Milken Institute School of Public Health

Department of Exercise and Nutrition Sciences

THE GEORGE WASHINGTON UNIVERSITY

Bachelor of Science in Exercise Science 2017 – 2018

Undergraduate Program Director

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Note: All curriculum revisions will be updated immediately on the website <u>http://publichealth.gwu.edu</u>.

Program Mission Statement

The mission of the Bachelor of Science (BS) in Exercise Science (EXSC) program is to advance the scientific basis of the benefits of regular physical activity and proper nutrition to health and function throughout the life-span. The BS in EXSC program trains students in the science and practice of exercise, physical activity, and health in the greater context of public health by developing critical thinking skills and fostering life-long learning.

Careers

The BS in Exercise Science prepares students for professional careers in the field and for entrance into professional graduate programs:

- Medicine (Physician Assistant, Nursing, Physician)
- Physical Therapy
- Nutrition
- Corporate Fitness and Wellness Programs
- Personal Training
- Exercise Rehabilitation
- Coaching
- Sport Psychology
- Health Promotion
- Other health and public health professions

Degree Requirements

All students accepted to the BS with a major in Exercise Science complete 124 credit hours and maintain a minimum 2.5 grade point average in the core Exercise Science courses. In addition students must earn a minimum of a C- in each exercise science core course. There are four levels of requirements for the BS with a major in Exercise Science: University general education requirements, Exercise Science core requirements, guided electives, and general electives. General education requirements are taken by all University undergraduate students and form the liberal arts education component of the BS degree with a major in Exercise Science. Students with a declared concentration must meet the requirements for the concentration in addition to the four levels of requirements listed above.

PROGRAM-AT-A-GLANCE 2017-2018 DEPARTMENT OF EXERCISE and NUTRITION SCIENCES BACHELOR OF SCIENCE in EXERCISE SCIENCE

	University General Education Requirements (GenEd) Courses(See University Bulletin for GenEd's under University Regulations)Credits	
University Writing	UW 1020 UNIVERSITY WRITING OR HONR 1015	4
WID	TWO WID COURSES; These may also be counted in another category	6
Humanities	ONE COURSE IN HUMANITIES	
	http://bulletin.gwu.edu/university-regulations/general-education/	3
Mathematics or Statistics*	ONE COURSE IN EITHER MATH OR STATISTICS Can be satisfied with STAT 1051 or STAT 1053 or STAT 1127 (required for the BS in Exercise Science)	3
Science*	ONE NATURAL OR PHYSICAL SCIENCE COURSE WITH LABORATORY EXPERIENCE Can be satisfied with BISC 1115/1125 which is required for the BS in Exercise Science	4
Social Science*	TWO COURSES IN THE SOCIAL SCIENCES http://bulletin.gwu.edu/university-regulations/general-education/	6
	TOTAL GenEd	26

Exercise Science Core

	Exercise Science Core Courses (same for all concentrations)					
EXNS 1103	Professional Foundations in Exercise Science	1	EXNS 3110	Field Experience	4	
EXNS 1110	Applied Anatomy & Physiology I & Lab	4	EXNS 4110	Current Issues in EXNS	3	
EXNS 1111	Applied Anatomy & Physiology II & Lab	4	PUBH 1101 or	Introduction to Public Health or	3	
			PUBH 1102	History of Public Health		
EXNS 2111	Exercise Physiology I & Lab	4	PSYC 1001	General Psychology	3	
EXNS 2112	Exercise Physiology II & Lab	4	BISC 1115	Intro Biology: Cells & Molecules		
			and BISC			
			1125** ^G			
EXNS 2113	Kinesiology	4	STAT*G	1051 or 1053 or 1127		
EXNS 2116	Exercise and Health Psychology	3	COMM* ^G	1040 or 1041		
			_	(satisfies Social Science & Oral		
				Communication requirement)		
EXNS 2119	Introduction to Nutrition Sciences	3	ANTH*G	1002, 1003, 1004		
			_	(satisfies Social Science & Global/Cross		
				Cultural Perspective requirement)		
				ements (*G = excluding GenEd requirements)	40	
	Students must maintain/earn a minimum of 2.5 GPA in the Exercise Science Core Courses and					
	earn at a C- or better in each course to graduate					

Concentration Requirements:

BS Exercise Students-No Concentration-Must Fulfill the Following Degree Requirements					
All General Education Requirements (GenEd) & WID Courses	26 Credits				
All Core Exercise Science Requirements	40 Credits				
C- or better required in core Exercise Science courses	40 Credits				
Guided Electives Planned with Advisor	40 Credits				
 Please see the "Guided Electives" worksheet for a list of approved courses 	40 Credits				
General Electives	18 Credits				
Total Exercise Science Core Requirements (not including GenEd requirements)	124				

No Concentration

Pre-Athletic Training/Sports Medicine Concentration

Pre-Athletic Training/Sports Medicine Concentration Requirements						
EXNS 2110	Injury Prevention and Control	3		EXNS 3119	Therapeutic Exercise	4
EXNS 2121	Orthopedic Taping and Bracing	1		EXNS 3121	Medical Issues in Sports Medicine	3
EXNS 3117	Injury Assessment	4		EXNS 3123W	Psychology of Injury and Performance	3
EXNS 3118	Therapeutic Modalities	4		EXNS 3125	Athletic Training Practicum	3
Total Concentration Requirements						25

BS Exercise Students-Pre-Athletic Training/Sports Medicine-Must Fulfill the Following Degree Requirement						
All General Education Requirements (GenEd) & WID Courses	26 Credits					
 All Core Exercise Science Requirements C- or better required in core Exercise Science courses 	40 Credits					
Pre-Athletic Training/Sports Medicine Concentration Requirements	25 Credits					
 Guided Electives Planned with Advisor Please see the "Guided Electives" worksheet for a list of approved courses 	15 Credits					
General Electives	18 Credits					
Total Exercise Science Core Requirements (not including GenEd requirements)	124					

Pre-Medical Professional Concentration

Pre-Medical Professionals Concentration Requirements						
BISC 1116 and BISC 1126	Intro Biology: The Biology of Organisms	4		MATH ≥1220* ^G	Calculus with Precalculus I (or higher level MATH)	3
CHEM 1111	General Chemistry I	4				
CHEM 1112	General Chemistry II	4		PHYS 1011	General Physics I	4
CHEM 2151	Organic Chemistry I	3		PHYS 1012	General Physics II	4
CHEM 2153	Organic Chemistry I Lab	1				
CHEM 2152	Organic Chemistry II	3				
CHEM 2154	Organic Chemistry II Lab	1				
Total Exercise Science Core Requirements (not including GenEd requirements)						31

BS Exercise Students-Pre-Medical Professionals Concentration-Must Fulfill the Following Degree Requirements						
All General Education Requirements (GenEd) & WID Courses						
 All Core Exercise Science Requirements C- or better required in core Exercise Science courses 						
Pre-Medical Professionals Concentration Requirements	31 Credits					
 Guided Electives Planned with Advisor Please see the "Guided Electives" worksheet for a list of approved courses 	9 Credits					
General Electives	18 Credits					
Total Exercise Science Core Requirements (not including GenEd requirements)	124					

Pre-Physical Therapy Concentration

Pre-Physical Therapy Concentration Requirements						
BISC 1116 and BISC 1126	Intro Biology: The Biology of Organisms	4		PHYS 1011	General Physics I	4
CHEM 1111	General Chemistry I	4		PHYS 1012	General Physics II	4
CHEM 1112	General Chemistry II	4		PSYC 2013 or PSYC 2011	Developmental Psychology OR Abnormal Psychology	3
MATH =/> 1220	Calculus or pre-calculus I (or higher level math	3				
Total Exercise Science Core Requirements (not including GenEd requirements) 2					26	

BS Exercise Students-Pre-Physical Therapy Concentration-Must Fulfill the Following Degree Requireme	nts
All General Education Requirements (GenEd) & WID Courses	26 Credits
 All Core Exercise Science Requirements C- or better required in core Exercise Science courses 	40 Credits
Pre-Physical Therapy Concentration Requirements	26 Credits
 Guided Electives Planned with Advisor Please see the "Guided Electives" worksheet for a list of approved courses 	14 Credits
➢ General Electives	18 Credits
Total Exercise Science Core Requirements (not including GenEd requirements)	124

Guided Electives Planned with Advisor (Choose required # of Degree/Concentration)						
BIOC 3261	Intro Medical Biochemistry	4	EXNS 2122	Food Systems in Public Health	3	
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BIOC 3560	Diet, Health, & Longevity	3	EXNS 3101	Independent Study	3	
BISC 1116	Intro Biology: The Biology of Organisms	3	EXNS 3102	Applied Sport Psychology	3	
BISC 1126	Intro Biology-lab for BISC 1116	1	EXNS 3117	Injury Assessment	4	
BISC 2202	Cell Biology	3	EXNS 3118	Therapeutic Modalities in Sports Med.	4	
BISC 2207	Genetics	3	EXNS 3119	Therapeutic Exercise in Sports Medicine	4	
BISC 2213	Biology of Cancer	3	EXNS 3121	Medical Issues in Sports Medicine	3	
BISC 2214	Developmental Biology	4	EXNS 3123W	Psychology of Injury and Performance	3	
BISC 2220	Developmental Neurobiology	3	HLWL 1101	Special Topics	1-	
					3	
BISC 2320	Neural Circuits & Behavior	3	HLWL 1102	Stress Management	3	
BISC 2322	Human Physiology	3	HLWL 1103	Issues in Men's Health	3	
BISC 2323	Human Physiology Lab	1	HLWL 1104	Outdoor & Environmental Education	3	
BISC 2337	Introductory Microbiology	4	HLWL 1105	Yoga & the Meaning of Life	3	
Or						
BISC 2337W					-	
BISC 2581	Human Gross Anatomy	3	HLWL 1106	Drug Awareness	3	
BISC 3165	Biochemistry I	3	HLWL 1108	Weight & Society	3	
			or			
DIGGALCC			HLWL 1108W		-	
BISC 3166	Biochemistry II	3	HLWL 1109	Human Sexuality	3	
BISC 3209	Molecular Biology	4	HLWL 1110	Issues in Alternative Medicine	3	
BISC 3262	Biochemistry Lab	2				
BISC 3263	Special Topics in Biochemistry	2	HLWL 1112	Issues in Women's Health	3	
or						
BISC 3263W	11 NJ 111				2	
BISC 3320	Human Neurobiology	3	HLWL 1114	Personal Health & Wellness	3	
CHEM 1111	General Chemistry I	4	HLWL 1117	Functional Fitness	3	
CHEM 1112	General Chemistry II	4	HSCI 2101	Psychological Aspects of Health	3	
CHEM 2151	Organic Chemistry I	3	HSCI 2105	Current Issues in Bioethics	3	
CHEM 2153	Organic Chemistry I Lab	1	HSCI 2110	Disease Prevention/Health Promotion	3	
CHEM 2152	Organic Chemistry II	3	HSCI 2112	Writing in the Health Sciences	3	
CHEM 2154	Organic Chemistry II Lab	1	HSCI 2115	Intro Biostatistics-Health	3	
CHEM 3165	Biochemistry I	3	HSCI 2117	Introduction to Statistics for the Health		
			LIGGL 01001	Sciences	-	
CHEM 3262	Biochemistry Lab	2	HSCI 2122W	Writing in the Health Sciences	3	
CHEM 3166	Biochemistry II	3	HSCI 2102	Pathophysiology	3	
Or CHEN 21(CN)						
CHEM 3166W	CDD & Einst Aid	1	DUVC 1011	Can anal Dhavaian I	4	
EHS 1002	CPR & First Aid	1	PHYS 1011	General Physics I	4	
EHS 1040	EMT Basic	3	PHYS 1012	General Physics II	4	
EHS 1041	EMT Basic Lab	1	PSYC 2011	Abnormal Psychology	3	
EIIS 1041	EWI Basic Lab	1	Or	Abholmar I sychology	5	
			PSYC 2011W ^{*G}			
EHS 1058	EMT Instructor Development	2	PSYC 2013*G	Developmental Psychology	3	
EHS 2108	Emergency Medical Clinical Scribe	3	PSYC 2014*G	Cognitive Psychology	3	
EXNS 1112	Current Issues in Coaching	3	PSYC 2015*G	Biological Psychology	3	
EXNS 1114	Community Nutrition	3	PUBH 1101	Introduction to Public Health and Health	3	
				Services	1	
EXNS 1117	Principles of Coaching (2 different courses)	3	PUBH 1102	History of Public Health	3	
EXNS 1118	Sport Nutrition	3	PUBH 2110	Public Health Biology	3	
EXNS 1119W	Children and Sport	3	PUBH 2113	Impact of Culture upon Health	3	
EXNS 1199	Topics in EXNS	3	PUBH 2117	Service Learning in Public Health	3	
EXNS 2117	Sport Psychology	3	PUBH 3137	Global Public Health Nutrition	3	
or	······································				1	
2117W					1	
EXNS 2110	Injury Prevention and Control	3	PUBH 3151	Current Issues in Bioethics	3	
EXNS 2121	Orthopedic Taping & Bracing	1				
EXNS 2120	Assessment of Nutritional Status	3			1	
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Guided Electives: