

See: <http://www.hsc.wvu.edu/som/ep/>

'Bachelor of Science (Exercise Physiology or Honors Exercise Physiology) Emphasis areas in Aquatic Therapy and Health Professions are available

Masters of Science (Exercise Physiology) Clinical or Thesis track

Ph.D. in Exercise Physiology

The bachelor of science program (BS) in exercise physiology is a preparatory program for graduate or professional school. Graduates continue their education in areas such as exercise physiology, physical therapy, or medicine. The program is designed to provide a background in basic science and exercise physiology, and includes courses in nutrition, athletic training, first aid and emergency care, and business. Students will also complete a 200 hr. clinical internship in their senior year. Students may choose to do an emphasis in health professions which provides coursework necessary for admittance to medical professional programs such as medical school, dentistry, pharmacy, physician's assistant, chiropractic, etc. We have an Honors program in Exercise Physiology, and offer emphasis areas in Health Professions and in Aquatic Therapy in Exercise Physiology.

The Masters of Science clinical track in Exercise Physiology (MS) provides coursework and clinical experience that prepares students for careers in adult fitness, hospital or corporate-based wellness programs, or cardiac rehabilitation. Some students move into additional training in Medicine, Physical Therapy or Occupational Therapy. Students specialize by completing a 200-hour clinical internship. At the completion of this two-year program, students are eligible for sitting for the ACSM Registered Clinical Exercise Physiologist certification.

The Masters of Science thesis track in Exercise Physiology (MS) is intended to give exceptional students knowledge in basic medical and scientific areas to prepare them for entry into advanced research intensive or professional careers (e.g., Ph.D., MD/Ph.D.; PT, OT, dentistry, pharmacy, etc) or further research training (e.g., in a Ph.D. program). Students in the thesis track will typically take 2 academic years to complete the course work and research thesis. Graduate work involves a program of study and research individually designed to utilize the abilities and strengths of the faculty and accommodate the needs of the student within an area of specific interest. Although there are common goals, expectations, and courses that will be universal for all masters' graduate students, the exact content of a program of study may differ from one student to another

The Doctor of Philosophy degree (Ph.D.) in Exercise Physiology is offered through the School of Medicine through the university's graduate program. The Ph.D. program in Exercise Physiology is intended to give exceptional students knowledge in basic medical and scientific areas to prepare them for careers as effective and knowledgeable researchers and teachers in the broad field of Exercise Physiology/Kinesiology. In the Division of Exercise Physiology these goals are achieved by several means. Formal coursework in the sub-disciplines of Exercise Physiology, Physiology, Biochemistry, Molecular Biology, Pharmacology, and Neuroscience provides the student with the opportunity to develop a solid foundation in basic subject matter of medical sciences that can be applied to aspects of exercise and disease. The student's knowledge base will be further strengthened by participation in elective courses offered within the Division, selected courses offered by other departments within the School of Medicine and by departments in other colleges

of West Virginia University. The faculty in the Division of Exercise Physiology views the Ph.D. primarily as a research degree. Research training and experience are provided under the guidance and supervision of the graduate faculty. The aim of this effort is to promote attitudes, habits, skills, and abilities that will enable the student to grow and develop as an independent scientist. In our Division, the graduate program is designed to foster the student's ability for independent thought and research. For the first year, all graduate students enrolled in the school of medicine will participate in the "undifferentiated curriculum" which provides a strong background in basic cellular function and whole organism dynamics. At the end of the first year of enrollment, graduate students choose their department/division or program in which they will conduct their dissertation and specialize. Students who choose to specialize in Exercise Physiology will enter our graduate program at the end of the first year by choosing an advisor from our faculty. The students will work with that advisor and learn techniques, collect pilot data, etc. leading towards the dissertation research. Graduate work involves a program of study and research individually designed to utilize the abilities and strengths of the faculty and accommodate the needs of the student within an area of specific interest. The exact content of a program of study for a particular student usually will differ from another student. Advanced courses provide a comprehensive exploration of topics in exercise physiology utilizing systems biology, and molecular biology tools to understand and interpret data. Through the choice of advanced courses and electives, each student, with the help of their advisor, designs a program to suit individual research needs and career objectives. Faculty research interests currently include, aging, skeletal muscle hypertrophy, sarcopenia, apoptosis, obesity, diabetes, vascular biology, cardiovascular diseases, ischemia reperfusion injuries. The faculty use modern cell molecular and transgenic approaches and models for their studies. The Ph.D. program in Exercise Physiology was ranked 7th Nationally in 2007 by the Chronicle of Higher Education Top Research Universities Faculty Scholarship Productivity Index.

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