Milken Institute School of Public Health

THE GEORGE WASHINGTON UNIVERSITY

Department of Exercise and Nutrition Sciences

Master of Science in Exercise Science

2026-2027

Program Director

TBN

Mission Statement

To provide graduate-level academic instruction in the science, theory, and application of exercise science, for the purpose of improving human health, athletic performance, and the prevention of inactivity-related chronic health conditions and disorders. Our scholars will be rigorously trained in the methodology of exercise research and innovative thinking to advance knowledge that can be translated into real-world health applications.

Program Requirements

All Milken Institute School of Public Health (SPH) Master of Science (MS) in Exercise Science students are required to have completed a Bachelor of Science in a relevant field. Prospective students who completed a Bachelor of Arts and wish to enter the MS Exercise Science program must demonstrate appropriate undergraduate coursework in biological sciences.

In this program, students will take MS Required Core Courses (17 credits), Electives (13-16 credits), and a Culminating Experience (internship or thesis; 3-6 credits).

Program Competencies

Students in the MS in Exercise Science program will be able to:

- 1. Explain human response and adaptation to physical activity, exercise, and nutritional exposures
- 2. Integrate knowledge of the systems and functions underlying human physiology as they pertain to the maintenance of homeostasis and matching metabolic demand
- 3. Apply psychosocial theories and models to sport and exercise behavior to optimize performance and improve health.
- 4. Evaluate, interpret, and synthesize research on physical activity and exercise
- 5. Use oral and written communication skills to summarize and communicate research findings to scientific and public health audiences

Course Requirements

All GW Department of Exercise and Nutrition Sciences MS degree students will enroll in Core Courses (17 credits) and Electives (13-16 credits). The 36-credit program offers two options for a Culminating Experience: a) A 3-6 credit internship plus the successful completion of a Written Comprehensive Exam or; b) A mentored thesis seminar and project.

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Graduation Requirements

- 1. **Integrity Quiz & Plagiarism:** In the first semester as a MS student, all students should review the George Washington University's Code of Academic Integrity, take the quiz and submit documentation to the School of Public Health's Office of Student Records.
- 2. **CITI Training requirement.** All students are required to complete training regarding human subject protection regulation and the Health Insurance Portability and Accountability Act of 1996 (HIPAA). To fulfill this requirement, you must complete the Collaborative IRB Training Initiative (CITI) Course in The Protection of Human Research Subjects.
- 3. **Graduate Credit Requirement:** 36 graduate credits are required.
 - a. **Core Requirements.** Successful completion of Core courses (17 credits)
 - b. **Elective Requirements:** Successful completion of Elective courses (13-16 credits)
 - c. **Culminating Experience:** Completion of an Internship (3-6 credits) + written comprehensive exam OR Completion of a mentored Thesis (6 credits)
- 4. **Pathways to Public Health (PUBH 6080).** Successful completion or waiver of PUBH 6080 within one year of matriculation
- 5. **Grade Point Requirement.** A 3.0 (B average) program grade point average is required.
- 6. **Time Limit Requirement.** The degree must be completed within five years.
- 7. **Transfer Credit Policy.** Up to 12 graduate credits that have not been applied to a previous graduate degree may be transferred to the MS EXSC. Courses need to have been taken within the past three years from an accredited institution with a grade of B or better.

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Program at-a-Glance 2026-2027

Course Descriptions and Registration information can be found on the website: http://publichealth.gwu.edu/academics/.

	-	Credits	Semester Offered	Grade	
MS Exercise Science Core Courses					
EXNS 6202	Advanced Exercise Physiology I	3	Fall		
EXNS 6203	Advanced Exercise Physiology II	3	Spring		
EXNS 6204	Biostatistical Methods and Research Design	3	Fall		
EXNS 6207	Psychological Aspects of Sport and Exercise	3	Fall		
EXNS 6810	Advanced Metabolism	3	Spring		
EXNS 8108	Laboratory Techniques in Human Physiology	2	Fall		
PUBH 6080 ¹	Pathways to Public Health ¹	0	Fall, Spring, Summer		
	Core Courses Total	17			
Electives					
Examples of Pre-Approved Electives are listed below.					
Elective choices should be discussed with Academic Advisor.					
PUBH 6002	Biostatistical Applications for Public Health	3	Fall/Spring		
EXNS 6208	Physical Activity in Public Health	2	Spring		
EXNS 6221	Science and Theory of Resistance Training	3	Spring		
EXNS 6222	Advanced Topics in Strength and Conditioning	2	Fall		
EXNS 6223	Biomechanical Analysis	3	Spring		
PUBH 6003	Principles and Practices of Epidemiology	3	Fall		
PUBH 6235	Epidemiology of Obesity	1	Summer		
PUBH 6619	Fundamentals of Nutrition Science	3	Fall/Spring		
PUBH 6611	Nutrition Assessment	2	Spring		
EXNS 6233	Graduate Internship	3	Fall, Spring, Summer		
	Others as approved by Program Director				
	Electives Total	13-16			
Culminating Experience					
Students will choose ONE of the following as a culminating experience.					
EXNS 6998 ²	Thesis Research	6	Fall, Spring, Summer		
OR					
EXNS 6233 ³	Graduate Internship (includes required completion of a written Comprehensive Exam)	3	Fall, Spring, Summer		

¹ PUBH 6080 is a zero-credit course (no cost) that must be completed within the first year of matriculation. Students who earned a prior degree from a CEPH-accredited school or program of public health may waive this requirement.

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²EXNS 6998 Thesis Research is a 3-credit course. Students completing a thesis must register for a total of 6 credits over two academic semesters. Students completing a thesis may also register for EXNS 6233 Graduate Internship as an Elective.

³ EXNS 6233 Graduate Internship is a variable-credit course. Students must register for a total of 3 credits; it may be completed over multiple semesters. Students may register for a maximum of 6 credit hours; additional credits beyond 3 may count as an Elective. Included with this Culminating Experience option is the requirement to complete a Comprehensive Exam.

Department of Exercise and Nutrition Sciences MS in Exercise Science

Suggested Course Sequence

NOTES: PUBH 6080 (0 credits) must be taken during the first academic year. Students choosing to take a 6-credit internship plus a Written Comprehensive Exam will take the exam in April of Spring Semester, 2nd year.

Fall Semester, 1st year (9 credits)

EXNS 6202	Advanced Exercise Physiology I (3)
EXNS 6204	Biostatistical Methods and Research Design (3)
EXNS 6207	Psychological Aspects of Sport and Exercise (3)
PUBH 6080	Pathways to Public Health (0)

Spring Semester, 1st year (9 credits)

EXNS 6203	Advanced Exercise Physiology II (3)
EXNS 6810	Advanced Metabolism (3)
ELECTIVE	Approved by Program Director (3)

Fall Semester, 2nd year (9 credits)

EXNS 8198	Laboratory Techniques in Human Physiology (2)
ELECTIVE(S)	Approved by Program Director (7)
Or	

EXNS 6998 Thesis Research (3)

Spring Semester, 2nd year (9 credits)

ELECTIVE(S) Approved by Program Director (6)

EXNS 6233 Graduate Internship (3)

Or

EXNS 6998 Thesis Research (3)

(36 credits total)

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