Program Director

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Mission Statement

The mission of the Master of Science (MS) degree in Clinical Exercise Physiology is to develop and train graduate students to understand the disease processes in selected chronic diseases and the proper use of exercise assessment, prescription and training for persons with these chronic diseases and other clinical populations.

Goals

The goals of this program in the Department of Exercise Science are to:

- Help students understand the metabolic and physiological aspects of selected disease processes, prevention, and rehabilitation
- Provide students with an in-depth understanding of exercise physiology, clinical exercise assessment, and exercise prescription for disease prevention and rehabilitation
- Provide students with the laboratory and clinical skills necessary for assessing, educating, and treating persons in preventive and rehabilitative exercise programs
- Help students apply principles of exercise testing and prescription in a way that will enhance the quality of life of individuals with chronic disease and/or other special medical considerations
- Facilitate students becoming certified as Clinical Exercise Specialist® with the American College of Sports Medicine

Course Requirements

All GW Department of Exercise Science Master Degree students who select the Clinical Exercise Physiology Program must successfully complete all requirements of the program. The required 36 credit total includes successful completion of the American College of Sports Medicine Clinical Exercise Specialist® certification examination. This certification examination is typically taken in the last semester of the program.
Competencies

Upon completion of the MS Clinical Exercise Physiology program, professionals will possess the following functional competencies:

- Skills necessary for the clinical assessment of individuals. Relevant Courses: EXSC 6202, EXSC 6203, EXSC 6209, EXSC 6210, EXSC 6211, EXSC 6212, EXSC 6213, EXSC 6214, EXSC 6215.
- Skills necessary for conducting exercise tests and other evaluations of individuals with special clinical needs. Relevant Courses: EXSC 6202, EXSC 6203, EXSC 6209, EXSC 6210, EXSC 6211, EXSC 6212, EXSC 6213, EXSC 6214, EXSC 6215.
- Skills for prescribing preventive and rehabilitative exercise for individuals with special medical needs. Relevant Courses: EXSC 6202, EXSC 6203, EXSC 6207, EXSC 6209, EXSC 6210, EXSC 6211, EXSC 6212, EXSC 6213, EXSC 6214, EXSC 6215.
- Administrative and professional skills for working with other health care team members in the clinical setting. Relevant Courses: EXSC 6206, EXSC 6208, EXSC 6209, EXSC 6210, EXSC 6213, EXSC 6214, EXSC 6215, EXSC 6216.
- Skills for managing clinical exercise and wellness programs. Relevant Courses: EXSC 6202, EXSC 6203, EXSC 6209, EXSC 6210, EXSC 6211, EXSC 6212, EXSC 6213, EXSC 6214.
- Develop the knowledge, skills, and abilities required to successfully complete the American College of Sports Medicine Clinical Exercise Specialist® certification examination. Relevant Courses: EXSC 6202, EXSC 6203, EXSC 6204, EXSC 6207, EXSC 6209, EXSC 6210, EXSC 6211, EXSC 6212.

Please see the curriculum sheets that follow.
**Prerequisites**
Undergraduate course in Exercise Physiology – must be completed before beginning coursework at GW

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<thead>
<tr>
<th>MSES Core Courses</th>
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<tbody>
<tr>
<td>EXSC 6202 Advanced Exercise Physiology 1</td>
<td>3</td>
<td>Fall</td>
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<tr>
<td>EXSC 6203 Advanced Exercise Physiology 2</td>
<td>3</td>
<td>Spring</td>
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<tr>
<td>EXSC 6204 Biostatistical Methods and Research Design</td>
<td>3</td>
<td>Fall</td>
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<tr>
<td>EXSC 6207 Psychological Aspects of Sport and Exercise</td>
<td>3</td>
<td>Fall</td>
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<tr>
<td>EXSC 6208 Physical Activity: Physiology &amp; Epidemiology</td>
<td>2</td>
<td>Spring</td>
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<tr>
<td>EXSC 6209 Advanced Concepts in Nutrition Science</td>
<td>3</td>
<td>Fall</td>
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<thead>
<tr>
<th>Program Specific Courses</th>
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<tbody>
<tr>
<td>EXSC 6210 Cardiac Rehabilitation</td>
<td>3</td>
<td>Fall</td>
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<tr>
<td>EXSC 6211 Clinical Exercise Testing, Exercise Prescription &amp; Electrocardiogram Fundamentals</td>
<td>3</td>
<td>Spring</td>
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<tr>
<td>EXSC 6212 Exercise in Selected Chronic Diseases</td>
<td>3</td>
<td>Spring</td>
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<tr>
<td>EXSC 6215 Clinical Exercise Physiology Rotations</td>
<td>3</td>
<td>Spring</td>
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<tr>
<td>EXSC 6216 Organization &amp; Management of Clinical Programs</td>
<td>1</td>
<td>Spring</td>
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<tr>
<th>Culminating Experience</th>
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<tr>
<td>EXSC 6213 Clinical Internship I</td>
<td>3</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>EXSC 6214 Clinical Internship II</td>
<td>3</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>Certification Exam Students must take and pass the American College of Sports Medicine Clinical Exercise Specialist® Certification Examination</td>
<td>0</td>
<td>Students may take at any time during final semester at a Pearson Vue Testing Center</td>
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**Course Descriptions and Registration** information can be found on the website: [http://publichealth.gwu.edu/academics/](http://publichealth.gwu.edu/academics/).
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. **Examination Requirement:** Pass the American College of Sports Medicine Clinical Exercise Specialist® certification examination.
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. **Transfer Credit Policy.** Up to 12 graduate credits that have not been applied to a previous graduate degree may be transferred to the MSES. Courses need to have been taken within the past three years from an accredited institution with a grade of B or better.

Prerequisite
Exercise Physiology – must be completed before beginning coursework at GW
Suggested Course Sequence

Fall Semester, 1st Year (9 credits)

EXSC 6202 Advanced Exercise Physiology I (3)
EXSC 6207 Psychological Aspects of Sport and Exercise (3)
EXSC 6210 Cardiac Rehabilitation (3)

Spring Semester, 1st Year (9 credits)

EXSC 6203 Advanced Exercise Physiology II (3)
EXSC 6211 Clinical Exercise Testing, Exercise Prescription & Electrocardiogram Fundamentals (3)
EXSC 6212 Exercise in Selected Chronic Diseases (3)

Fall Semester, 2nd Year (9 credits)

EXSC 6213 Clinical Internship I (3)
EXSC 6204 Biostatistical Methods and Research Design (3)
EXSC 6209 Advanced Concepts in Nutrition Science (3)

Spring Semester, 2nd Year (9 credits)

EXSC 6208 Physical Activity: Physiology & Epidemiology (2)
EXSC 6214 Clinical Internship II (3)
EXSC 6215 Clinical Exercise Physiology Rotations (3)
EXSC 6216 Organization & Management of Clinical Programs (1)

Prerequisite: Exercise Physiology

Updated May 2014