

# BACHELOR OF SCIENCE WITH A MAJOR IN EXERCISE SCIENCE

**Program Director** B. Westerman

The bachelor of science with a major in exercise science degree program prepares individuals for careers in medicine and other health related professions including athletic training/sports medicine, physical therapy, physician's assistant or nursing, exercise physiology and rehabilitation, sport psychology as well as fitness and health promotion.

Students in the exercise science major may select the pre-medical professional concentration (for those planning to enter a medical, physician assistant, or nursing program upon graduation), the pre-physical therapy concentration, or the pre-athletic training/sports medicine concentration. The exercise science major also may be taken without a concentration.

## REQUIREMENTS

The following requirements must be fulfilled:

124 credits and maintenance of a minimum grade point average of 2.5 in the exercise science core requirements.

### University General Education Requirement\*

Code	Title	Credits
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#### University General Education Requirement (26 credits)

UW 1020	University Writing	
or HONR 1015	Honors Seminar: UW 1020: Origins and Evolution of Modern Thought	

Two writing in the disciplines (WID) courses (may also be counted in another category).

One critical or creative analysis in the humanities course.

One quantitative reasoning course. For exercise science and nutrition science majors, must be satisfied with STAT 1051 or STAT 1053 or STAT 1127 .

One scientific reasoning course with laboratory experience. For exercise science and nutrition science majors, must be satisfied with either BISC 1111 or BISC 1115 and BISC 1125.

Two critical, creative, or quantitative analysis in the social sciences courses. For exercise science and nutrition science majors, must be satisfied with ANTH 1002 or ANTH 1003 or ANTH 1004; and COMM 1040 or COMM 1041 .

A list of approved courses can be found on the University General Education Requirements (<http://bulletin.gwu.edu/university-regulations/general-education/>) page.

### Exercise Science Core Requirements

Code	Title	Credits
<b>Required (40 credits)</b>		
EXNS 1103	Professional Foundations in Exercise Science	
EXNS 1110	Applied Anatomy and Physiology I	
EXNS 1111	Applied Anatomy and Physiology II	
EXNS 2111	Exercise Physiology I	
EXNS 2112	Exercise Physiology II	
EXNS 2113	Kinesiology	
EXNS 2116	Exercise and Health Psychology	
EXNS 2119	Introduction to Nutrition Science	
EXNS 3110	Field Experience - Exercise and Nutrition Sciences	
EXNS 4110	Current Issues in Exercise Science	
PSYC 1001	General Psychology	
PUBH 1101	Introduction to Public Health and Health Services	
Course requirements also fulfilling University General Education Requirements (13 credits)		
ANTH 1002	Sociocultural Anthropology	
or ANTH 1003	Archaeology	
or ANTH 1004	Language in Culture and Society	
BISC 1111	Introductory Biology: Cells and Molecules	
or BISC 1115 & BISC 1125	Introductory Biology: Cells and Molecules and Introduction to Cells and Molecules Laboratory	
COMM 1040	Public Communication	
or COMM 1041	Interpersonal Communication	
STAT 1051	Introduction to Business and Economic Statistics	
or STAT 1053	Introduction to Statistics in Social Science	
or STAT 1127	Statistics for the Biological Sciences	

## Concentration Requirements

Code	Title	Credits
<b>Electives (58 credits)</b>		
40 credits of guided electives planned with the advisor		
18 credits of general electives		

## Guided Electives

Code	Title	Credits
ANTH 1005	The Biological Bases of Human Behavior	
ANTH 2502	Anthropology of Science and Technology: Twenty-First-Century Brave New Worlds	
ANTH 3413	Evolution of the Human Brain	
ANTH 3504	Illness, Healing, and Culture	
BIOC 3261	Introductory Medical Biochemistry	
BIOC 3560	Diet, Health, and Longevity	
BISC 1112	Introductory Biology: The Biology of Organisms	
or BISC 1116 & BISC 1126	Introductory Biology: The Biology of Organisms and Introduction to Organisms Laboratory	
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 2337	Introductory Microbiology	
or BISC 2337W	Introductory Microbiology	
BISC 2581	Human Gross Anatomy	
BISC 3165	Biochemistry I	
BISC 3166	Biochemistry II	
BISC 3209	Molecular Biology	
BISC 3261	Introductory Medical Biochemistry	

BISC 3262	Biochemistry Laboratory
BISC 3263	Special Topics in Biochemistry
BISC 3320	Human Neurobiology
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
CHEM 3262	Biochemistry Laboratory
CHEM 3165	Biochemistry I
CHEM 3166	Biochemistry II
or CHEM 3166W	Biochemistry II
CHEM 3263W	Special Topics in Biochemistry
EHS 1002	CPR and First Aid
EHS 1040	Emergency Medical Tech-Basic
EHS 1041	EMT - Basic Lab
EHS 1058	EMT Instructor Development
EHS 2108	Emergency Medicine Clinical Scribe
EHS 2110	Emergency Department Critical Care Assessment and Procedures
EXNS 1112	Current Issues in Coaching
EXNS 1114	Community Nutrition
EXNS 1117	Principles of Coaching (2 different courses)
EXNS 1118	Sport and Nutrition
EXNS 1119W	Children and Sport
EXNS 1199	Topics in Exercise and Nutrition Sciences
EXNS 2110	Injury Prevention and Control
EXNS 2117	Sport Psychology
or EXNS 2117W	Sport Psychology
EXNS 2120	Assessment of Nutritional Status
EXNS 2121	Orthopaedic Taping and Bracing

EXNS 2122	Food Systems in Public Health
EXNS 3101	Independent Study
EXNS 3102	Applied Sport Psychology
EXNS 3117	Injury Assessment
EXNS 3118	Therapeutic Modalities in Sports Medicine
EXNS 3119	Therapeutic Exercise in Sports Medicine
EXNS 3121	Medical Issues in Sports Medicine
EXNS 3123W	Psychology of Injury and Rehabilitation
HLWL 1101	Special Topics
HLWL 1102	Stress Management
HLWL 1103	Issues in Men's Health
HLWL 1104	Outdoor and Environmental Education
HLWL 1105	Yoga and the Meaning of Life
HLWL 1106	Drug Awareness
HLWL 1108	Weight and Society
or HLWL 1108W	Weight and Society
HLWL 1109	Human Sexuality
HLWL 1110	Issues in Alternative Medicine
HLWL 1112	Issues in Women's Health
HLWL 1114	Personal Health and Wellness
HLWL 1117	Lifetime Fitness
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 2117	Introduction to Statistics for Health Sciences *
PHYS 1011	General Physics I
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
PUBH 1102	History of Public Health
PUBH 2110	Public Health Biology
PUBH 2112	Principles of Health Education and Health Promotion
PUBH 2113	Impact of Culture upon Health
PUBH 2116	Global Delivery of Health Systems
PUBH 2117	Service Learning in Public Health
PUBH 3130	Health Services Management and Economics
PUBH 3131	Epidemiology: Measuring Health and Disease
PUBH 3135W	Health Policy
PUBH 3137	Global Public Health Nutrition
PUBH 3151	Current Issues in Bioethics

\*Summer session only for online delivery

Note: LSPA courses do not count towards the academic requirements for the bachelor of science with a major in exercise science degree.