

The Exercise Science Graduate Program

Thank you for your interest in the Exercise Science program at University of Tennessee. We are part of the Department of Exercise, Sport, and Leisure Studies in the College of Education, Health and Human Sciences on the flagship campus at Knoxville. UT Knoxville is Tennessee's oldest and largest public university, a land-grant institution that holds the Carnegie Foundation doctoral/research-extensive classification.

Focus of the Program

The Exercise Science program is dedicated to promoting and integrating scientific research and education on the health benefits of exercise. Through a program of interdisciplinary graduate study, using both experimental and epidemiological methods, students gain a greater understanding of the role of exercise in the prevention of various cardiovascular, metabolic, and musculoskeletal disorders. In addition to primary faculty members, adjunct faculty members provide expertise in the areas of sports medicine, cardiac rehabilitation, epidemiology, orthopedics and exercise psychology.

❖ Exercise Physiology

The Exercise Physiology specialty involves the study of the acute and chronic effects of exercise on the human body. Students may elect to do internships in cardiac rehabilitation at several area hospitals, and are encouraged to take the ACSM Exercise Specialist® exam upon graduation. The Ph.D. program requires course work in the life sciences, physiological chemistry, statistics and advanced topics in exercise physiology. Graduate students collaborate with an exercise physiology faculty member to perform research in the areas of physical activity assessment, metabolism, the health benefits of exercise, and body composition assessment.

❖ Biomechanics/Sports Medicine

The Biomechanics/Sports Medicine specialty involves the study of the biomechanics of exercise and rehabilitation. This program area focuses on the mechanism, prevention, and rehabilitation of musculoskeletal injuries. The Ph.D. Program requires course work in engineering mechanics, numerical analysis, statistics, and advanced topics in biomechanics. Graduate students work with biomechanics/sports medicine faculty to pursue research in the areas of biomechanics of lower extremity function, footwear biomechanics, and the biomechanics of injury mechanisms and prevention, and post-surgical recovery of function.

Degrees Offered

- **Master of Science** in Exercise Science with a concentration in **Exercise Physiology** (with two possible tracks: **Adult Fitness/Cardiac Rehabilitation** and **Applied Physiology Research**)
- **Master of Science** in Exercise Science with a concentration in **Biomechanics/Sports Medicine**
- **PhD** in Exercise & Sport Sciences with a concentration in Exercise Science and a specialization in **Exercise Physiology**
- **PhD** in Exercise & Sport Sciences with a concentration in Exercise Science and a specialization in **Biomechanics/Sports Medicine**
- **PhD** in Exercise & Sport Sciences with a concentration in Exercise Science and a specialization in **Physical Activity & Population Health**

Exercise Science Faculty

David R. Bassett, Jr. (Ph.D. Wisconsin) teaches courses in exercise physiology, fitness testing/exercise prescription, electrocardiogram interpretation, and cardiac rehabilitation. He is a fellow of the American College of Sport Medicine (ACSM), and holds an Exercise Specialist certification from that organization. Dr. Bassett has been a member of the Southeast ACSM executive board, and an associate editor of *Medicine and Science in Sports and Exercise*. His research interests include physical activity assessment, maximum oxygen uptake, exercise training and blood pressure regulation.

Dawn P. Coe (Ph.D., Michigan State) teaches undergraduate and graduate courses in exercise science including Exercise Testing and Prescription. Her research focuses primarily on pediatric exercise physiology, the genetic influence on physical fitness and cardiovascular disease risk in youth, the growth and maturation process, and physical activity epidemiology. Dr. Coe is actively involved with the American College of Sports Medicine and the North American Society for Pediatric Exercise Medicine (NASPEM) and she is currently serving on the Midwest Chapter of ACSM and NASPEM executive boards.

Eugene C. Fitzhugh (Ph.D., Alabama) teaches undergraduate and graduate courses in physical activity epidemiology and research methodologies. His research has resulted in numerous publications in various public health, nutrition, and health promotion journals. He has served as editor for the *American Journal of Health Studies*, and currently reviews papers for several other journals. His primary area of research revolves around the relationship of physical activity to obesity and other chronic diseases across the lifespan.

Clare E. Milner (Ph.D., Leeds, Great Britain) teaches graduate and undergraduate courses in the kinesiology curriculum. She focuses her research efforts on the biomechanics of lower extremity injury and rehabilitation, in particular the occurrence of stress fractures in runners and the quality of walking gait following joint replacement surgery. Dr. Milner has presented her work at national & international conferences and has had research articles published in biomechanics and biomedical journals. She is also a reviewer for several biomechanics journals.

Dixie L. Thompson (Ph.D., Virginia) teaches graduate and undergraduate courses in the exercise physiology curriculum. She is a ACSM (American College of Sports Medicine) Fellow, has served on ACSM national and regional committees, and is Associate Editor-in-Chief of *ACSM's Health and Fitness Journal*. Dr. Thompson focuses her research efforts on health benefits of exercise for women, the response of females to exercise, and body composition analysis. She serves as the Director of the Center for Physical Activity and Health here at UT.

Songning Zhang (Ph.D., Oregon) teaches undergraduate and graduate courses in the areas of biomechanics. His publications include works appearing in medical and biomedical journals, and in proceedings of national and international biomechanics conferences. His research interests focus on biomechanics of the lower extremity function and impact loading, footwear related issues, orthoses functions, injury mechanisms and prevention, mechanisms of human performance, and performance variability.

Emeritus Professors

- Edward T. Howley (Ph.D., Wisconsin)
- Andrew J. Kozar (Ph.D., Michigan)
- Wendell Liemohn (Ph.D., Iowa)

Other Supporting Faculty

- Greg Mathien, M.D., Knoxville Orthopedic Clinic
- Jenny Moshak, M.S., A.T.C., Lady Vols Sports Medicine
- Chris Hofman, M.A., A.T.C., Lady Vols Sports Medicine

How to Apply

The application process has two parts. You must apply to the Department of Exercise, Sport, & Leisure Studies and the University of Tennessee Graduate School.

You apply to the department through Margy Wirtz, our Admissions Coordinator.

You should submit the following (links to the forms are available on our website):

- The ESLS Departmental Application, including the Departmental Assistantship Application if you want to be considered for a teaching assistantship
- Your Resume
- Three Ratings Forms (University of Tennessee's recommendation forms). Two of these should be completed for you by professors who are familiar with your work and the third can be completed by either an academic or an employment reference.

You must also apply to the University of Tennessee Graduate School

through the Office of Graduate and International Admissions. This involves the submission of the following:

- The Graduate Application for Admissions
- \$35 application fee
- Official academic transcripts sent directly from all your post-secondary academic institutions
- GRE scores (PhD students only)

- TOEFL scores (Test of English as a Foreign Language; only required if you are not a native English speaker)
- Financial documentation (International Students only; contact the Graduate and International Admissions Office for more information)

Who is admitted?

We usually admit 2-6 doctorate students and 15-30 master's students each year. Admissions decisions are made on a number of criteria:

- All MS applicants need to have the required pre-requisite courses before starting the program. The applicant can be admitted conditionally if missing a few, as long as all are complete before the entering semester. These are:
 - 2 semesters of general chemistry (1 semester is acceptable for Biomechanics applicants)
 - 1 semester each of:
 - ◊ general physics (may be waived for Exercise Physiology applicants)
 - ◊ human anatomy or biomechanics
 - ◊ human physiology
 - ◊ statistics or calculus (calculus is needed for Biomechanics applicants)
- Ph.D. applicants need to have completed a master's degree in the field of Exercise Science (or equivalent) to enter our program. Most students admitted to the PhD program have completed a master's thesis.
- PhD students are usually brought in by a specific professor because of similarity of research interests.
- For Ph.D. students, we look for a GRE score at or above the 50th percentile for the verbal and quantitative portions and a score of 4.5 or higher on the writing portion. (Master's candidates are not required to take the GRE, but scores will be considered using the same criteria if they are submitted.)
- MS students must have a minimum overall GPA of 3.0 or above in their undergraduate work to be considered (or at least in the senior year); PhD candidates must have a minimum GPA of 3.0 in their graduate work and also in their undergraduate work.
- We then look at the applicant's writing ability and answers to questions on our application form (research interests, for one) in considering folks who might be a good fit for our program. PhD students are usually brought in by a specific professor because of similarity of research interests.
- Ratings forms (our version of letters of recommendation) are also considered.

Timeline and Deadlines

Department/Degree Program

Admissions are done on a rolling basis, so qualified applicants can be admitted as soon as **all application materials** (i.e., graduate school, application materials, application forms, ratings forms/reference letters, etc.) are in.

***All Exercise Science graduate programs only admit for Fall semester entry, therefore the following deadlines all pertain to fall admission.**

The Department/Degree Program Deadlines

- Admissions are done on a rolling basis for M.S. students, so qualified applicants can be admitted as soon as **all application materials** (i.e., graduate school, application materials, application forms, ratings forms/reference letters, etc.) are in.
- **For priority consideration**, as well as consideration for departmental assistantships, all materials should be received in the department and submitted to the Graduate School by **February 1st**.
- While some decisions will be made sooner, **the majority of admissions decisions are made from mid-February to the end of March**. Decisions on our limited number of departmental assistantships are made during this time.
- **Only complete application files will be considered**. It is your responsibility to confirm that all your materials have been received. You should check with both the Graduate and International Admissions Office (<http://admissions.utk.edu/graduate/check.shtml>) **and** the Department of Exercise, Sport, & Leisure Studies Admissions Coordinator (Ms. Margy Wirtz-Henry, mwirtz@utk.edu, 865-974-7154). Your status with the Graduate Admissions Office does not necessarily reflect your status with the department until the admission decision has been made at the department level and communicated with Graduate Admissions.
- Applicants applying later can be considered for admission if there are still openings in the incoming class.

The University/Graduate Admissions Deadlines

The Graduate School's admissions deadlines are later than those required by the department, and therefore, please use our February 1st deadline instead of those posted by the Graduate School and have all materials in to the Graduate School and the department by then.

IMPORTANT: The application process requires that students be accepted by both the Department/Degree Program and the University/Graduate School. **To ensure full consideration, both of these applications should be completed prior to the February 1st deadline.** International applicants should begin the University/Graduate School admissions process several months prior to the deadline to allow adequate time for the graduate school application materials to be forwarded to the department for consideration along with the Department/Degree Program materials—we recommend international application files to be complete by December 31st.

Funding

Graduate assistantships are the primary source of funding for graduate students at UT and are offered by academic departments and administrative offices of the university. An assistantship is a financial award to a graduate student for part-time

work in teaching, administration, or research while pursuing an advanced degree. Appointments are normally on a one-fourth to one-half time basis, usually requiring 10 – 20 hours of service per week. The annual stipend is payable in either nine or twelve monthly installments. In addition to the stipend, Graduate Teaching Assistants (GTA), Graduate Teaching Associates (GTAssoc), Graduate Assistants (GA), and Graduate Research Assistants (GRA), with appointments on a one-fourth time basis or higher, are entitled to a waiver of maintenance fees and tuition for the period of appointment in accordance with university policy. These appointments also include a benefit of health insurance for the student.

While there is no central point of contact for information on GA positions in administrative offices around the university, some positions are filled periodically in college advising centers, admission offices, residence halls, and other service offices. When announced by the administrative office, openings for the assistantships may be found at <http://gradstudies.utk.edu/asstshipfunds.shtml>.

A limited number of graduate teaching associateships are available from our department, teaching in the Physical Education Activity Program, assisting with research, and/or teaching undergraduate lab sections. Most PhD candidates are brought in with funding; very few master's students are funded through the department. However, there are many sources of funding and assistantships elsewhere on campus, as detailed above, such as through Men's Athletics, Women's Athletics, Rec Sports, Housing, Admissions, and other departments. **We highly recommend that prospective students start early looking for funding sources.** These areas/departments should be contacted directly; the Dept of Exercise, Sport, & Leisure Studies has no say in the awarding of these assistantships.

Some helpful links:

<http://gradstudies.utk.edu/fellowships.shtml>

<http://gradstudies.utk.edu/asstshipfunds.shtml>

<http://web.utk.edu/~finaid/newpage/schol-info.html>

<http://admissions.utk.edu/graduate/costs.shtml>

Useful University of Tennessee Links

- Exercise Science Program <http://web.utk.edu/%7Esals/grad/exsci.html>
- Graduate Admissions <http://admissions.utk.edu/graduate/>
- About Knoxville <http://www.tennessee.edu/knoxville/>
- Financial Aid <http://web.utk.edu/~finaid/>
- Student Residency Classification
<http://registrar.utk.edu/residency/residency.shtml>
- Center for International Education <http://web.utk.edu/~globe/>
- Admission Guide for International Students
<http://admissions.utk.edu/graduate/forms/intl.admission.guide.pdf>

Need More Information or Have Questions?

If you are interested in learning more about our application process or our program, please contact our Admissions Coordinator, Margy Wirtz, at (865) 974-7154 or mwirtz@utk.edu. Specific questions about curriculum, career options, etc, will be referred to the appropriate faculty member.

Thank you for your interest in the University of Tennessee. Best wishes in your search for a graduate program that meets your needs.