# **EXERCISE SCIENCE (MS)**

### **Master of Science**

This program is offered in an Online format.

# **Program Description**

The Master of Science in Exercise Science (MSES) prepares candidates for mid- and high-level positions in a variety of fitness, sports, and health care settings working with diverse populations. The MSES core curriculum provides students with a strong foundation in the areas of exercise physiology, sports nutrition, sports psychology, research methods, and program organization and administration. Based on this foundation, students develop expertise in Clinical Exercise Physiology. Through additional course work students will be qualified to sit for the American College of Sports Medicine's (ACSM) Clinical Exercise Physiologist (CEP) exam.

# **Admission Requirements**

- Completed Graduate Application for Admission (aurora.edu/auapply (http://www.aurora.edu/auapply/))
- · Official transcripts for all prior college and/or university credit
- Complete a baccalaureate degree from a regionally accredited institution of higher learning with a major in exercise science, kinesiology, or related area with a 3.0/4.0 GPA. Those without the appropriate major must complete the prerequisite courses as listed below.
- Prerequisite required courses: Anatomy and Physiology and Exercise Physiology
- Bridge courses are available for those not meeting the above prerequisite courses
- Submit a current TB screen/test (within past 12 months). Cost incurred by student.
- Complete a criminal background check through the university. Cost incurred by student.

#### **Program Prerequisites:**

- · Anatomy and Physiology
- Exercise Physiology

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### **Program Requirements - MSES**

The MSES degree requires 30 semester hours: 18 semester hours of required core courses plus the completion of either the sports performance or clinical exercise physiology specialization (12 semester hours).

#### **Program Prerequisites:**

- Anatomy and Physiology
- · Exercise Physiology

Code

Required Core Courses			
EXS-5010	Research Methods in Exercise and Sport	3	
EXS-5020	Nutrition for Sports Performance	3	

Total Credits		
EXS-5400	Exercise Physiology Graduate Internship	
EXS-5370	Advanced Clinical Exercise Physiology	
EXS-5360	Advanced Cardiovascular Physiology and ECG Interpretation	
EXS-5350	Advanced Exercise Assessment and Prescription	
Clinical Exercise Phys	siology	
EXS-5400	Exercise Physiology Graduate Internship	
EXS-5270	Applied Biomechanical Principles	
EXS-5260	Program Evaluation and Analysis	
EXS-5250	Advanced Methods of Strength and Conditioning	
Sports Performance S	Specialization	
Select one of the follo	owing specializations:	12
Specializations		
EXS-5110	Advanced Exercise Physiology Lab	3
EXS-5100	Advanced Exercise Physiology	3
EXS-5040	Management in Exercise and Sport	3
EXS-5030	Applied Sports and Exercise Psychology	3

# **Graduate Degree Requirements**

- 1. Completion of all coursework specified by the graduate program.
- 2. Cumulative GPA of at least 3.0 on a 4.0 scale, or higher if specified by the graduate program.
- Submission of all pre-graduation materials required by the graduate program.
- Acceptance of thesis or other required final project by the graduate program.
- 5. Submission of two copies of approved thesis or project in a specified form together with payment of binding fee where applicable.
- Submission of Application for Graduation and payment of any graduation fees assessed by the university.
- In the case of certification programs, submission of all governmental forms.
- 8. Residency Requirement: A minimum of 25% percent of the total credits required for the completion of the graduate degree or postbaccalaureate certificate or credential must be earned at Aurora University. Individual programs may establish more extensive residency requirements, including requirements that specific coursework be completed at Aurora University.

# **Learning Outcomes**

Candidates will:

**Credits** 

- Synthesize and critically analyze scientific literature in the field of exercise science and communicate clearly and concisely in both the written and oral forms
- Select and administer the appropriate health-related and sportspecific assessments to evaluate individuals across diverse populations and health conditions.
- 3. Create, implement and modify various programs and interventions to improve the overall health and wellbeing of various populations.
- Understand the role of various psychological variables (personality, motivation, stress) and their impact on exercise and sport performance.

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- 5. Evaluate the role of nutrition on the disease process, disease prevention, and exercise and sport performance.
- 6. Demonstrate effective management practices and professional behavior that aligns with ethical standards in the field of exercise science.