

# PhD in Nutrition and Exercise Physiology with Emphasis 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 75 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 coursework in exercise physiology, 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).

### Required Core Courses

NEP 7340	Human Nutrition II Lecture	3
NEP 8220	Cardiovascular Disease and Exercise	3
NEP 8501	Hot Topics in Nutrition, Exercise and Disease (minimum of 3 hrs.)	1
NEP 8850	Advanced Exercise Physiology	3
NEP 8860	Exercise Endocrinology	3
NEP 8870	Exercise Metabolism	3
NEP 9087	Doctorate Seminar in Nutritional Sciences and Exercise Physiology (minimum of 4 hrs.)	1
NEP 9090	Doctorate Research in Nutritional Sciences and Exercise Physiology	12
BIOCHM 7270 & BIOCHM 7272 or BIOCHM 8240	Biochemistry and Biochemistry Introduction to Graduate Biochemistry I	6
Research Ethics (select 1-2 hrs.)		1-2
BIOCHM 8060	Ethical Conduct of Research	1
BIO_SC 8060	Ethical Conduct of Research	1
MPP 8415	Responsible Conduct of Research thru Engagement, Enactment and Empowerment NIH and other Federal Age	2
V_PBIO 8641	Introduction to Research Ethics	1
Statistics (pick two courses)		

ESC_PS 7170	Introduction to Applied Statistics	3
ESC_PS 8850	Quantitative Foundations in Educational Research	3
ESC_PS 9650	Application of Multivariate Analysis in Educational Research	3
STAT 7070	Statistical Methods for Research	3
STAT 7510	Applied Statistical Models I	3
STAT 7520	Applied Statistical Models II	3
STAT 7540	Experimental Design	3
Research Methods and Techniques (minimum of 2 hrs.)		
NEP 7500	Research in Nutritional Sciences and Exercise Physiology	1-99

### Suggested Electives

NEP 7970	PANHP Capstone: Sports Nutrition	3
NEP 8030	Etiology of Obesity	3
NEP 8125	Preventive and Therapeutic Exercise Physiology	3
NEP 8127	Advanced Physiological Assessment and Exercise Prescription	3
NEP 8310	Nutritional Biochemistry of Lipids	3
NEP 8340	Nutrition in Human Health	3
V_BSCI 9435	Molecular Exercise Biology	3
NEP 8085	Problems in Nutritional Sciences and Exercise Physiology (independent study, can take more than one)	1-99
BIOCHM 8260	Macromolecular Systems Integration	4
MPP 7422	Medical Physiology	4
MPP 9426	Transmembrane Signaling	4
MPP 9434	Microvascular Physiology	4
BIOCHM 9432	Molecular Biology II	4

## 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

Internet-based test (iBT)	Paper-based test (PBT)
100	600

### GRE Scores - this department no longer requires the GRE

**Exercise and Physiology Program Applicants** must have a 3.00 undergraduate GPA and a 3.5 graduate GPA. TOEFL scores are required from international applicants. Specific information can be found on the department website: NEP graduate program (<https://cafnr.missouri.edu/academics/degrees-programs/nutrition-and-exercise-physiology-graduate-studies/>).

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: NEP graduate program (<https://cafnr.missouri.edu/academics/degrees-programs/nutrition-and-exercise-physiology-graduate-studies/>).