GROSSMONT COLLEGE

COURSE OUTLINE OF RECORD

Curriculum Committee Approval: 11/30/2021

GCCCD Governing Board Approval: 12/14/2021

ES 005C – ADVANCED Cardio Fitness and Resistance Training

1. Course Number Course Title Semester Units

ES 005C Advanced Cardio Fitness and Resistance Training 1.5

Semester Hours

1 hour lecture: 16-18 hours 32-36 outside-of-class hours for lecture 2 hours laboratory: 32-36 hours

80-90 total hours

2. Prerequisites

None

Corequisites

None

Recommended Preparation

A “C” grade or higher or “Pass” in ES 005B or equivalent or specified skill competencies.

3. Catalog Description

A continuation of ES 005B emphasizing the formulation and design of an advanced level of cardiorespiratory fitness and resistance training. Students will complete more physical challenging activities to achieve an advanced level of cardiovascular endurance, muscular strength/endurance, body composition, and flexibility. Exercise theories, training methods, nutritional influences on exercise and body composition, and injury prevention/treatment will be presented. A wide range of cardiovascular activities and resistance training equipment are utilized. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness.

4. Course Objectives

The student will:

1. Apprise and compile current health-related physical fitness.
2. Construct and propose a personalized an advanced level exercise program, and measure progress relative to individual goals and standard exercise theories.
3. Estimate and maximize functional aspects of physical fitness necessary to maintain the health and vigor of his/her body for a lifetime.
4. Recognize and demonstrate exercise safety guidelines through proper body mechanics.
5. Combine and predict variables which are essential to a healthy lifestyle: muscular strength/endurance, cardiorespiratory endurance, flexibility, nutrition, stress management, and weight management.
6. Engage in a variety of conditioning activities in a knowledgeable disciplined manner that will preclude injuries and allow for ongoing, satisfying exercise experiences.
7. Elaborate and modify attitudes concerning the positive relationship between lifelong physical fitness and disease prevention and overall health.
8. Formulate and adapt methods to increase individual adherence and enjoyment of regular exercise.
9. Measure and modify theories of exercise conditioning and other relevant health-related topics.
10. Demonstrate knowledge of the principles of physical fitness as well as healthy life-style choices and evaluate their impact on a health and well-being.

5. Instructional Facilities

1. Fitness instructional training lab (carpeted, weight machines, free weights, functional training equipment, adequate air conditioning, flexibility mats, cardiovascular machines, music, and voice-prompt system).
2. Track and surrounding areas of 41-101
3. Computer monitoring system (i.e., Heart Rate Monitors).
4. Projector, screen, and audio and visual equipment.

6. Special Materials Required of Student

a. Appropriate fitness attire (appropriate exercise attire for both indoor and outdoor activities).

b. Water bottle, hat, sunscreen.

c Towel

7. Course Content

1. Advanced fitness training techniques, activities, and modalities (body weight, rubber tubing, and stability equipment) to increase muscle strength, flexibility, and cardiovascular endurance to an advanced level.
2. Assessment of current fitness and health levels
3. Fitness training principles (i.e., Overload and HIIT Principles).
4. Psychological, physical, and overall health benefits of exercise training to enhance overall health.
5. Stress management and relaxation techniques.
6. Injury prevention and treatment **(**RICE and Proper Body Mechanics).
7. Principles of exercise conditioning, nutrition, weight control, and cardiorespiratory health related health practices.
8. Biomechanical efficiency and maintenance; proper movement mechanics and use of all equipment.
9. Advanced level personalized fitness training program.
10. Analysis of differences between exercise training methods: aerobic and anaerobic activities, resistance training and flexibility training.

8. Method of Instruction

a. Lectures/Demonstration

b. Visual instructional materials

c. Instructor-led activities exercises and individual consultation.

e. Advanced level fitness testing and monitoring.

9. Methods of Evaluating Student Performance

1. Observation of daily motor skill acquisition and body mechanics of cardiorespiratory endurance, muscular strength and endurance, and flexibility
2. Written final exam (knowledge and core)
3. Written self-evaluation assessments (i.e., fitness log)
4. Physiological self-evaluation of physiologic parameters for each class session (i.e., fitness log)
5. Pre and post fitness assessment~~s~~
6. Cardiorespiratory endurance (i.e., 1.5-mile run, 1.0-mile walk)
7. Muscle strength (i.e., weight training machine)
8. Muscle endurance (i.e., push-ups, plank)
9. Flexibility (i.e., back saver sits and reach)
10. Body Composition (i.e., bioelectrical impedance, skinfold calipers, girth measurements)
11. Health Measurements (i.e., resting heart rate, resting blood pressure, height/weight)
12. Evaluation of outside class assignments utilizing the course text.
13. Practical exams (biomechanical skill for resistance and cardio exercise)

10. Outside Class Assignments

1. Inclusion of at least one additional day of prescribed exercise to meet minimum frequency and training standards needed to gain fitness.
2. Weekly reading and practicing resistance and cardiovascular exercise theories and techniques.
3. Assignments based on course text.

11. Representative Texts

1. Representative Text(s):

Exercise Science and Wellness Department. *The Way to a Long and Healthy Life.* El Cajon, CA: Grossmont College, 6th edition, 2017.

b. Supplementary texts and workbooks:

Instructor materials: ACSM exercise guidelines; Dietary Guidelines for Americans

Student Learning Outcomes

Upon completion of the course, the student will:

1. Demonstrate knowledge, physical fitness, skills, and appreciation of cardiorespiratory fitness and resistance training at an advanced level.
2. Identify basic principles for maintaining an active and healthy life.