# Health and Exercise Sciences

## **Degree Programs**

- We offer Bachelor of Science (BS) degrees in Exercise Science (ES), Health Science (HLTH), and Athletic Training (AT).
- Our Health Science Program is approved by the Society of Public Health Educators – American Association for Health Education Baccalaureate Approval Committee (SABPAC).
- Our Athletic Training Education Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).
- Students in all three degree programs take nationally prominent certification exams specific to their program as their senior test.
   Passing these exams provides students with highly respected credentials such as Certified Health Education Specialist (HLTH),
   Board of Certification (AT), and Health Fitness Specialist (ES).
- All HES students take Human Anatomy with a cadaver lab
  which is located at AT Still University of Health Sciences, the
  local medical school. Only 4% of undergraduate programs in
  the nation offer cadaver-based anatomy.
- All students complete a required professional field experience or practicum in supervised professional health-related settings of their choosing.
- There are numerous opportunities for students to conduct undergraduate research, either on-campus with a Truman faculty member or off campus, both during the academic year and during the summer.
- Many of our students study abroad in countries such as Australia, Costa Rica, Germany, Ireland, Italy, England, and Spain.
- We have articulation agreements with some of the most prominent physical therapy, medical, occupational therapy and athletic training graduate programs in the nation. These agreements provide HES students special advantages in the admissions process. Articulating schools include Washington University (St. Louis), Creighton University, AT Still University of Health Sciences, and the Arizona School of Health Sciences.
- Our class sizes are small and our faculty are readily available to students.
- The HES curricula offers the flexibility to obtain a variety of minors, both interdisciplinary and discipline-specific.

"After two years of graduate study I look back on the experience I gained while at Truman. To summarize my thoughts: as a whole, the HES faculty did a fantastic job of facilitating the learning process. Specifically, you all allowed us to free our minds from the constructs of content-based learning and actually learn."

—CHRIS BRAMMER, '06

## **Faculty**

- HES includes 21 full-time and 2 part-time faculty members.
- 52% of full-time faculty members hold a terminal degree.
- Our faculty are diverse; they come from many different areas, they attended an array of public and private undergraduate institutions, and their doctorates were received from some of the most prominent research universities from across the United States.
- Our faculty are active teacher-scholars who work collaboratively with students on undergraduate research projects.
- Our faculty are dedicated to serving the State of Missouri and the Midwest region. They currently or have recently served as executive officers, members of executive boards, and on committees of the following state organizations: Missouri Association for Health, Physical Education, Recreation and Dance, MO Governor's Council on Physical Fitness and Health, Missouri Partners in Prevention, Missouri/Kansas Association for Cardiovascular and Pulmonary Rehabilitation, and the Missouri Athletic Trainers Association.
- Our faculty are active nationally and internationally with membership and leadership roles in:

American Alliance for Health, Physical Education, Recreation and Dance

American Alliance for Cardiovascular and Pulmonary Rehabilitation

American College of Sports Medicine
American School Health Association
International Society of Biomechanics
International Society of Biomechanics in Sports
National Association of Advisors for the Health Professions
National Commission for Health Education Credentialing
National Strength and Conditioning Association
National Wellness Association
Society for Neuroscience
Society for Public Health Education

- Our faculty members serve the Northeast Missouri area through numerous **student-based partnerships**. Partnering organizations include Kirksville Primary School, Brashear Elementary School, Preferred Family Healthcare, Partners in Prevention, Kirksville Police Department, Heartland Task Force, and Kirksville Parks and Recreation.
- Our faculty members are committed academic advisors with several faculty members winning the prestigious William O'Donnell Lee Advising Award.

### **Students**

- We currently have over 600 students across our three degree programs and we continue to grow.
- Our students have presented research at professional conferences across the United States and internationally.
- Student-led organizations include Phi Epsilon Kappa, Eta Sigma Gamma, and the Student Public Health Association. Our students and faculty are also heavily involved in other discipline-related organizations such as the American Medical Students Association, American Student Dental Association, and the Pre-Student Osteopathic Medicine Association.
- Our students work with a wide range of community residents from children to the elderly to increase quality of life for Missouri residents.
- Many of our students are leaders in campus service organizations such as Cardinal Key, Blue Key, Habitat for Humanity, and Student Athlete Advisory Committee.
- Upon graduation, 100% of our athletic training students have been employed or entered into graduate programs in athletic training.
- Approximately 65% of our Exercise Science majors identify
   physical therapy as their occupation of choice and
   approximately 90% of those who apply to graduate programs in
   physical therapy gain admission.

## **Facilities & Equipment**

- Students working in our Human Performance Laboratory
  measure all aspects of human function. For example, they
  measure oxygen consumption and caloric expenditure using a
  computerized metabolic cart; measure body composition and
  bone mineral density using a dual x-ray absorptionmetry; gain
  clinical experience in identifying cardiac abnormalities using a
  state-of-the-art treadmill with an integrated electrocardiogram
  package; or use a velocity-controlled strength device to analyze
  muscle power output and assess the effect of resistance training
  on strength.
- Students participating in the Movement Neuroscience
   Laboratory investigate neural contributions to movement
   control and movement learning using everything from a Sony
   PlayStation® system to Neurocom's Balance Master® system.
- We have two athletic training clinics where our students work with our 20 NCAA Division II sports teams under the supervision of our five approved clinical instructors.
- Students working in our **Piper Movement Analysis Laboratory** learn about human motion, muscle activity, and kinematics using state-of-the-art technology. For example, students use our sophisticated motion analysis system integrated with Bertec forceplates to measure force vectors in 3-dimensional

space, evaluate the activity of multiple muscles while simultaneously examining joint angles or acceleration using a Delsys electromyography system, or measure kinematics through video-based analysis systems including Vicon and Dartfish.

## **Graduate School Placement**

#### Medical Schools

Creighton University

Des Moines University
Kansas City University of
Medicine and Biomedical
Sciences
Kirksville College of
Osteopathic Medicine
Lovola University

Medical College of Wisconsin

University of Illinois
University of Iowa
University of Kansas
University of Minnesota
University of MissouriColumbia
University of MissouriKansas City
University of Nebraska

#### Physical & Occupational Therapy Schools

Arizona School of Health
Sciences
Boston University
Colorado State University
Creighton University
Des Moines University
Mayo Clinic
Midwestern State University
Missouri State University
Old Dominion University
Rockhurst University
Saint Louis University
Southwest Baptist University

University of Colorado
University of Miami
University of MissouriColumbia
University of Nebraska
Medical Center
University of North Carolina
at Chapel Hill
University of Southern
California
University of St. Augustine
Washington University in
St. Louis

#### Graduate Schools

Drexel University
Illinois State University
Iowa State University
Johns Hopkins University
Ohio University
Saint Louis University
The University of Alabama
Tulane University
University of Michigan

University of Missouri-Columbia University of Pittsburgh Washington University in St. Louis West Virginia University Yale University

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