

# EXERCISE PHYSIOLOGY - MASTER OF SCIENCE

(Code 997-801)

The Master of Science in Exercise Physiology is designed to provide foundational coursework and clinical experiences to prepare students for work in preventative health programs, medically-based fitness programs, cardiac rehabilitation and rehabilitation programs for individuals with disabilities. Additionally, this program will prepare students for positions in clinical, university, or industry-based research laboratories or as a preparatory option for application to advanced professional degree programs.

## Admission Requirements (traditional 2-year plan):

At the time of admission to the Master of Science in exercise physiology program, a student must have:

- **A Bachelor of Science or Bachelor of Arts degree** from an accredited institution.
- **A cumulative 3.00 GPA** in their undergraduate major.
- The following courses must be completed with a letter grade of C or better earned and documented on official transcripts prior to matriculating into the program:
  - general chemistry
  - anatomy and physiology (2 semesters)
  - exercise physiology
  - statistics
  - general physics
  - biomechanics
  - exercise prescription/programming and exercise physiology laboratory procedures are additional courses which are preferred but not required
- **International students** will need to achieve a total TOEFL score of 76 or a Duolingo score of 115 or a IELTS of 6.0

Screening for these requirements will be completed via undergraduate transcript review during time of application. No GRE will be required for admission to the program.

The program requirements are comprised of 36 credits, of which 30-33 credits are required within the program and 3-6 credits are chosen as electives. The range of required and elective credits within this graduate program is dependent upon the final capstone experience chosen by the student.

Code	Title	Credits
<b>Major Course Requirements</b>		<b>30-33</b>
KINS 546	Academic Apprenticeship in Kinesiology	1-3
KINS 664	Clinical Exercise Physiology	3
KINS 708	Advanced Exercise Physiology	3
KINS 709	Advanced Exercise Physiology Laboratory Procedures	4
KINS 784	Clinical Practicum in Exercise Physiology I	2
KINS 785	Clinical Practicum in Exercise Physiology II	3
KINS 786	Clinical Practicum in Exercise Physiology III	1

KINS 790	Exercise Physiology Graduate Seminar	3
KINS 791	Evidence Based Practice & Research I	3
KINS 792	Evidence Based Practice & Research II	2
<b>Choose one of the following:</b>		<b>3-6</b>
KINS 797	Independent Study	
KINS 799	Thesis in Exercise Physiology	
KINS 777	Exercise Physiology Internship	
<b>Electives:</b>		<b>3-6</b>
KINS 512	Psychology of Sport and Physical Activity	
KINS 557	Essentials of Strength and Conditioning	
KINS 591	Special Topics	
KINS 645	Basic Electrocardiography	
KINS 650	Applied Nutrition in Kinesiology	
PH 541	Rural Public Health	
PH 710	Foundations and Applications of Public Health	
PH 715	Environmental and Occupational Health	
PH 720	Biostatistics for Population Health	
PH 725	Principles of Epidemiology	
PH 730	Public Health Policy and Advocacy	
PH 735	Public Health Program Planning	
PH 740	Public Health Administration	
PH 745	Program Evaluation and Research Methodologies	
<b>Total Credits</b>		<b>36</b>

## Program Learning Outcomes

Students completing this program will be expected to meet the following learning outcomes:

- Contribute to the development of knowledge about exercise physiology by conducting independent research.
- Demonstrate a scientific, evidence-based foundation of knowledge regarding chronic disease, chronic conditions, and various disabilities (i.e. WHO/ADA definition of disability) as they occur across the lifespan and as they relate to desired outcomes of health, functional capacity, independence, and quality of life.
- Utilize laboratory- and field-based assessment competencies and data interpretation skills to address the consequences of poor overall health, physical function, cardiometabolic health, and fitness and how this information can be utilized to build the prescription for achieving desired health outcomes.
- Use theoretical and practical knowledge to design therapeutic exercise programs; utilizing assessment data to enhance health, fitness, function, and quality of life of individuals from clinical populations.
- Understand the significant role social determinants of health play in the current state of health, disease, and disability in the U.S. and identify solutions to address issues of health equity/disparity in their future profession.

The Master of Science in Exercise Physiology (MSEP) Accelerated Plan allows qualified students to start taking courses in the approved master's degree while finishing their bachelor's degree in Rehabilitation Science or Exercise Science. Course sequencing allows undergraduate students to complete their fourth year of the Rehabilitation Science or Exercise Science major while completing the first-year coursework in the MSEP. This pathway for the Master of Science degree in Exercise Physiology is a total of five years upon matriculation to UW-Eau Claire.

A student interested in the MSEP Accelerated plan should consult with academic advisors and the Program Director of MSEP and declare Pre-Exercise Physiology as their course sequencing. A student will major in Rehabilitation Science or Exercise Science in the Department of Kinesiology and earn credits toward their Bachelor of Science degree. Accelerated coursework will be confirmed upon admission to the MSEP degree program and completion of the first term in the MSEP program. Upon successful completion of the fifth year in the MSEP program, a student would graduate with a Master of Science in Exercise Physiology degree.

#### Admission Requirements (4+1 Accelerated Plan):

At the time of admission to the Master of Science in exercise physiology program accelerated plan, a student must have:

- **Earned a minimum of 95 credits at the end of the 3<sup>rd</sup> year** in their undergraduate Rehabilitation Science or Exercise Science program (or obtained a consent of the Program Director).
- **A minimum cumulative GPA of 3.00 after the 3<sup>rd</sup> year** in their Rehabilitation Science or Exercise Science program.
- **Successful completion of prerequisite courses for MSEP (see Overview).**

The following MSEP courses will fulfill degree requirements for both the Rehabilitation Science or Exercise Science Major and the MSEP Program (18 credits during your fourth year):

KINS 664A	Clinical Exercise Physiology	3
KINS 708A	Advanced Exercise Physiology	3
KINS 709A	Advanced Exercise Physiology Laboratory Procedures	4
KINS 784A	Clinical Practicum in Exercise Physiology I	2
KINS 785A	Clinical Practicum in Exercise Physiology II	3
KINS 791A	Evidence Based Practice & Research I	3