Program Director

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Washington, DC 20052
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Mission Statement

The mission of this program is to provide formal graduate level academic instruction in the science and theory of resistance training, for the purpose of improving athletic performance and the prevention of inactivity related health disorders.

Goals

The goals of this program in the Department of Exercise and Nutrition Sciences are to:

- Establish scientific basis for the value of anaerobic exercise, and to provide internal and external programs that promote health behaviors across the lifespan.
- Meet an increasing demand for well-educated professionals capable of delivering a broad range of exercise-based preventive, technical, educational, and rehabilitative services.
- Gain insight into strategies for the prevention and treatment of sarcopenia, osteoporosis and obesity.
- Provide advanced training in exercise physiology as it relates specifically to resistance training for the purpose of increasing athletic performance and the prevention or treatment of inactivity-related health disorders.
- Prepare students with knowledge and skills to take the Certified Strength and Conditioning Specialist (CSCS) exam offered through the NSCA, and the Level One Weightlifting Coaching Course offered through United States Weightlifting (USAW)

Program Competencies

1. Integrate evidence-based knowledge of exercise physiology, nutrition, and the science of training to create exercise programs that improve health and optimize athletic performance.
2. Utilize social and behavioral theories in designing exercise training programs that lead to maximal improvement in athletic performance and health.
3. Utilize statistical and epidemiologic methods in the development, production, and dissemination of research related to improved athletic performance, physical activity, and health.

4. Utilize biomechanical principles in the evaluation, development, and implementation of sport-specific training programs.

5. Develop, coach, and execute complex exercise training modalities for working with athletic populations.

Course Requirements

All GW Department of Exercise and Nutrition Sciences Master Degree students who select the Strength and Conditioning Program enroll in both Core Courses (3 credits) and Program- Specific Courses (33 credits). The 36-credit program includes a culminating experience that is a 6-credit internship plus the successful completion of a Comprehensive Exam, or a 6-credit thesis and thesis defense.
Graduation Requirements

1. **Graduate Credit Requirement:** 36 graduate credits are required.

2. **Course Requirements.** Successful completion of core courses and the program specific courses are required.

3. **Pathways to Public Health (PUBH 6080).** Successful completion of PUBH 6080 prior to graduation.

4. **Grade Point Requirement.** A 3.0 (B average) overall grade point average is required.

5. **Time Limit Requirement.** The degree must be completed within four years.

6. **Professional Enhancement.** Successful completion of 8 hours of Professional Enhancement activities prior to graduation.

7. **Transfer Credit Policy.** Up to 12 graduate credits that have not been applied to a previous graduate degree may be transferred to the MSEXSC. Courses need to have been taken within the past three years from an accredited institution with a grade of B or better.

8. **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.

**Prerequisite**

Undergraduate Exercise Physiology – Course must be completed prior to beginning coursework at GW. Student must receive a grade of “B” or better.
Master of Science
Exercise and Nutrition Sciences
MS in Strength and Conditioning
Program at a Glance
2023-2024

Prerequisites
Undergraduate course in Exercise Physiology (must be completed prior to beginning coursework at GW, and must receive a grade of “B” or better)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Semester Offered</th>
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Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Semester Offered</th>
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<tbody>
<tr>
<td>PUBH 6002</td>
<td>Biostatistical Applications for Public Health</td>
<td>3</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>PUBH 6080</td>
<td>Pathways to Public Health</td>
<td>0</td>
<td>Fall, Spring, Summer</td>
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Program Specific Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Semester Offered</th>
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<tbody>
<tr>
<td>EXNS 6202</td>
<td>Advanced Exercise Physiology I</td>
<td>3</td>
<td>Fall</td>
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<tr>
<td>EXNS 6203</td>
<td>Advanced Exercise Physiology II</td>
<td>3</td>
<td>Spring</td>
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<tr>
<td>EXNS 6207</td>
<td>Psychological Aspects of Sport and Exercise</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>EXNS 6208</td>
<td>Physical Activity: Physiology &amp; Epidemiology</td>
<td>2</td>
<td>Spring</td>
</tr>
<tr>
<td>EXNS 6220</td>
<td>Power Training for Sports Performance</td>
<td>2</td>
<td>Spring</td>
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<tr>
<td>EXNS 6221</td>
<td>Science and Theory of Resistance Training</td>
<td>3</td>
<td>Spring</td>
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<tr>
<td>EXNS 6222</td>
<td>Current Topics in Strength and Conditioning</td>
<td>2</td>
<td>Fall</td>
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<tr>
<td>EXNS 6223</td>
<td>Biomechanical Analysis</td>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>PUBH 6619</td>
<td>Fundamentals of Nutrition Science</td>
<td>3</td>
<td>Fall &amp; Spring</td>
</tr>
<tr>
<td>Elective(s)</td>
<td>Approved by Program Director</td>
<td>3</td>
<td>Fall, Spring, Summer</td>
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Culminating Experience

Students will choose one of the following as a culminating experience

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Semester Offered</th>
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<tbody>
<tr>
<td>EXNS 6261</td>
<td>Thesis Seminar and Thesis Research</td>
<td>3</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>EXNS 6998</td>
<td></td>
<td>3</td>
<td>Fall, Spring, Summer</td>
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**OR**

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<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EXNS 6233</td>
<td>Graduate Internship and Comprehensive Exam</td>
<td>6</td>
<td>Fall, Spring, Summer</td>
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<td></td>
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<td>Fall, Spring, Summer</td>
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DE = Distance Education- course delivered online.

Course Descriptions and Registration information can be found on the website: [http://publichealth.gwu.edu/academics/](http://publichealth.gwu.edu/academics/).
Suggested Course Sequence

NOTE: PUBH 6080 (0 credits) must be taken prior to graduation

Fall Semester, 1st year (9 credits)

EXNS 6202 Advanced Exercise Physiology I (3)
PUBH 6002 Biostatistical Applications for Public Health (3)
EXNS 6207 Psychological Aspects of Sport and Exercise (3)

Spring Semester, 1st year (9 credits)

EXNS 6203 Advanced Exercise Physiology II (3)
EXNS 6223 Biomechanical Analysis (3)
EXNS 6221 Science and Theory of Resistance Training (3)

Fall Semester, 2nd year (8 credits)

PUBH 6619 Fundamentals of Nutrition Science (3)
EXNS 6222 Current Topics in Strength & Conditioning (2)
*ELECTIVE Approved by Program Director (3)
  Or
EXNS 6261 Thesis Seminar (3)

Spring Semester, 2nd year (10 credits)

EXNS 6208 Physical Activity: Physiology & Epidemiology (2)
EXNS 6220 Power Training Laboratory (2)
EXNS 6233 Graduate Internship (6)
  Or
EXNS 6998 Thesis Research (3)

(36 credits total)

*Students completing a thesis should register for their elective in Spring of the 2nd year.
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**List of Courses**
- EXNS 6202: Advanced Exercise Physiology I
- EXNS 6203: Advanced Exercise Physiology II
- EXNS 6207: Psychological Aspects of Sport and Exercise
- EXNS 6208: Physical Activity: Physiology and Epidemiology
- PUBH 6619: Fundamentals of Nutrition Science
- EXNS 6220: Power Training
- EXNS 6221: Science and Theory of Training
- EXNS 6222: Current Topics in Strength and Conditioning
- EXNS 6223: Biomechanical Analysis
- EXNS 6233: Internship