

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
Thesis or Non-thesis Track		6-12
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)