

# APPLIED EXERCISE PHYSIOLOGY & HUMAN PERFORMANCE (MS)

## Health and Human Enrichment

## Overview

The MS in Exercise Science and Sport Performance is offered to current students in the form of a **3+2 program**. For non-PSU students and PSU alumni, a **2-year program** is available. In each program, students can elect the **thesis** or **non-thesis** option.

The thesis option will give students the opportunity to develop a research project driven by their own interests in exercise and sport physiology. Thesis students will work closely with a faculty supervisor and will be guided through the thesis process through work in the Graduate Seminar and Graduate Thesis classes.

Students who elect the non-thesis option will complete practicum and internship experiences, which will give them the hands on skills they will need to be successful across a variety of fields in exercise science. Experiences may include work in strength and conditioning, clinical exercise physiology, or general health and wellness. Non-thesis students will work closely with a faculty supervisor and will be guided through the practicum and internship process through work in the Graduate Seminar, Advanced Practicum, and Graduate Internship classes.

## Admission Requirements

### Requirements

The Exercise Science and Sport Performance degree requires the following materials to be submitted through our online application (<https://www.plymouth.edu/apply-to-psu/>)

- Recommended 3.0 or better GPA in undergraduate coursework
- Official transcripts from any/all college level work
- Three professional recommendations
- Current Resume
- Statement of Interest
- NH Residency Verification form (NH residents only)

### Deadlines

Admission to the Exercise Science and Sport Performance degree is only available for the fall semester each year.

### Fall 2025 and Fall 2026

Early Decision: June 1

Final Deadline: August 1

*\*We suggest submitting your documentation at least two weeks prior to the posted date to ensure your application is complete and can be reviewed by the deadline.*

## Degree Requirements MS Exercise Science and Sport Performance

Course	Title	Credits
EX 5310	Research Methods in Exercise Science	3
EX 5410	Applied Research in Exercise Science	4
EX 5520	Advanced Exercise Testing & ECG	4
EX 5510	Graduate Seminar in Exercise Science	1
EX 5610	Advanced Strength and Conditioning	4
EX 5620	Behavioral Intervention Strategies	4
EX 5730	Advanced Topics in Exercise Physiology	4
EX 5710	Advanced Practicum in Exercise Science	3
EX 5840	Exercise Biochemistry & Sports Nutrition	4
EX 5920	Exercise Physiology in Clinical Populations	4
<b>Thesis or Non-thesis Track</b>		<b>6-12</b>
EX 6200	Graduate Thesis in Exercise Science	
or EX 6100	Graduate Internship in Exercise Science	

**Total Credits** **41-47**

## Learning Outcomes

- Critically interpret current literature in exercise physiology.
- Explain the acute and chronic effects of resistance and aerobic exercise on metabolism and the cardiovascular, pulmonary, and neuromuscular systems.
- Demonstrate competency of the pathophysiology of various chronic diseases and explain the preventative and therapeutic effects of exercise.
- Design, manage, implement assessment and exercise prescriptions for athletic, healthy, and special populations through evidence-based practice.
- Create interventions to modify health behaviors utilizing theoretical frameworks.
- Explain biochemical components of exercise to help better assist exercise prescription and nutritional strategies for both athletes and recreationally active adults.
- Synthesize and disseminate scientific findings from thesis and practicum experiences.
- Apply theoretical knowledge acquired in the classroom to practical experiences in clinical and/or applied settings.

## Career Pathways

The MS in Applied Exercise Physiology & Human Performance will prepare you to work in strength and conditioning, clinical, and community-based settings. The degree will also prepare you for future doctoral study in exercise physiology and related fields.

Career paths include:

- Strength & Conditioning Coach
- Clinical Exercise Physiologist
- Exercise Specialist
- Fitness Director
- Cardiopulmonary Rehabilitation Specialist
- Researcher

Graduates of the MS in Applied Exercise Physiology program will be qualified to challenge the following certification exams:

- ACSM's Certified Exercise Physiologist (ACSP-EP)
- ACSM's Clinical Exercise Physiologist (ACSM-CEP)
- NSCA's Certified Strength & Conditioning Specialist (CSCS)
- NSCA's Certified Performance and Sport Scientist (CPSS)