ingredients in recipe development. Recipe selection and conversions for quantity food production. Management theories and the functional roles of managers in quantity food production and service.

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 455. Medical Nutrition Therapy and Counseling. 4 Hours.
Continuation of the nutrition care process, demonstration of nutrition counseling and education skills.
Prerequisites: NTR 421 [Min Grade: C]

NTR 460. Undergraduate Nutrition Sciences Research Experience. 1-6 Hour.
Conduct of research under a faculty mentor, including but not limited to, review and synthesis of literature about a research topic, design and development of research protocols, data collection, data analysis and interpretation, and preparation of research findings for dissemination.
Prerequisites: NTR 222 [Min Grade: C] and HRP 200 [Min Grade: C]

NTR 465. Nutritional Physiology and Integrative Metabolism. 3 Hours.
Comprehensive instruction on the integrative physiologic and metabolic responses to differing diets and dietary practices.
Prerequisites: NTR 330 [Min Grade: C]

NTR 475. Special Topics in Nutrition Sciences. 1-4 Hour.
Exploration of current issues in Nutrition Sciences.

NTR 480. Professional Studies in Nutrition and Dietetics. 2 Hours.
Advanced nutrition and dietetics professional development, including: health screening assessments, documentation, mentoring, and precepting. Mock applications and interviews for dietetic internships and graduate schools.
Prerequisites: NTR 421 [Min Grade: C]

NTR 490. Capstone Experience in Nutrition Sciences. 3 Hours.
Capstone experience integrating and applying the nutrition sciences body of knowledge in a comprehensive group project.