

KINESIOLOGY, B.S.

Exercise and movement science (EMS) is a named option offered in the Department of Kinesiology. The department's mission is to research, teach, and apply knowledge related to movement, exercise, and human occupation with the ultimate goal of enhancing human health, productivity, and quality of life.

Students in this major take coursework grounded in the basic sciences (e.g., physiology, anatomy, physics) and in kinesiology. EMS core courses examine how the body responds to physical activity, the role of physiology and psychological factors in exercise, mechanics driving movement, how movement is controlled, learned, and developed over the lifespan, and the role of physical activity in the health of larger populations.

The curriculum includes coursework, laboratory research opportunities, and hands-on learning experiences. In addition, at least 11 credits of electives in exercise and movement science are required, giving students some flexibility to tailor the program to their specific interests. Examples of elective topics include strength and conditioning, leadership, health theory, and advanced courses in exercise physiology, psychology and biomechanics.

The EMS science major is a pre-professional program. This means that our students are well prepared for subsequent graduate or professional training in different health-related disciplines such as physical therapy, occupational therapy, medicine, or biomedical research. The major also prepares students for graduate training programs in kinesiology (e.g., exercise physiology, cardiac rehabilitation, biomechanics, physical activity epidemiology, exercise psychology, motor learning). Exercise and movement science graduates may also pursue entry-level careers in the fitness area.