

Exercise Physiology

Master of Science in Exercise Physiology

The Master of Science in Exercise Physiology is acknowledged as a STEM program according to the Carnegie classification. Exercise physiology is the scientific study of acute physiological responses and chronic adaptations to a wide range of exercise conditions. The Master of Science in Exercise Physiology at UAB provides a strong academic foundation for individuals interested in careers in science, medicine, physical therapy, cardiac rehabilitation, diabetes and weight management, lifestyle behavior changes, sports physiology, coaching, and other health- and fitness-related professions. The curriculum is multidisciplinary and can comprise of courses in the Schools of Education and Human Sciences, Medicine, Health Related Professions, and Public Health.

Thesis Option

The thesis option consists of 33 credit hours. This path is for those seeking to further their academic research skills in preparation for doctoral study or a career in research. Students who choose this path are required to take 6 credit hours of thesis research. The thesis option will require successful completion of the thesis defense. The thesis option requires students to follow a specific timeline; this is essential to completing their degree on time. Failure to comply with the timeline will result in delays. The thesis timeline can be located on the [Graduate School's website](#).

Non-Thesis Option

The non-thesis option consists of 36 credit hours and the successful completion of a comprehensive exam. This path is designed to give students a foundation in Kinesiology, while also focusing on content relevant to their areas of interest. This option allows students to choose more electives that align with their interests while taking a comprehensive exam at the end of the program.

The Non-thesis option will require successful completion of a comprehensive exam. Comprehensive exam dates and timelines can be found on the [Exercise Physiology Website](#). Students will register the semester before the semester they complete their comprehensive exam, which is during their final semester (if completing the program within 3 semesters) or the semester before their last semester (if completing the program in more than 3 semesters). The exam will be completed on a Friday during the semester they registered for and no collaboration nor outside help is allowed during the 4-hour exam. Failure to independently complete the comprehensive exam will result in an automatic no-pass score and the student will be required to retake the exam the following semester. They must complete the comprehensive exam before they will be allowed to graduate.

Admissions Requirements

Applicants must meet the following requirements for admission to the Master of Science in Exercise Physiology:

- Completed undergraduate degree (any major) from a regionally accredited institution
- Pre-requisite courses required before acceptance (grade of C or better)
 - Biology, Chemistry, Human Anatomy, and Human Physiology
- An official copy of all transcripts

- GPA of at least 2.75 on a 4.0 scale
- Resume/CV
- Statement of purpose
- Three Letters of recommendation
- GRE is not required

Deadlines for all Applicants:

- **Fall:** August 1
- **Spring:** December 1
- **Summer:** May 1

For more information: please contact Dr. Gordon Fisher (Graduate Program Director; grndfs@uab.edu (grndfs@uab.edu)).

Exercise Physiology

The Exercise Physiology master's degree option is for students interested in either clinical exercise physiology or exercise physiology research. The curriculum is multidisciplinary and can comprise of courses in the Schools of Education and Human Sciences, Medicine, Health Related Professions, and Public Health. Two program plans are offered (detailed below). Plan I culminates with a thesis research project, and Plan II culminates with a written comprehensive exam. Resources for student participation in research include an Exercise & Nutritional Physiology Laboratory, Human Performance Laboratory, and the Resistance Exercise Physiology (REP) Laboratory. A wide array of field experiences are also available at UAB, local agencies, and clinics. In addition to Graduate School admission requirements, prospective students must have completed undergraduate coursework in Biology, Chemistry, Human Physiology, and Anatomy. Listed below are the courses required in the program and a sample of elective courses.

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Admission Requirement and Prerequisites

In addition to the general admission requirements of the Graduate School, potential applicants must have passed an undergraduate or graduate level Biology, Chemistry, Anatomy, and Physiology courses. A minimum undergraduate GPA of 2.75 is required.

Plan I

Requirements	Hours	
KIN 637	Physiology of Exercise I	3
KIN 638	Physiology of Exercise II	3
EPR 608	Introduction to Statistical Methods in Educational Research	3
EPR 609	Statistical Methods and Research in Education: Intermediate	3
EPR 594	Introduction to Educational Research Design	3
KIN 642	Practicum in Physiology	3
Program Electives¹		9
Choose three of the following:		
KIN 585	Advanced Exercise Testing and Prescription	
KIN 639	Exercise Prescription for High Risk Populations	
KIN 640	Advanced Techniques in Conditioning the Athlete	
KIN 641	Advanced Planning/Management of Fitness Facilities	
KIN 645	Advanced Motor Development	
KIN 656	Advanced Sport Psychology	
KIN 672	Advanced Treatment of Athletic Injuries	

KIN 674	Advanced Sports Nutrition	
KIN 694	Special Projects in Kinesiology	
Research/Thesis		6
KIN 699	Thesis Research	
Total Hours		33

¹ Potential courses that may be used for the Electives in the Exercise Physiology Master's Degree Program:
 CHHS 602, CHHS 621, CHHS 631, BY 511, GER 540, BY 611, BY 616, BHS 550, BHS 555, CH 560, EPR 607, EPR 608, KIN 585, KIN 639, KIN 640, KIN 641, KIN 645, KIN 653, KIN 656, KIN 672, KIN 674, KIN 694, KIN 695, KIN 697, NTR 521, NTR 601, NTR 609, NTR 779, NTR 618, NTR 625, NTR 750, RHB 780, RHB 781.
 Other graduate-level courses may be used with the consent of your Advisor.

Plan II

Requirements	Hours	
KIN 637	Physiology of Exercise I	3
KIN 638	Physiology of Exercise II	3
EPR 608	Introduction to Statistical Methods in Educational Research	3
EPR 609	Statistical Methods and Research in Education: Intermediate	3
EPR 594	Introduction to Educational Research Design	3
Program Electives¹		21
KIN 585	Advanced Exercise Testing and Prescription	
KIN 639	Exercise Prescription for High Risk Populations	
KIN 640	Advanced Techniques in Conditioning the Athlete	
KIN 641	Advanced Planning/Management of Fitness Facilities	
KIN 645	Advanced Motor Development	
KIN 656	Advanced Sport Psychology	
KIN 672	Advanced Treatment of Athletic Injuries	
KIN 674	Advanced Sports Nutrition	
KIN 694	Special Projects in Kinesiology	
Total Hours		36

¹ Potential courses that may be used for the Electives in the Exercise Physiology Master's Degree Program:
 CHHS 602, CHHS 621, CHHS 631, BY 511, GER 540, BY 611, BY 616, BHS 550, BHS 555, CH 560, EPR 607, EPR 608, KIN 585, KIN 639, KIN 640, KIN 641, KIN 645, KIN 653, KIN 656, KIN 672, KIN 674, KIN 694, KIN 695, KIN 697, NTR 521, NTR 601, NTR 609, NTR 779, NTR 618, NTR 625, NTR 750, RHB 780, RHB 781.
 Other graduate-level courses may be used with the consent of your Advisor.