



El Camino College

COURSE OUTLINE OF RECORD - Official

I. GENERAL COURSE INFORMATION

Subject and Number: Physical Education 280
Descriptive Title: Exercise and Nutrition Programs for Fitness and Weight Management

Course Disciplines: Physical Education

Division: Health Sciences and Athletics

Catalog Description: Students will be given guidelines for the design of individual exercise programs of aerobic fitness, weight loss, and development of muscle mass, muscle strength, and joint flexibility. Nutritional support for optimizing these fitness objectives is integrated throughout the course. Students participate in both classroom discussions and relevant exercise training. Measurement of aerobic fitness, body composition, and tests of muscle function will be conducted to guide exercise and dietary recommendations.

Conditions of Enrollment: Recommended Preparation

English 1A

Course Length: Full Term Other (Specify number of weeks):
Hours Lecture: 2.00 hours per week TBA
Hours Laboratory: 2.00 hours per week TBA
Course Units: 3.00

Grading Method: Letter
Credit Status: Associate Degree Credit

Transfer CSU: Effective Date: Prior to July 1992
Transfer UC: Effective Date: Proposed

General Education:

El Camino College: 5 – Health and Physical Education

Term:

Other:

CSU GE:

E - Lifelong Understanding and Self-Development

Term: Fall 1988

Other:

IGETC:

II. OUTCOMES AND OBJECTIVES

A. COURSE STUDENT LEARNING OUTCOMES (The course student learning outcomes are listed below, along with a representative assessment method for each. Student learning outcomes are not subject to review, revision or approval by the College Curriculum Committee)

1. Students will evaluate their level of cardiopulmonary fitness and make training program design recommendations for improvement based on laboratory fitness test results and reference standards for age and gender.
2. Students will assess current fitness levels in muscle endurance and develop programs to improve fitness levels.
3. Students will identify and apply principles of proper diet and nutrition systems when formulating caloric intake.

The above SLOs were the most recent available SLOs at the time of course review. For the most current SLO statements, visit the El Camino College SLO webpage at <http://www.elcamino.edu/academics/slo/>.

B. Course Student Learning Objectives (The major learning objective for students enrolled in this course are listed below, along with a representative assessment method for each)

1. Implement guidelines for developing aerobic fitness, muscle strength and endurance, flexibility, and improvements in body composition in a personally relevant exercise training program.
Class Performance
2. Explain the need for lifetime physical activity and weight control as they relate to health enhancement and disease risk reduction.
Performance exams
3. With respect to accuracy and precision, evaluate methods commonly available for evaluating aerobic fitness, muscle performance, flexibility, and body composition.
Performance exams
4. Explain the benefits of achieving and maintaining high levels of aerobic and muscular fitness through the lifespan.
Multiple Choice
5. Evaluate results of fitness evaluations for identification of strengths, weaknesses, and need for change.
Written homework
6. Using proper technique, correctly demonstrate at least one resistance training exercise for each of the major muscles or muscle groups.
Performance exams
7. Demonstrate understanding of static and PNF stretching techniques by exhibiting specific stretches for lower and upper body parts.
Field work
8. Design an eight-week progressive exercise training program that is likely to improve aerobic fitness, muscle performance, and flexibility.
Written homework
9. Assess 3 day personal dietary intake for total caloric intake and the percentages of carbohydrates, fats, and proteins in comparison to current Institute of Medicine recommendations.

Laboratory reports

10. Construct an energy balance plan that will achieve negative calorie balance.

Class Performance

III. OUTLINE OF SUBJECT MATTER (Topics are detailed enough to enable a qualified instructor to determine the major areas that should be covered as well as ensure consistency from instructor to instructor and semester to semester.)

Lecture or Lab	Approximate Hours	Topic Number	Major Topic
Lecture	3	I	Course Orientation A. Brief overview of the five health components of fitness B. Overview of health, wellness, and disease prevention C. Overview of nutrition D. Description of fitness evaluations
Lecture	2	II	Goal Setting and Assessment A. Development of SMART goals specific to improving health, fitness, and performance through exercise B. Field fitness assessments
Lecture	6	III	Cardiovascular Fitness A. Guidelines and methods for developing and maintaining cardiovascular performance. B. Standards for cardiovascular fitness, including sub VO2 max test C. Training adaptations due to cardiovascular training D. Progressive overload and various training programs
Lab	12	IV	Cardiovascular Fitness A. Implement exercise guidelines and methods for developing and maintaining aerobic fitness B. Standards and calculations for fitness assessment C. Aerobic training adaptations due to training
Lecture	8	V	Muscular Strength and Endurance A. Guidelines and methods for developing and maintaining muscle performance (strength, endurance, hypertrophy) B. Standards for muscular strength including upper and lower body exercises C. Training adaptations due to weight training D. Progressive overload and various training programs
Lecture	6	VI	Flexibility and Mobility A. Guidelines and methods for developing and maintaining joint mobility B. Standards for flexibility C. Various stretching techniques
Lab	8	VII	Body Composition A. Analyze various methods for measuring body composition B. Standards for body composition and BMI C. Obesity vs. overweight and disease prevention
Lecture	11	VIII	Basic Nutrition A. Energy balance equation B. Macronutrients: carbohydrates, fats, and proteins including water C. Micronutrients: vitamins and minerals D. Choosing a healthy diet for disease prevention

Lab	4	IX	Field Tests A. Demonstrate ability to perform field tests i. body composition ii. aerobic capacity iii. muscle strength iv. muscle endurance.
Lab	6	X	Demonstrate the ability to perform and monitor fitness programs designed to improve all of the 5 components of fitness.
Lab	6	XI	Muscular Endurance and Muscular Strength A. Implement exercise guidelines and methods for developing and maintaining muscular endurance, hypertrophy, and strength B. Standards and calculations for fitness assessment C. Muscular training adaptations
Total Lecture Hours	36		
Total Laboratory Hours	36		
Total Hours	72		

IV. PRIMARY METHOD OF EVALUATION AND SAMPLE ASSIGNMENTS

A. PRIMARY METHOD OF EVALUATION:

Substantial writing assignments

B. TYPICAL ASSIGNMENT USING PRIMARY METHOD OF EVALUATION:

Calculate your target heart rate training zone using the Karvonen method. Determine if your training zone is within the ACSM guidelines. Develop a training program using the FITT principle.

C. COLLEGE-LEVEL CRITICAL THINKING ASSIGNMENTS:

1. In a one- two-page paper, using fitness assessment data, SMART goals, and ACSM exercise training guidelines, propose an eight-week progressive training plan to improve aerobic fitness and muscle hypertrophy/strength.
2. Using the nutritional website provided in class, track and analyze a 3-day food and beverage intake. Assess your present level of macronutrient (CHO, PRO, FAT) and micronutrient (vitamins and minerals) intake and compare to your recommended daily requirements. If changes are needed, what specifically can you do to improve your daily nutritional intake? Please submit in a one- to two-page essay regarding changes.

D. OTHER TYPICAL ASSESSMENT AND EVALUATION METHODS:

Essay exams

Reading reports
Written homework
Term or other papers
Multiple Choice
Completion
Matching Items
True/False

V. INSTRUCTIONAL METHODS

Demonstration
Discussion
Group Activities
Laboratory
Lecture
Multimedia presentations
Role Play
Other (please specify)
Internet resources, Nutrient analysis software, Periodical literature

Note: In compliance with Board Policies 1600 and 3410, Title 5 California Code of Regulations, the Rehabilitation Act of 1973, and Sections 504 and 508 of the Americans with Disabilities Act, instruction delivery shall provide access, full inclusion, and effective communication for students with disabilities.

VI. WORK OUTSIDE OF CLASS

Study
Answer questions
Skill practice
Required reading
Problem solving activities
Written work

Estimated Independent Study Hours per Week: 5

VII. TEXTS AND MATERIALS

A. UP-TO-DATE REPRESENTATIVE TEXTBOOKS

Powers, SK and Dodd S.L.. Total Fitness and Wellness, The Mastering Health Edition. Brief 5th ed. Pearson Benjamin Cummings, Publishers, 2017.

B. ALTERNATIVE TEXTBOOKS

C. REQUIRED SUPPLEMENTARY READINGS

D. OTHER REQUIRED MATERIALS

Access to the Internet.

VIII. CONDITIONS OF ENROLLMENT

A. Requisites (Course and Non-Course Prerequisites and Corequisites)

Requisites	Category and Justification
------------	----------------------------

B. Requisite Skills

Requisite Skills

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification
Non-Course Recommended Preparation English 1A	Students will be required to analyze and comprehend assigned readings from the textbook and related articles. Students will be required to compose writing assignments to demonstrate understanding and application of principles taught.

D. Recommended Skills

Recommended Skills
Students will be able to read, comprehend and analyze reading assignments assigned from the text book.
Students will be able to compose a variety of sentence types and edit them for correct grammar, appropriate word choice, and accurate spelling.

E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact
-------------------------------------	-------------------------------

Course created by Thomas W. Storer, Ph.D. on 09/01/1984.

BOARD APPROVAL DATE:

LAST BOARD APPROVAL DATE:

Last Reviewed and/or Revised by Danielle Roman on 11/27/2017