Human Movement Science, BS

Emphases: Pre-Physical Therapy; Physical Education Teaching; Exercise Science
Department: Health, Physical Education, and Recreation Department
College: Emma Eccles Jones College of Education & Human Services

Overview

About This Degree

The human movement science degree at USU provides three different options for students who wish to pursue careers in exercise science, physical therapy, or physical education. In all of these areas, students study the psychological, neurophysiological, and biomechanical/biophysical aspects of human movement.

Through mentoring, students are given the opportunity to conduct undergraduate research. The department collaborates with state health programs, parks and recreation programs, and local and regional school districts to provide students with opportunities for hands-on experience and professional training.

Many graduates from the program are accepted into advanced degree programs in physical and occupational therapy or are admitted to medical schools.

Career Options

With a degree in human movement science, students may pursue the following careers:

Pre-Physical Therapy Emphasis

The pre-physical therapy emphasis prepares students to enter into a graduate program, after which, they will be qualified for the following positions:

- Physical therapy
- Physical therapy assistant
- Physician's assistant
- Occupational therapy
- Chiropractics

Physical Education Teaching Emphasis

- Elementary and secondary physical education teacher
- High school/college sports coach/manager
- Youth and sport camp director
- Sports management and marketing
- Professional referee, official, umpire

Exercise Science Emphasis

This emphasis prepares students for the following careers, in addition to being an excellent pre-medical major:

- Private and corporate fitness
- Personal trainer
- Rehabilitation
- Fitness instruction
- Strength and conditioning specialist
- Cardiac rehabilitation
- Manager of an exercise facility

Career Services provides counseling and information on hundreds of job and internship opportunities and even helps students apply and interview.

What it takes

Admissions Requirements

In addition to Utah State University's admissions requirements, the human movement science program has additional requirements:

Pre-Physical Therapy Emphasis:

- **Freshmen:** New freshmen admitted to USU in good standing qualify for admission as human movement science majors.
- **Transfer Students:** Students transferring from other institutions need a 3.0 total GPA to qualify for admission as human movement science major with an emphasis in exercise science. Students transferring from other USU majors need a 3.0 total GPA to qualify for admission as human movement science major with an emphasis in exercise science.

Physical Education Teaching Emphasis:

- **Freshmen:** New freshmen admitted to USU in good standing qualify for admission as human movement science majors.
- **Transfer Students:** Students transferring from other institutions need a 2.75 total GPA to qualify for admission as human movement science major with an emphasis in exercise science. Students transferring from other USU majors need a 2.75 total GPA to qualify for admission as human movement science major with an emphasis in exercise science.
- **STEP Requirements:** In order to be accepted into STEP, students must go through an application process, which includes the following:
    - Complete 60 semester credits with a minimum GPA of 2.75
    - Complete certain core courses (see department for more information)
    - Complete a speech and hearing test
    - Pass the Teacher Education Writing Exam
    - Provide an unofficial copy of your transcript
    - Pass a criminal background check (this should be done one semester before submitting the application)

Exercise Science Emphasis:

- **Freshmen:** New freshmen admitted to USU in good standing qualify for admission as human movement science majors.
- **Transfer Students:** Students transferring from other institutions need a 2.75 total GPA to qualify for admission as human movement science major with an emphasis in exercise science. Students transferring from other USU majors need a 2.75 total GPA to qualify for admission as human movement science major with an emphasis in exercise science.

International students have additional admissions requirements.

Major Requirements

Click here to see course requirements for the **Bachelor of Science**.

Contact

Advising

All new USU students participate in a New Student Orientation program, where they receive detailed information about major requirements, registering for classes, and other important advising information.

Get Involved

Professional Organizations, Honor Societies, and Clubs

American Alliance for Health, Physical Education, Recreation, and Dance: AAHPERD's mission is to promote and support leadership, research, education, and best practices in the professions that support creative, healthy, and active lifestyles. There is a Utah chapter of the AAHPERD.

American College of Sports Medicine: The American College of Sports Medicine promotes and integrates scientific research, education, and practical applications of sports medicine and exercise science to maintain and enhance

physical performance, fitness, health, and quality of life.

American Council on Exercise: The American Council on Exerciseis a nonprofit organization committed to enriching the quality of life through safe and effective exercise and physical activity. As America's authority on fitness, ACE protects all segments of society against ineffective fitness products, programs and trends through its ongoing public education, outreach, and research. ACE further protects the public by setting certification standards and continuing education standards for fitness professionals.

American Physical Therapy Association: The American Physical Therapy Association is a national professional organization representing more than 74,000 members. Its goal is to foster advancements in physical therapy practice, research, and education.

American Society of Exercise Physiologists: The American Society of Exercise Physiologists is a professional organization committed to the professional development of exercise physiology, its advancement, and the credibility of exercise physiologists.

National Strength and Conditioning Association: NSCA is a nonprofit organization designed to promote and support the role of the strength and conditioning specialist who is employed with professional, collegiate, high school and private sports conditioning programs. NSCA offers professional certifications for strength and conditioning professionals.

Pre-Physical Therapy Club: This club introduces students to all areas of physical therapy. The club helps students understand the physical therapy program, be familiar with what classes they need to take, help them apply to physical therapy schools, and make friends who share same interests. The club also participates in various service projects.

Physical Education Club: This club encourages students to exercise regularly and sponsors a departmental fun run each October. It is open to all majors.

Labs, Centers, Research

With the second oldest undergraduate research program in the nation, USU offers students a wide range of opportunities to gain hands-on research experience. The Undergraduate Research and Creative Opportunities program allows students to apply for grants and receive funding. USU's Honors Program prepares students for excellent graduate programs by helping them build relationships with professors, participate in research projects, take smaller, more intensive classes, and develop leadership skills.

Biomechanics Laboratory (Undergraduate): This laboratory serves as the primary teaching laboratory for the undergraduate biomechanics class. Students study human anatomical structures and work on solving biomechanical problems related to motion, sport performance, and rehabilitation.

Body Composition Laboratory: This facility contains the Bod Pod air displacement plethysmography system for body composition analysis. It also has other body composition assessment devices, including a hydrostatic weighing, a RJL Quantum II bioelectrical impedance analyzer, an Omron HBF-500 full-body analyzer, several Omron HBF-306 hand-held BIA machines, several Lange skin fold calipers, a Harpenden skin fold caliper, anthropometers, anthropometric tape measures, and a wall-mounted stadiometer.

Exercise Physiology Laboratory: The Exercise Physiology Lab includes a Parvo Medics TrueMax 2400 Metabolic Measurement System with resting metabolic rate and residual volume capabilities, a Quinton Q5000 ECG with treadmill, two Monarch 824 E cycle ergometers with one equipped for the Wingate using SMI software, two other Monarch cycle ergometers, polar heart rate monitors, two Jamar hand grip dynamometers, sphygmomanometers, three commercial treadmills, a recumbent cycle ergometer, an upright cycle ergometer, and a Pacific universal weight machine.

Health, Physical Education, and Recreation Building: The HPER building contains approximately 50,000 square feet of programming space. It houses the HPER Department and USU Campus Recreation advising and faculty offices, a number of classrooms, three gymnasiums, one dance studio, two swimming pools, a 1,500-square-foot weight room, six racquetball courts, and male and female locker rooms. Adjacent to the HPER building is a grass outdoor facility used for activity classes, club sports, and intramurals. Eight outdoor tennis courts complete the HPER complex.

Jim and Carol Laub Athletics-Academics Complex: At USU's Romney Stadium, the Jim and Carol Laub Athletics-Academic Complex hosts an 11,000-square-foot sports medicine complex and a sports medicine research center. Faculty and students from HPER collaborate with USU sports medicine staff on research projects related to

exercise evaluation, training, and rehabilitation. The complex houses two underwater treadmill systems, a cold plunge pool, and a number of other systems to aid in this research.

Motion Analysis Laboratory: This laboratory houses the Vicon motion analysis systemand, which is complete with seven 500Hz Vicon cameras, two Bertec 3-D force platforms, a Bassler 200Hz video camera, a BIOPAC MP150 data acquisition system with 8-channel telemetric electromyographic and pressure pad modules combined with motion analysis software.