PhD in Exercise Physiology

Degree Requirements

Students previous coursework must include biology, chemistry, anatomy, physiology and exercise physiology to be considered. It is also advantageous to have organic chemistry, biochemistry and some nutrition.

The PhD program in Exercise Physiology requires 85 hours beyond the bachelor's degree. A committee of 4 faculty members must approve all graduate courses, including those from other universities. The graduate course work includes 15 hours in exercise physiology, plus coursework in physiology, nutrition and biochemistry. Research requirements include NEP 7500 (9 hours of research projects) and NEP 9090 (12 hours dissertation). One semester of teaching experience is highly recommended, as is participation on an external grant proposal and co-authoring two manuscripts. NEP 8850 Advanced Exercise Physiology is used as your competency course a grade of B or better is required. If the student has a similar course in their transfer courses from a masters, then another course will be used - this must be approved by the graduate director and committee.

Note:  Masters courses may be transferred from other institutions (30 hours maximum), and may count toward the doctoral program at the discretion of the student’s committee (3 members in dept., 1 member outside).

Exercise Science (Major Field)

NEP 7001  Topics in Nutritional Science and Exercise Physiology (Exercise Endocrinology)  3
NEP 7500  Research in Nutritional Sciences and Exercise Physiology (3 projects)  9
NEP 8001  Topics in Nutritional Sciences and Exercise Physiology  3
NEP 8850  Advanced Exercise Physiology  3
NEP 9090  Doctorate Research in Nutritional Sciences and Exercise Physiology  12 (max)

Physiology Area (1st support area - minimum 9hrs credit)

MPP 9430  Cardiovascular Physiology  3
MPP 9434  Microvascular Circulatory Function  4
NEP 8870  Exercise Metabolism  3
V_BSCI 8420  Veterinary Physiology  5
V_BSCI 9435  Molecular Exercise Biology  3

Nutrition (2nd support area - minimum of 9 hrs credit)

BIOCHM 7270  Biochemistry  3
BIOCHM 7272  Biochemistry  3
NEP 7001  Topics in Nutritional Science and Exercise Physiology (Etiology of Obesity)  3
NEP 7340  Human Nutrition II Lecture  3
NEP 7970  PANHP Capstone: Sports Nutrition  2
NEP 8085  Problems in Nutritional Sciences and Exercise Physiology  3-5
NEP 8310  Nutritional Biochemistry of Lipids  3
NEP 8340  Nutrition in Human Health  3

Research and Statistics (minimum of 9 hrs. credit)

ESC_PS 8850  Quantitative Foundations in Educational Research  3

Electives (these are suggestions, others may be acceptable upon discussion with your committee)

AN_SCI 8420  Endocrinology  3
AN_SCI 9442  Vitamins and Minerals  4
V_BSCI 8410  Seminar in Veterinary Biomedical Science (Neural Control)  3
STAT 7560  Applied Multivariate Data Analysis  3
NEP 7001  Topics in Nutritional Science and Exercise Physiology (Preventative and Therapeutic Exercise Physiology)  3
MPP 9426  Transmembrane Signaling  4

* Required Course

Sample Plan of Study

Because students in the PhD program are from a wide variety of disciplines, and pursue the PhD at different paces, a sample plan of study is not easily produced. Students are encouraged to work out their plan of study with their advisor.

Qualifying Process

NEP 8850 Advanced Exercise Physiology is used as your competency course and the student must pass with the grade of B or better. If the student comes in with a master’s course similar to NEP 8850, then another course can be used as the competency course and will be approved by the committee and graduate director (e.g. NEP 8870 Exercise Metabolism).

Comprehensive Examination Process

Candidacy for a doctoral degree is established by passing the comprehensive examination. The comprehensive examination includes written and oral sections and is completed as the candidate is completing the prescribed coursework.

Dissertation Requirements

The dissertation must be written on a subject approved by the candidates doctoral program committee, must embody the results of original and significant investigation and must be the candidates own work. All dissertation defenses shall be open to the general faculty. For the dissertation to be successfully defended, the student’s doctoral committee must vote to pass the student on the defense with no more than one dissenting or abstaining vote.

Admissions

Deadline for Fall entrance: Dec 30

Minimum TOEFL Scores

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<th>Paper-based test (PBT)</th>
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Minimum GRE Scores

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Applicants are required to meet two sets of minimum qualifications for admission: the requirements of the PhD in Exercise Physiology (http://nep.missouri.edu/grad_admission.html) and the minimum requirements of the Graduate School (http://gradschool.missouri.edu/admissions/eligibility-process/minimum-requirements.php). Before official admission to the University of Missouri, your application materials will be reviewed by both the Graduate School and the degree program to which you applied.

**Exercise and Physiology Program Applicants** must have a 3.00 undergraduate GPA, a 3.5 graduate GPA and meet the minimum GRE scores to be admitted (GRE scores must be within the last 5 years). TOEFL scores are required from international applicants. Specific information can be found on the department website: http://ns.missouri.edu/grad_admission.html

At this time, the program does not accept students into the doctoral program without a master's degree. A student without a master's degree who would like to pursue a doctoral degree must apply to the master’s graduate program. Once accepted into the master's program it is possible to apply and transfer to the doctoral program after the first year of graduate study. Specified criteria must be met for the transfer to be approved by the Nutritional Sciences Graduate Admissions Committee. Please contact the department for more information on this subject.

**Deadline for Applications is December 30th.** While applications received after that date will still be considered, they will not be eligible for all fellowships.

Complete instructions for applying to the program can be found on the programs website: http://ns.missouri.edu/graduate_apply.html