MASTER OF SCIENCE IN THE FIELD OF EXERCISE SCIENCE WITH A CONCENTRATION IN STRENGTH AND CONDITIONING

Program Director T.A. Miller

Mission Statement
The mission of the program is to provide formal graduate level academic instruction in the science and theory of resistance training, as well as to promote student production of research that directly relates to the neuromuscular adaptations involved with resistance training.

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 professional 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 childhood 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; and
- 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).

REQUIREMENTS

Course Requirements
All students who select the Strength and Conditioning Program enroll in both core courses (17 credits) and program-specific courses (19 credits). The 36 total credit requirement includes a culminating experience consisting of either successful completion of an oral research defense or the comprehensive exam.

Program Requirements

Prerequisites
Undergraduate exercise physiology - must be completed prior to beginning coursework at GW

Core courses:

EXNS 6202 Advanced Exercise Physiology I
EXNS 6203 Advanced Exercise Physiology II
EXNS 6204 Biostatistical Methods and Research Design
EXNS 6207 Psychological Aspects of Sport & Exercise
EXNS 6208 Physical Activity: Physiology and Epidemiology
EXNS 6209 Advanced Concepts in Nutrition Science

Program specific courses:

EXNS 6220 Power Training for Sports Performance
EXNS 6221 Science & Theory of Training
EXNS 6222 Current Topics in Strength and Conditioning
EXNS 6223 Biomechanical Analysis
Elective Approved by Program Director

Culminating experience:

One of the following options:

Option A
EXNS 6261 Thesis Seminar
EXNS 6998 Thesis Research

Option B
EXNS 6233 Graduate Internship

Comprehensive exam

Graduation requirements
1. Graduate credit requirement: 36 graduate credits
2. Course requirements: successful completion of core and program specific courses
3. Examination requirement: pass the American College of Sports Medicine Clinical Exercise Specialist® certification examination (clinical exercise physiology only)
4. Grade point requirement: 3.0 (B average) overall grade point average
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.