I. **OVERVIEW**
   The following information will appear in the 2009 - 2010 catalog

   **PE 130**
   **Personal Trainer Health Fitness Instructor** 3 Units

   **Formerly listed as:** PE - 130: Personal Trainer Health Fitness Instr.
   Basic competency in designing and implementing fitness programs for a healthy population. Features both practical and theoretical instruction as well as career advice. Emphasis on safe, effective and efficient methods of teaching cardiovascular training, resistance training, balance training and flexibility training for individuals or groups. Covers a broad range of exercise physiology, exercise program design, anatomy of major muscle groups, interval and circuit training, exercise biomechanics, advanced lifting techniques, the basics of working with special populations, and exercise progression.

   **Advisory:** Before enrolling in this course, students are strongly advised to satisfactorily complete PEC 195 or satisfactorily complete PEC 197 or satisfactorily complete PEW 192

   Field trips are not required. **Units/Hours:** 3.00 Units: Lecture - 54.00 hours

   **Grading:** A-F or P/NP - Student choice **Transfer:** CSU

II. **LEARNING CONTEXT**
   Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

   **A. COURSE CONTENT**

   1. **Required Content:**

      a. **Professionalism**

         i. Establishing credibility

         ii. Remaining current

         iii. Traits and responsibilities

         iv. Job opportunities

      v. **Licenses**

         a. **Fitness**

         b. **Business**

         vi. Insurance

      vii. **Trainer/Facility agreements**

      viii. **Associations**

      ix. **Ethics**

      b. **Physical assessments**

         i. **ACSM risk stratification**
ii. Medical considerations
   a. medical clearance
   b. special medical conditions

c. Liability

d. Programming with fitness components and FITT principle
   i. Warm up
   ii. Muscular endurance
   iii. Muscular strength
   iv. Cardiorespiratory endurance
   v. Cool down
   vi. Flexibility training
   vii. Fitness assessments
   viii. Emergency procedures

e. Assessments
   i. Measuring intensity
   ii. Borg's Scale of Perceived Exertion
   iii. Target Heart Rate formulas
      a. Resting, active, and recovery
   iv. Fitness
   v. Measuring blood pressure
   vi. Postural screening
      a. Lordosis
      b. Kyphosis
      c. Scoliosis
      d. Leg length discrepancy
   vii. Body composition tests
   viii. Three minute step test
   ix. Twelve minute walk/run field test
   x. Sit-up test
   xi. Bench press muscular strength test
xii. Vertical jump test

xiii. Sti and reach flexibility test

xiv. Hip joint and inner thigh flexibility test

xv. Shoulder reach flexibility test

f. Cardiorespiratory Fitness
   i. Aerobic exercise
   ii. Anaerobic exercise
   iii. Benefits of cardiorespiratory exercise
      a. Surgeon General's guidelines

g. Anatomy and biomechanics
   i. Joint actions
   ii. Range of motion
   iii. Skeletal system
   iv. Muscular system
   v. Anatomical planes

h. Muscle categories for resistance training: actions, exercises, and precautions
   i. Back
   ii. Shoulder joint
   iii. Chest and arms
   iv. Anterior trunk
   v. Posterior hip
   vi. Hamstring
   vii. Hip adductor
   viii. Posterior calf
   ix. anterior shin

i. Muscular contractions

j. Training principles
   i. Frequency
   ii. Intensity
   iii. Overload principle
iv. Duration
v. Volume
vi. Work
vii. Power

k. ACSM resistance training guidelines

l. Benefits of weight training
   i. Machines versus free weights
   ii. Resistance techniques
   iii. Spotting

m. Typical weight room exercises and spotting techniques

n. Core Training

o. Balance Training

p. Injury prevention

q. Exercise Modifications

r. The "personal" in personal training

s. Development of a personalized program

t. The power of humor

u. First aid/CPR certification requirements

B. **ENROLLMENT RESTRICTIONS**

1. **Advisories**

   Before enrolling in this course, students are strongly advised to satisfactorily complete PEC 195 satisfactorily complete PEC 197 satisfactorily complete PEW 192

2. **Health and Safety Skills/Restrictions**

   Before entering the course, the student must demonstrate the following skill or condition:

   a. General Knowledge of weight training and its related safety components.

C. **HOURS AND UNITS**

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D. METHODS OF INSTRUCTION (TYPICAL)

Instructors of the course might conduct the course using the following method:

1. Lectures using Power Point Presentation
2. Discussion focusing on applications of exercise principles
3. Actual practice focusing on application of safe biomechanics, spotting and cueing for weight training, stability, fit-bands and core training
4. Videos/DVDs
5. Apply principles learned while writing personalized exercise program using periodization and macrocycling
6. Review current periodicals

E. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS

Time spent on coursework in addition to hours of instruction (lecture hours)

   a. Weekly weight training exercise lab card.
   b. Weekly reading of exercise science activities
   c. Per term, group project

2. EVIDENCE OF CRITICAL THINKING

Assignments require the appropriate level of critical thinking

   a. Fitness Presentations: Students must complete a fitness presentation on a topic identified and determined relevant to the individual and his or her personal situation. Students must thoroughly evaluate the topic and present the information in both verbal and written forms.

F. TEXTS AND OTHER READINGS (TYPICAL)


III. DESIRED LEARNING

A. COURSE GOAL

As a result of satisfactory completion of this course, the student should be prepared to:

Design and implement fitness programs for a healthy population. Provide practical instruction with an emphasis on safe, effective and efficient methods. Show beginning competency in exercise physiology, prescription and anatomy of major muscle groups as well as lifting technique and exercise progression.

B. STUDENT LEARNING GOALS

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals
Upon satisfactory completion of this course, the student will be able to:

a. Develop practical application of the concepts and theories of fitness.

b. Design and instruct a complete program, incorporating students’ interests, goals and current fitness levels.

c. Identify concepts and themes of basic exercise science, anatomy and physiology.

d. Describe the characteristics of different muscle fiber types and predict their relative involvement in different sport events.

e. Address factors that effect flexibility.

f. Describe proper resistance training exercise and spotting techniques.

g. Describe the basic energy systems present in skeletal muscle.

h. Address the importance of aerobic and resistance exercise on the physiological characteristics of the cardiovascular system.

i. Understand aerobic endurance training and its correlation with training intensity.

j. Designate exercises in a training session according to type.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Practical tests

B. SUMMATIVE ASSESSMENT

1. Written exercise programs for various case histories

2. Required writing assignments

3. Completion of various charts (muscles, bones, planes, etc.)

4. Practical tests on fitness assessments, weight training, stability ball, core training and primary muscle functions