

Exercise Science Program

Program Goals and Student Learning Outcomes

Goal 1: Students will understand the scientific principles governing human movement.

- Student Learning Outcome 1.1
 - a) The anatomical principles of human movement:
 - b) The mechanical principles of human movement
 - c) The physiological adaptations and mal-adaptations to exercise:
 - d) The components of fundamental movement patterns and the changes in the developmental stages through a life-span approach:
 - e) The nutritional and energy needs during activity and exercise

Goal 2: Students will develop the skills necessary to measure human movement, responses to exercise, and health related variables.

- Student Learning Outcome 2.1
 - a) Assess human movement:
 - 1) Components: Quality and Efficiency
- Student Learning Outcome 2.2
 - a) Assess fitness
 - a) Exercise readiness and health screening, Body composition, Cardiorespiratory fitness, Flexibility, Muscular fitness
 - b) Nutrition
- Student Learning Outcome 2.3
 - Assess physiological responses to exercise

Goal 3: Students will be able apply the knowledge and skills in order to develop and administer appropriate exercise programs.

- Student Learning Outcome 3.1
 - Create effective exercise programs for a variety of populations
 - Components: training specificity, individual assessments, and programs for strength, anaerobic, aerobic, flexibility, and explosive power:

Goal 4: Students will develop critical thinking skills and problem-solving techniques within exercise science.

- Student Learning Outcome 4.1
 - Prepare and interpret graphs and tables:

Goal 5: Students will be able to generate, evaluate, and communicate exercise science oriented information.

- Student Learning Outcome 5.1
 - Effectively utilize the scientific method
 - Components: create hypotheses, experimental designs, and data

- Student Learning Outcome 5.2
 - Communicate experimental findings and data analysis
 - Components: orally and in writing.