

# EXERCISE SCIENCE, M.S.

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## Program Description

The M.S. in Exercise Science prepares students for allied health careers in the clinical, commercial, corporate, community, university, and health care settings. Options include an emphasis on leadership roles and skills that permit one to work with individuals on a client/patient continuum extending from the elite athlete to those with chronic diseases, to the recreational athlete and those simply wishing to stay healthy by living sensibly. Popular career settings include cardiopulmonary rehabilitation, diabetes and obesity management programs, sport performance and wellness centers. Other health related fields include athletic training, pharmaceutical and medical sales as well as health coaching and health promotion. This program also prepares students to enter schools for physician assistants, physicians, physical therapy and occupational therapy. Graduates from the M.S. in Exercise Science are also prepared to pursue studies for an advanced degree in related doctoral programs.

The course of study for the M.S. in Exercise Science degree is a two-year program with a 36-hour requirement.

## Admission Requirements

Admission requirements are different for the degree programs. A personal interview may be required. Provisional admission to a program is possible, and will be considered on an individual basis. (See definition of Provisional Admission in this catalog) All students applying to the Exercise Science, M.S. program must have successfully completed an undergraduate course in either exercise physiology or human physiology. Applicants lacking these courses may be provisionally admitted and must complete required undergraduate courses within the first 12 hours of graduate coursework. Students are limited to twelve semester hours of transfer credit from other institutions, and limited to a maximum of nine semester hours taught at the 500 level.

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at [www.marshall.edu/graduate/admissions/how-to-apply-for-admission](http://www.marshall.edu/graduate/admissions/how-to-apply-for-admission) (<http://www.marshall.edu/graduate/admissions/how-to-apply-for-admission/>).

In addition (submit all materials directly to Graduate Admissions office):

- an undergraduate Grade Point Average (GPA) of 2.75 or higher on a 4.0 scale for all previously completed undergraduate university work;
- an appropriate undergraduate/graduate background that includes anatomy, physiology, and exercise physiology;
- Graduate Record Exam scores (no older than five (5) years) with at least a 285 combined score on verbal and quantitative reasoning on the GRE and an analytical writing GRE score of at least 3.0;
- three letters of reference.

Acceptance into the M.S. Exercise Science program is competitive and not guaranteed.

To continue in the M.S. in Exercise Science program, students are required to maintain a 3.0 GPA in all coursework.

## Plan of Study

Code	Title	Credit Hours
<b>Core</b>		
ESS 621	Adv Exercise Physiology I	3
ESS 601	Adv Exercise Testing	3
ESS 642	Devise Train & Cond Prog	3
ESS 670	Research Meth in Kinesiology	3
BSC 517	Biostatistics	3
<b>Area of Emphasis</b>		
Select one of the following:		21
Cardiometabolic Rehabilitation (p. 1)		
Exercise Physiology and Human Performance (p. 1)		
<b>Total Credit Hours</b>		<b>36</b>

## Areas of Emphasis

### Cardiometabolic Rehabilitation

Code	Title	Credit Hours
<b>Required Courses</b>		
ESS 578	Exercise Metabolism	3
ESS 623	Adv Ex Phys II (Neuromuscular and Environmental Adaptation)	3
ESS 660	Internship	6
ESS 682	Prev & Rehab Physiology (Clinical Perspectives)	3
ESS 683	Cardiovascular Assessment	3
<b>Electives</b>		
Select 6 hours from the following or other approved courses:		6
ESS 644	Cardio Exer Physiol	
ESS 645	Respir Exer Physiol	
<b>Total Credit Hours</b>		<b>24</b>

### Exercise Physiology and Human Performance

The Exercise Physiology and Human Performance track prepares a student to work in performance enhancement, fitness, and weight loss industries as an exercise professional who specializes in applying the integrated sciences of biochemistry, biomechanics, and physiology to the athletic and adult fitness populations.

Code	Title	Credit Hours
ESS 578	Exercise Metabolism	3
ESS 623	Adv Ex Phys II (Neuromuscular and Environmental Adaptation)	3
or ESS 542	Strength and Cond	
ESS 683	Cardiovascular Assessment	3
HS 566	Biomechanical Analysis	3
or HS 610	Adv Biomechanics	
ESS 660	Internship	6
or ESS 681	Thesis	

Advisor-approved elective	3
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<b>Total Credit Hours</b>	<b>21</b>
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- Cardiometabolic Rehabilitation, Area of Emphasis (<http://catalog.marshall.edu/graduate/programs-az/health-professions/exercise-science-ms/cardiometabolic-rehabilitation-area-emphasis/>)
- Exercise Physiology and Human Performance, Area of Emphasis (<http://catalog.marshall.edu/graduate/programs-az/health-professions/exercise-science-ms/exercise-physiology-human-performance-area-emphasis/>)