

# BACHELOR OF SCIENCE WITH A MAJOR IN NUTRITION, NUTRITION SCIENCE CONCENTRATION

Program Director: Gabby Headrick

The mission of GW’s nutrition program is to provide undergraduate students with an in-depth understanding of the scientific aspects of food and nutrition and the application of nutrition to public health. As a multi-faceted and cross-disciplinary field, encompassing chemistry, biology, physiology, psychology, and public health, the program lays the groundwork for integrating nutrition science across disciplines. Once they complete the program, students are well-prepared to develop, extend, and apply all aspects of nutrition to improve clinical practice and public health. Program graduates are employed in a variety of settings, including federal government agencies such as the USDA and FDA, nonprofit organizations, and advocacy groups, while others choose to pursue advanced degrees in the health sciences, dietetics, and/or public health.

Students in the nutrition program can select the nutrition science concentration, which is designed for those planning to pursue an advanced degree in dietetics and become a registered dietitian. Please note that as of 2024, it is required that students have a Master’s degree to become a Registered Dietitian.

Visit the program website (<https://publichealth.gwu.edu/content/nutrition-science-bs/>) for additional information.

## ADMISSIONS

Information on the admission process is available on the Office of Undergraduate Admissions website (<https://undergraduate.admissions.gwu.edu/>). Applications can be submitted via the Common Application (<https://go.gwu.edu/commonapp/>).

Supporting documents not submitted online should be mailed to:

Office of Undergraduate Admissions  
The George Washington University  
800 21st Street NW, Suite 100  
Washington, DC 20052

Contact for questions:  
[gwadm@gwu.edu](mailto:gwadm@gwu.edu) or 202-994-6040

Current GW students who wish to declare one of the SPH majors should visit the school’s undergraduate admissions (<https://publichealth.gwu.edu/admissions/undergraduate-admissions/>) website.

## REQUIREMENTS

The following requirements must be fulfilled: 120 credits, including 26 credits in courses counting toward the University General Education Requirement, 34 credits in nutrition core courses, 30

credits in concentration-specific courses, 12 credits in approved guided elective courses, and 18 credits in general elective courses.

Code	Title	Credits
<b>SPH University General Education Requirement</b>		
One course in critical thinking in the humanities.		
Two courses in critical thinking, quantitative reasoning, or scientific reasoning in the social sciences.		
For exercise science and nutrition majors, this requirement must be fulfilled with one of the following: ANTH 1002, ANTH 1003, or ANTH 1004.		
For public health majors, students are encouraged to take ECON 1011 as a General Education social science course, as it is a prerequisite for PUBH 3130.		
One course that has an approved oral communication component .		
For exercise science and nutrition majors, this requirement must be fulfilled with either COMM 1040 or COMM 1041.		
For public health majors, students can chose any of the following pre-approved oral communication courses: AMST 2450, AMST 2620, ANTH 1004, ANTH 2502, CHEM 2118W, COMM 1040, COMM 1041, EAP 1010, ECON 4198W, ENGL 1365, ENGL 3918, GTCH 2003, GTCH 3101, HSSJ 4195, ORSC 2000, PHIL 2124 or PHIL 2124W, PHIL 2134, SLHS 1011, SOC 4192, SOC 4195 or SOC 4195W, SPAN 3022, SUST 2004, WLP 1020		
One course in quantitative reasoning.		
For exercise science and nutrition majors, this requirement must be fulfilled with one of the following: STAT 1051, STAT 1053, or STAT 1127.		
Public health majors should avoid taking STAT 1051, STAT 1053, STAT 1111 or STAT 1127.		
One course in scientific reasoning with laboratory experience.		
For exercise science and nutrition majors, this requirement must be fulfilled with BISC 1111.		
For public health majors, this requirements must be fulfilled with one of the following: BISC 1005, BISC 1006, BISC 1007, BISC 1008, BISC 1111, BISC 1112 or HONR 1033 Biology.		
UW 1020	University Writing	
or HONR 1015 (Origins and Evolution of Modern Thought)		
After successful completion of UW 1020 or HONR 1015, 6 credits distributed over at least two different Writing in the Disciplines (WID) courses taken in separate semesters (summer counts as one semester) are required. WID courses are designated by a "W" appended to the course number.		

Approved courses can be found under University General Education Requirement (<http://bulletin.gwu.edu/university-regulations/general-education/>).

Code	Title	Credits
<b>Required nutrition core courses</b>		
34 credits in core nutrition courses. Students must maintain a minimum grade-point average of 2.5 in nutrition core requirements with a minimum grade of C- in each core course.		
CHEM 1110	Fundamentals of Chemistry <sup>1</sup>	
EXNS 1109	Professional Foundations in Nutrition <sup>2</sup>	
EXNS 2119	Introduction to Nutrition Science	
EXNS 2120	Assessment of Nutritional Status	
EXNS 2123	Nutrition and Chronic Disease	
EXNS 2124	Lifecycle Nutrition	
EXNS 2210	Applied Anatomy and Physiology I	
EXNS 2211	Applied Anatomy and Physiology II	
EXNS 3110	Field Experience in Exercise and Nutrition Sciences <sup>3</sup>	
or EXNS 3120	Experiences in Community Nutrition	
or EXNS 3995	Undergraduate Research	
or CCAS 2154	Elective Internship	
EXNS 3111W	Exercise and Nutrition Sciences Research Methods	
PSYC 1001	General Psychology	
PUBH 1010	First-Year Experience in Public Health	
PUBH 1101	Introduction to Public Health and Health Services	

<sup>1</sup>Students in the nutrition science and pre-medical professional concentrations can waive CHEM 1110 Fundamentals of Chemistry if they earned a score of 95 or higher on the ALEKS examination. If CHEM 1110 is waived, it must be replaced with two additional credits in guided electives. Students are required to take CHEM 1111 General Chemistry I and CHEM 1112 General Chemistry II as part of their required concentration courses. Students interested in waiving CHEM 1110 should speak with their academic advisor.

<sup>2</sup>Students who have taken EXNS 1103 Professional Foundations in Exercise Science should not take EXNS 1109 Professional Foundations in Nutrition.

<sup>3</sup>Students can choose between listed courses. If a student enrolls in a course of 2 credits or more, 1 credit will apply toward the guided

elective credit requirement and any additional credit will be counted toward the general elective credit requirement.

Code	Title	Credits
<b>Required concentration courses</b>		
30 credits in concentration-specific courses.		
BISC 1112	Introductory Biology: The Biology of Organisms	
BISC 2336	Introductory Microbiology	
BISC 2337	Introductory Microbiology Laboratory	
BISC 3165	Biochemistry I	
or CHEM 3165	Biochemistry I	
CHEM 1111	General Chemistry I	
CHEM 1112	General Chemistry II	
CHEM 2151	Organic Chemistry I	
CHEM 2153	Organic Chemistry Laboratory I	
CHEM 2152	Organic Chemistry II	
CHEM 2154	Organic Chemistry Laboratory II	
EXNS 4199	Advanced Topics in Exercise and Nutrition Sciences (only in topic Metabolism in Exercise Science)	

Code	Title	Credits
<b>Electives</b>		
30 credits in elective courses, including 12 credits in nutrition guided electives, selected from the list below in consultation with the advisor, and 18 credits in general elective courses.		

No more than 3 credits in Lifestyle, Sport, and Physical Activity (LSPA) courses may be counted toward the 120 credits required for the bachelor's degree. LSPA courses count as general electives.

### Nutrition guided electives

The courses listed below have been identified as highly relevant to the BS in nutrition degree program. Guided elective courses must be selected from this list. General elective courses can be selected from this list, or they can be any other undergraduate course at GW.

Courses offered online can only be taken in the summer term.

Code	Title	Credits	Emergency Health Services	
Anthropology			EHS 1002	CPR and First Aid
ANTH 1005	The Biological Bases of Human Behavior		EHS 1040	Emergency Medical Technician
ANTH 3413	Evolution of the Human Brain		EHS 1041	Emergency Medical Technician Laboratory
ANTH 3504	Illness, Healing, and Culture		EHS 1058	EMT Instructor Development
Biological Sciences			EHS 2108	Emergency Medicine Clinical Scribe
BISC 2202	Cell Biology		EHS 2110	Emergency Department Critical Care Assessment and Procedures
BISC 2207	Genetics		Exercise and Nutrition Sciences	
BISC 2213	Biology of Cancer		EXNS 1113	Medical Terminology <sup>2</sup>
BISC 2214	Developmental Biology		EXNS 1114	Community Nutrition <sup>3</sup>
BISC 2220	Developmental Neurobiology		EXNS 2116	Exercise and Health Psychology <sup>2</sup>
BISC 2320	Neural Circuits and Behavior		EXNS 2118	Sport and Nutrition
BISC 2322	Human Physiology		EXNS 2122	Food Systems in Public Health <sup>3</sup>
BISC 2336	Introductory Microbiology <sup>1</sup>		EXNS 2126W	International Nutrition <sup>3</sup>
BISC 2337	Introductory Microbiology Laboratory <sup>1</sup>		EXNS 2127	Introduction to Food Policy <sup>3</sup>
BISC 2581	Human Gross Anatomy		EXNS 3101	Independent Study <sup>4</sup>
BISC 2583	Biology of Proteins		or EXNS 3110	Field Experience in Exercise and Nutrition Sciences
BISC 3165	Biochemistry I <sup>1,2</sup>		or EXNS 3995	Undergraduate Research
BISC 3209	Molecular Biology		EXNS 3114W	Cultivating Food Justice in Urban Food Systems
BISC 3212	Immunology		EXNS 3311	Exercise Physiology I
BISC 3262	Biochemistry Laboratory		EXNS 3312	Exercise Physiology II
BISC 3263	Special Topics in Biochemistry		EXNS 3120	Experiences in Community Nutrition
BISC 3320	Human Neurobiology		EXNS 4199	Advanced Topics in Exercise and Nutrition Sciences (Metabolism in Exercise and Nutrition Science) <sup>1</sup>
Chemistry			Health and Wellness	
CHEM 3166	Biochemistry II		HLWL 1102	Stress Management
or CHEM 3166W	Biochemistry II		HLWL 1106	Drug Awareness
CHEM 3262	Biochemistry Laboratory		HLWL 1108	Weight and Society
CHEM 3263W	Special Topics in Biochemistry		HLWL 1114	Personal Health and Wellness
CHEM 3564	Lipid Biotechnology		HLWL 1117	Lifetime Fitness
CHEM 4122	Instrumental Analytical Chemistry		Health Sciences	
Culinary Medicine				
CULI 1810	Fundamentals of Culinary Medicine			

HSCI 2101	Psychosocial Aspects of Health and Illness
HSCI 2102	Pathophysiology
HSCI 2110	Disease Prevention and Health Promotion Concepts
HSCI 2112W	Writing in the Health Sciences
HSCI 3113	Health Policy and the Health Care System
Psychology	
PSYC 2011	Abnormal Psychology
or PSYC 2011W	Abnormal Psychology
PSYC 2013	Developmental Psychology
PSYC 2014	Cognitive Psychology
PSYC 2015	Biological Psychology
PSYC 2570	Peer Education
PSYC 3128	Health Psychology
Public Health	
PUBH 1102	History of Public Health
PUBH 2110	Public Health Biology
PUBH 2112	Principles of Health Education and Health Promotion <sup>3</sup>
PUBH 2113	Impact of Culture upon Health
PUBH 2117	Service Learning in Public Health
PUBH 2142	Introduction to Biostatistics for Public Health
PUBH 3130	Health Services Management and Economics
PUBH 3131	Epidemiology <sup>3</sup>
PUBH 3135W	Health Policy
PUBH 3151W	Current Issues in Bioethics

<sup>1</sup>Required for the nutrition science concentration.

<sup>2</sup>Required for the pre-medical professional concentration.

<sup>3</sup>Required for the applied nutrition concentration.

<sup>4</sup>Students can apply up to 3 credits in Undergraduate Research and/or Independent Study toward the major. These courses must be taken for a letter grade; if graded on a Pass/No Pass (P/NP), they cannot be counted toward the major requirements.