

# BACHELOR OF SCIENCE WITH A MAJOR IN NUTRITION (STEM)

Program Director: G. Headrick

The mission of GW's bachelor of science (BS) in 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.

The program also may be taken with an optional applied nutrition, (<http://bulletin.gwu.edu/public-health/exercise-science/bs-nutrition/applied-nutrition-concentration/>) nutrition science (<http://bulletin.gwu.edu/public-health/exercise-science/bs-nutrition/nutrition-science-concentration/>), or pre-medical professional (<http://bulletin.gwu.edu/public-health/exercise-science/bs-nutrition/premedical-professional-concentration/>) concentration.

This is a STEM designated program.

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 may 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

## REQUIREMENTS

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

courses, 18 credits in approved guided elective courses, and 42 credits in general electives.

Code	Title	Credits
------	-------	---------

### University General Education Requirement

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, must be satisfied with one of the following: ANTH 1002, ANTH 1003, or ANTH 1004.

One course that has an approved oral communication component. For exercise science and nutrition majors, must be satisfied with either COMM 1040 or COMM 1041.

One course in quantitative reasoning. For exercise science and nutrition majors, must be satisfied with one of the following: STAT 1051, STAT 1053, or STAT 1127.

One course in scientific reasoning with laboratory experience. For exercise science and nutrition majors, must be satisfied with BISC 1111.

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
------	-------	---------

### Required core nutrition courses

34 credits in core nutrition courses. Students must maintain a minimum grade-point average of 2.5 in nutrition core courses with a minimum grade of C- in each course.

CHEM 1110 Fundamentals of Chemistry

EXNS 1109 Professional Foundations in Nutrition

EXNS 2210 Applied Anatomy and Physiology I

EXNS 2211 Applied Anatomy and Physiology II

EXNS 2119 Introduction to Nutrition Science

EXNS 2120 Assessment of Nutritional Status

EXNS 2123 Nutrition and Chronic Disease

EXNS 2124	Lifecycle Nutrition
EXNS 3111W	Exercise and Nutrition Sciences Research Methods
EXNS 4112	Nutrition Senior Capstone Seminar
PSYC 1001	General Psychology
PUBH 1010	First-Year Experience in Public Health
PUBH 1101	Introduction to Public Health and Health Services

Note that the ANTH, BISC, COMM, and STAT courses required for the University General Education Requirement do not count toward the 34 credits in nutrition core courses.

Code	Title	Credits
------	-------	---------

### Electives

60 credits in elective courses, including 18 credits in courses from the list of preapproved nutrition guided electives, selected in consultation with the advisor; and 42 credits in general electives, which can be additional nutrition guided electives and/or any other undergraduate courses offered by the University.

No more than 3 credits in Lifestyle, Sport, and Physical Activity (LSPA) courses can 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. All guided elective credits must be taken in courses on this list.

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

Code	Title	Credits
------	-------	---------

#### Anthropology

ANTH 1005	The Biological Bases of Human Behavior
-----------	--

ANTH 3413	Evolution of the Human Brain
-----------	------------------------------

ANTH 3504	Illness, Healing, and Culture
-----------	-------------------------------

#### Biological Sciences

BISC 2202	Cell Biology
-----------	--------------

BISC 2207	Genetics
-----------	----------

BISC 2213	Biology of Cancer
-----------	-------------------

BISC 2214	Developmental Biology
-----------	-----------------------

BISC 2220	Developmental Neurobiology
-----------	----------------------------

BISC 2320	Neural Circuits and Behavior
-----------	------------------------------

BISC 2322	Human Physiology
-----------	------------------

BISC 2336	Introductory Microbiology <sup>1</sup>
-----------	--

BISC 2337	Introductory Microbiology Laboratory <sup>1</sup>
-----------	---

BISC 2581	Human Gross Anatomy
-----------	---------------------

BISC 2583	Biology of Proteins
-----------	---------------------

BISC 3165	Biochemistry I <sup>1,2</sup>
-----------	-------------------------------

BISC 3209	Molecular Biology
-----------	-------------------

BISC 3212	Immunology
-----------	------------

BISC 3262	Biochemistry Laboratory
-----------	-------------------------

BISC 3263	Special Topics in Biochemistry
-----------	--------------------------------

BISC 3320	Human Neurobiology
-----------	--------------------

#### Chemistry

CHEM 3166	Biochemistry II
-----------	-----------------

or CHEM 3166W	Biochemistry II
---------------	-----------------

CHEM 3262	Biochemistry Laboratory
-----------	-------------------------

CHEM 3263W	Special Topics in Biochemistry
------------	--------------------------------

CHEM 3564	Lipid Biotechnology
-----------	---------------------

CHEM 4122	Instrumental Analytical Chemistry
-----------	-----------------------------------

#### Emergency Health Services

EHS 1002	CPR and First Aid
----------	-------------------

EHS 1040	Emergency Medical Technician
----------	------------------------------

EHS 1041	Emergency Medical Technician Laboratory
----------	---

EHS 1058	EMT Instructor Development
----------	----------------------------

EHS 2108	Emergency Medicine Clinical Scribe
----------	------------------------------------

EHS 2110	Emergency Department Critical Care Assessment and Procedures
----------	--

#### Exercise and Nutrition Sciences

EXNS 1113	Medical Terminology <sup>2</sup>
-----------	----------------------------------

EXNS 1114	Community Nutrition <sup>3</sup>
-----------	----------------------------------

EXNS 2116	Exercise and Health Psychology <sup>2</sup>
-----------	---

EXNS 2118	Sport and Nutrition
-----------	---------------------

EXNS 2122	Food Systems in Public Health <sup>3</sup>
-----------	--

EXNS 2126W	International Nutrition <sup>3</sup>
EXNS 2127	Introduction to Food Policy <sup>3</sup>
EXNS 3101	Independent Study <sup>4</sup>
or EXNS 3110	Field Experience in Exercise and Nutrition Sciences
or EXNS 3995	Undergraduate Research
EXNS 3311	Exercise Physiology I
EXNS 3312	Exercise Physiology II
EXNS 3120	Experiences in Community Nutrition
EXNS 4199	Advanced Topics in Exercise and Nutrition Sciences (only in the topic Metabolism in Exercise and Nutrition Science) <sup>5</sup>

#### Health and Wellness

HLWL 1102	Stress Management
HLWL 1106	Drug Awareness
HLWL 1108	Weight and Society
HLWL 1114	Personal Health and Wellness
HLWL 1117	Lifetime Fitness

#### Health Sciences

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>6</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>6</sup>
PUBH 3135W	Health Policy
PUBH 3151W	Current Issues in Bioethics

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

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

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

<sup>4</sup> Only 3 credits of EXNS 3101, EXNS 3110, or EXNS 3995 count toward the guided elective requirement. Additional credits in these courses count as general electives.

<sup>5</sup> Required course for the nutrition science concentration.

<sup>6</sup> Required course for applied nutrition concentration.