



El Camino College

COURSE OUTLINE OF RECORD - Historical

I. GENERAL COURSE INFORMATION

Subject and Number: Physical Education 290
Descriptive Title: Personal Fitness Trainer

Course Disciplines: Physical Education

Division: Health Sciences and Athletics

Catalog Description: This course provides the scientific foundations and practical experience required by Personal Fitness Trainers for certification by agencies such as American College of Sports Medicine (ACSM), National Strength Coaches Association (NSCA), National Academy of Sports Medicine (NASM), and others. The course is broad-based, with topical areas including basic exercise physiology, biomechanics, fitness assessments, exercise prescriptions, fitness training principles, nutrition, weight management, and work with special populations. The business aspects of Personal Training are also reviewed.

Conditions of Enrollment: *You have no defined requisites.*

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

Grading Method: Both
Credit Status: Associate Degree Credit

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

General Education:

El Camino College: _____

CSU GE: _____

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. Student will demonstrate proper resistance training technique.

2. Student will create a nutrition and fitness plan for an individual who has the goal of weight loss.
3. Student will achieve improvement in upper and lower body strength.

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. Appraise health history by obtaining information on past and present health and exercise experiences.
Embedded questions
2. Evaluate health history data with respect to assessment selection, exercise training considerations, or referral to other health professionals.
Laboratory reports
3. Recognize the major risk factors associated with cardiovascular, respiratory, and metabolic diseases.
Homework Problems
4. Predict the expected cardiovascular, respiratory, and neuromuscular responses to acute incremental and constant rate exercise.
Laboratory reports
5. Recognize the expected cardiovascular, respiratory, and neuromuscular adaptations to the effects of specific exercise training.
Laboratory reports
6. Identify the major muscle groups of the human and specific resistance training exercises for each.
Quizzes
7. Administer appropriate tests to assess cardiopulmonary fitness, body composition, muscular strength/power/endurance, and flexibility.
Laboratory reports
8. Interpret the results of typical assessments for cardiopulmonary fitness, body composition, muscular strength/power/endurance, and flexibility.
Essay exams
9. Individualize an effective exercise training plan to improve cardiopulmonary fitness, muscular performance, flexibility, and body composition when appropriate health history and assessment data are provided.
Essay exams
10. Discuss biomechanical considerations in weight lifting and other exercise techniques.
Oral exams
11. Evaluate the quality and quantity of key macro- and micro-nutrients obtained from a 3-day diet log.
Written homework
12. Structure an appropriate nutritional plan based on a 3-day diet history.
Homework Problems
13. Integrate exercise training, nutrition, and behavior modification strategies in the design of a weight management program.

Written homework

14. Give examples of assessment and training considerations that must be addressed when working with special populations.

Written homework

15. Outline the necessary steps in establishing a Personal Trainer business.

Written homework

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	6	I	Health History Appraisal and Risk Factor Identification A. Medical and exercise history B. Cardiovascular, pulmonary, and metabolic disease risk factors, signs, and symptoms C. Measurement of resting heart rate and blood pressure D. Risk stratification
Lecture	10	II	Basic Exercise Physiology A. Cardiovascular System B. Pulmonary system C. Musculoskeletal system D. Nervous system E. Endocrine system F. Metabolism
Lab	6	III	Acute Responses to Exercise A. Endurance exercise B. Resistance exercise C. Speed training
Lecture	3	IV	Adaptations to Chronic Endurance and Resistance Exercise Training A. Cardiovascular B. Pulmonary C. Musculoskeletal D. Endocrine E. Metabolic
Lab	8	V	Assessing Cardiorespiratory Fitness A. Laboratory testing B. Field testing
Lab	10	VI	Assessing Musculoskeletal Performance A. Muscle strength B. Local muscle endurance C. Muscle power D. Range of motion E. Functional assessments
Lab	6	VII	Assessing Anthropometric Variables A. Height, weight, body mass index, waist circumference, muscle girths B. Percent relative body fat, lean body mass, skeletal muscle mass
Lecture	9	VIII	Developing Individualized Exercise Plans A. Endurance training B. Resistance training

			C. Speed and agility training D. Balance and stability training E. Applications in special populations
Lab	14	IX	Conducting Effective Exercise Training A. Methods of individual and group exercise instruction B. Endurance training techniques C. Resistance training techniques D. Techniques for instructing balance and stability
Lecture	5	X	Nutrition and Weight Management A. Macronutrients B. Micronutrients C. Hydration D. Supplements E. Energy balance
Lab	10	XI	Behavior Modification A. Goal setting B. Motivational strategies C. Mindfulness
Lecture	3	XII	Business Aspects of Personal Training A. Identifying the target client B. Customer service C. Marketing and selling services D. Developing a business plan
Total Lecture Hours		36	
Total Laboratory Hours		54	
Total Hours		90	

IV. PRIMARY METHOD OF EVALUATION AND SAMPLE ASSIGNMENTS

A. PRIMARY METHOD OF EVALUATION:

Problem solving demonstrations (computational or non-computational)

B. TYPICAL ASSIGNMENT USING PRIMARY METHOD OF EVALUATION:

Using the one month NASM program design template, the student will create an effective endurance exercise training program for a 40 year old. The client is a sedentary male with a goal of weight loss, increased aerobic fitness, and the reduction of cardiopulmonary disease risk factors.

C. COLLEGE-LEVEL CRITICAL THINKING ASSIGNMENTS:

- Using results from the NASM squat assesment, the student will diagnose the muscles that are likely overactive and create a 30 day flexibilty program. This program will be written on the NASM flexibility program template.
- During a laboratory session, the student will evaluate their performace of the Rockport Step Test. Heart rate will be measured at the end of the test and then

analyzed via the Step Test chart in the text. The student will use this knowledge to diagnose the ideal intensity for a cardiorespiratory workout.

D. OTHER TYPICAL ASSESSMENT AND EVALUATION METHODS:

Essay exams
Performance exams
Quizzes
Reading reports
Written homework
Laboratory reports
Class Performance
Homework Problems
Term or other papers
Multiple Choice
True/False
Other (specify):
Exercise techniques demonstrations

V. INSTRUCTIONAL METHODS

Demonstration
Laboratory
Lecture
Multimedia presentations
Other (please specify)
Use of personal computers for generation of fitness profiles, exercise prescriptions, and nutritional evaluations.

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
Skill practice
Required reading
Written work

Estimated Independent Study Hours per Week: 4

VII. TEXTS AND MATERIALS

A. UP-TO-DATE REPRESENTATIVE TEXTBOOKS

NASM. NASM Essentials of Personal Fitness Training. 4th ed. Lippincott Williams and Wilkins, 2011.

B. ALTERNATIVE TEXTBOOKS

C. REQUIRED SUPPLEMENTARY READINGS

D. OTHER REQUIRED MATERIALS

VIII. CONDITIONS OF ENROLLMENT

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

Requisites	Category and Justification
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B. Requisite Skills

Requisite Skills

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification
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D. Recommended Skills

Recommended Skills

E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact
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Course created by Thomas Storer on 09/01/1989.

BOARD APPROVAL DATE:

LAST BOARD APPROVAL DATE: 11/21/2016

Last Reviewed and/or Revised by Brandon Alcocer on 03/04/2016