

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

EXERCISE SCIENCE 019C – ADVANCED PHYSICAL FITNESS

1 hour lecture, 2 hours laboratory, 1.5 units

Catalog Description

Advanced skills and techniques of physical fitness with an emphasis on new concepts and techniques.

Prerequisite

None

Recommended Preparation

"C" grade or higher or "Pass" in ES 019B or equivalent

Entrance Skills

Without the following skills, competencies and/or knowledge, students entering this course will be highly unlikely to succeed:

- 1) Score 70% or better on a written exam concerning knowledge of the human organism, its capabilities and limitations in relation to a physical activity.
- 2) Apply intensity, duration and frequency of exercise guidelines in planning a fitness program and explain in writing how to vary these for desired results.
- 3) Apply the principle of progressive overload in planning a fitness program.
- 4) Demonstrate understanding of the relationship of fatigue, relaxation, rest, sleep, diet and aging to physical activity by creating a "lifelong fitness diary" in which these factors are addressed.
- 5) Demonstrate improvement in two aspects of health-related fitness (CV health, body composition, flexibility, muscular strength, and muscular endurance) on pre-post fitness assessment.
- 6) Analyze different "diets" in terms of the amounts of carbohydrate, fat and protein as compare to recommended daily allowances.

Course Content

- 1) Components of physical fitness
 - a. Cardiovascular endurance
 - b. Strength
 - c. Flexibility
 - d. Agility
 - e. Coordination
 - f. Power
 - g. Balance
 - h. Speed
- 2) Nutrition
- 3) Weight control
- 4) Physiology of exercise
- 5) Conditioning programs

Course Objectives

Students will be able to:

- 1) Demonstrate how principles learned in class may be applied to improve the five basic parameters of fitness (cardiovascular, muscle strength, muscle endurance, flexibility, and body composition).

- 2) Define personal physical fitness and nutrition goals.
- 3) Evaluate exercise prescription to determine appropriate changes to meet personal goals.
- 4) Utilize a personal food log to conduct nutritional analysis of their diet.
- 5) Apply principles of exercise prescription within case studies of various populations.

Method of Evaluation

A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in subject matter determined by multiple measurements for evaluation, one of which must be written essay exams, skills demonstration or, where appropriate, the symbol system.

- 1) Quizzes and exams that measure students' ability to identify, explain, describe and/or provide examples of exercises and nutritional principals for physical fitness and weight control.
- 2) Goal setting behavior change assignment that measures students' ability to identify the risks of unhealthy habits (smoking, poor diet, lack of exercise, etc.) and develop personal goals for modifying personal behavior to improve personal health and wellness.
- 3) Daily food log assignment in which students record their daily personal diets and compare their nutritional intake to daily recommended allowances.
- 4) Objective evaluation of proper form and technique in the execution of various exercise modalities.
- 5) Case study analysis applying principles of exercise prescription and nutrition for various segments of the population.

Special Materials Required of Student

Proper attire, tennis shoes

Minimum Instructional Facilities

- 1) Adequate space
- 2) Bar bells, dumb bells, mats
- 3) Running area

Method of Instruction

- 1) Lecture and demonstration
- 2) Films
- 3) Laboratory practice

Out-of-Class Assignments

- 1) Assigned reading
- 2) Online quizzes
- 3) Diet analysis
- 4) Fitness log

Texts and References

- 1) Required (representative example): Hoeger, *Lifetime Physical Fitness and Wellness: A Personalized Program*. 12th edition. Cengage, 2013.
- 2) Supplemental: None

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1) Define cardiovascular fitness, muscle conditioning, and nutrition terms.
- 2) Describe methods of monitoring cardiovascular, strength, and flexibility fitness.
- 3) Identify specific muscles of the body, including core, upper, and lower limbs.
- 4) Demonstrate skills appropriate for recreation and fitness-enhancing participation in advanced level physical fitness activities.