



El Camino College  
COURSE OUTLINE OF RECORD – Official

<b>Course Acronym:</b>	PE
<b>Course Number:</b>	290
<b>Descriptive Title:</b>	Personal Fitness Trainer
<b>Division:</b>	Health Sciences and Athletics
<b>Department:</b>	Physical Education
<b>Course Disciplines:</b>	Physical Education
<b>Catalog Description:</b>	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.
<b>Prerequisite:</b>	
<b>Co-requisite:</b>	
<b>Recommended Preparation:</b>	Eligibility for English 1A
<b>Enrollment Limitation:</b>	
<b>Hours Lecture (per week):</b>	2
<b>Hours Laboratory (per week):</b>	3
<b>Outside Study Hours:</b>	4
<b>Total Course Hours:</b>	90
<b>Course Units:</b>	3
<b>Grading Method:</b>	Letter Grade and Pass/No Pass
<b>Credit Status:</b>	Credit, degree applicable
<b>Transfer CSU:</b>	Yes
<b>Effective Date:</b>	Prior to July 1992
<b>Transfer UC:</b>	No
<b>Effective Date:</b>	
<b>General Education:</b>	ECC
<b>Term:</b>	
<b>Other:</b>	
<b>CSU GE:</b>	

	<b>Term:</b>
	<b>Other:</b>
	<b>IGETC:</b>
	<b>Term:</b>
	<b>Other:</b>
<b>Student Learning Outcomes:</b>	<p><b>SLO #1 Technique</b></p> <p>Students will demonstrate proper resistance training technique.</p> <p><b>SLO #2 Weight Loss</b></p> <p>Students will create a nutrition and fitness plan for an individual who has a goal of weight loss.</p> <p><b>SLO #3 Strength Improvement</b></p> <p>Students will achieve improvement in upper and lower body strength.</p>
<b>Course Objectives:</b>	<ol style="list-style-type: none"> <li>1. Appraise health history by obtaining information on past and present health and exercise experiences.</li> <li>2. Evaluate health history data with respect to assessment selection, exercise training considerations, or referral to other health professionals.</li> <li>3. Recognize the major risk factors associated with cardiovascular, respiratory, and metabolic diseases.</li> <li>4. Predict the expected cardiovascular, respiratory, and neuromuscular responses to acute incremental and constant rate exercise.</li> <li>5. Recognize the expected cardiovascular, respiratory, and neuromuscular adaptations to the effects of specific exercise training.</li> <li>6. Identify the major muscle groups of the human and specific resistance training exercises for each.</li> <li>7. Administer appropriate tests to assess cardiopulmonary fitness, body composition, muscular strength/power/endurance, and flexibility.</li> <li>8. Interpret the results of typical assessments for cardiopulmonary fitness, body composition, muscular strength/power/endurance, and flexibility.</li> <li>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.</li> <li>10. Discuss biomechanical considerations in weight lifting and other exercise techniques.</li> <li>11. Evaluate the quality and quantity of key macro- and micro-nutrients obtained from a 3-day diet log.</li> <li>12. Structure an appropriate nutritional plan based on a 3-day diet history.</li> <li>13. Integrate exercise training, nutrition, and behavior modification strategies in the design of a weight management program.</li> <li>14. Give examples of assessment and training considerations that must be addressed when working with special populations.</li> <li>15. Outline the necessary steps in establishing a Personal Trainer business.</li> </ol>
<b>Major Topics:</b>	<p><b>I. Health History Appraisal and Risk Factor Identification (6 hours, lecture)</b></p> <p>A. Medical and exercise history</p>

- B. Cardiovascular, pulmonary, and metabolic disease risk factors, signs, and symptoms
- C. Measurement of resting heart rate and blood pressure
- D. Risk stratification

**II. Basic Exercise Physiology (10 hours, lecture)**

- A. Cardiovascular System
- B. Pulmonary system
- C. Musculoskeletal system
- D. Nervous system
- E. Endocrine system
- F. Metabolism

**III. Acute Responses to Exercise (6 hours, lab)**

- A. Endurance exercise
- B. Resistance exercise
- C. Speed training

**IV. Adaptations to Chronic Endurance and Resistance Exercise Training (3 hours, lecture)**

- A. Cardiovascular
- B. Pulmonary
- C. Musculoskeletal
- D. Endocrine
- E. Metabolic

**V. Assessing Cardiorespiratory Fitness (8 hours, lab)**

- A. Laboratory testing
- B. Field testing

**VI. Assessing Musculoskeletal Performance (10 hours, lab)**

- A. Muscle strength
- B. Local muscle endurance
- C. Muscle power
- D. Range of motion
- E. Functional assessments

**VII. Assessing Anthropometric Variables (6 hours, lab)**

- A. Height, weight, body mass index, waist circumference, muscle girths
- B. Percent relative body fat, lean body mass, skeletal muscle mass

**VIII. Developing Individualized Exercise Plans (9 hours, lecture)**

- A. Endurance training
- B. Resistance training
- C. Speed and agility training

	<p>D. Balance and stability training E. Applications in special populations</p> <p><b>IX. Conducting Effective Exercise Training (14 hours, lab)</b></p> <p>A. Methods of individual and group exercise instruction B. Endurance training techniques C. Resistance training techniques D. Techniques for instructing balance and stability</p> <p><b>X. Nutrition and Weight Management (5 hours, lecture)</b></p> <p>A. Macronutrients B. Micronutrients C. Hydration D. Supplements E. Energy balance</p> <p><b>XI. Behavior Modification (10 hours, lab)</b></p> <p>A. Goal setting B. Motivational strategies C. Mindfulness</p> <p><b>XII. Business Aspects of Personal Training (3 hours, lecture)</b></p> <p>A. Identifying the target client B. Customer service C. Marketing and selling services D. Developing a business plan</p>
<b>Total Lecture Hours:</b>	36
<b>Total Laboratory Hours:</b>	54
<b>Total Hours:</b>	90
<b>Primary Method of Evaluation:</b>	2) Problem solving demonstrations (computational or non-computational)
<b>Typical Assignment Using Primary Method of Evaluation:</b>	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.
<b>Critical Thinking Assignment 1:</b>	Using results from the NASM squat assessment, the student will diagnose the muscles that are likely overactive and create a 30 day flexibility program. This program will be written on the NASM flexibility program template.
<b>Critical Thinking Assignment 2:</b>	During a laboratory session, the student will evaluate their performance 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.

<b>Other Evaluation Methods:</b>	Class Performance, Essay Exams, Homework Problems, Laboratory Reports, Multiple Choice, Other (specify), Performance Exams, Quizzes, Reading Reports, Term or Other Papers, True/False, Written Homework
<b>Instructional Methods:</b>	Demonstration, Lab, Lecture, Multimedia presentations, Other (specify)
<b>If other:</b>	Use of personal computers for generation of fitness profiles, exercise prescriptions, and nutritional evaluations.
<b>Work Outside of Class:</b>	Required reading, Skill practice, Study, Written work (such as essay/composition/report/analysis/research)
<b>If Other:</b>	
<b>Up-To-Date Representative Texts:</b>	Schoenfeld, Brad J, Ronald L. Snarr et al. <u>NSCA's Essential of Personal Training</u> . 3rd edition, Human Kinetics. 2022.
<b>Alternative Texts:</b>	
<b>Required Supplementary Readings:</b>	
<b>Other Required Materials:</b>	
<b>Requisite:</b>	
<b>Category:</b>	
<b>Requisite course(s): List both prerequisites and corequisites in this box.</b>	
<b>Requisite and Matching skill(s):</b> <b>Bold the requisite skill. List the corresponding course objective under each skill(s).</b>	
<b>Requisite Skill:</b>	
<b>Requisite Skill and Matching Skill(s):</b> <b>Bold the requisite skill(s). If applicable</b>	
<b>Requisite course:</b>	
<b>Requisite and Matching skill(s):</b> <b>Bold the requisite skill. List the corresponding course objective under each skill(s).</b>	
<b>Requisite Skill:</b>	Eligibility for English 1A
<b>Requisite Skill and Matching skill(s):</b> <b>Bold the requisite skill. List the corresponding course objective under</b>	<b>Students will be able to read, comprehend and analyze reading assignments assigned from the textbook.</b>  <b>Students will be able to compose a variety of sentence types and edit them for correct grammar, appropriate word choice, and accurate spelling.</b>

<b>each skill(s). If applicable</b>	<b>Comprehension of reading college level textbooks will enhance students success if they have these skills.</b>  Summarize, analyze, evaluate, and synthesize college-level texts.
<b>Enrollment Limitations and Category:</b>	
<b>Enrollment Limitations Impact:</b>	
<b>Course Created by:</b>	Thomas Storer
<b>Date:</b>	09/01/1989
<b>Original Board Approval Date:</b>	
<b>Last Reviewed and/or Revised by:</b>	Danielle Roman
<b>Date:</b>	10/17/2023
<b>Last Board Approval Date:</b>	01/17/2024
<b>Effective Term:</b>	FALL 2024