Las Positas College
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Course Outline for KIN CT1

CIRCUIT TRAINING 1

Effective: Spring 2019

I. CATALOG DESCRIPTION:
KIN CT1 — CIRCUIT TRAINING 1 — 1.00 - 2.00 units

This kinesiology class will offer the student an opportunity to learn how to exercise safely in a Weight/Cardio gym. Circuit, Interval and Cross Training programs will be introduced. The topics of discussion will include: equipment orientation and safety, Principles of Resistance and Aerobic Training, energy systems used for various training regimens, and the benefits of exercise in establishing and maintaining a healthy lifestyle throughout life.

1.00 - 2.00 Units Lab

Grading Methods:
Letter or P/NP

Discipline:
- Kinesiology

Family: Kinesiology Circuit Training

	MIN	MAX
Lab Hours:	54.00	108.00
Total Hours:	54.00	108.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

V. CONTENT:
- A. Orientation to the Gym layout of equipment and Safety Guidelines for usage
  1. Weight training machines - Fly, Leg Press, Chest Press, Cable/Pulleys, Quad Extension, Hamstring Curl, Leg abductor/adductor
  2. Cardio machines: Treadmill, Stationary Cycles, Recumbent Bikes, Jacob's Ladder, eliptycle, stairmaster
  3. Appropriate gym etiquette
- B. Definition of Training Regimins
  1. Circuit Training
  2. Interval Training
  3. Cross Training
- C. Resistance Training Principles
  1. Musculoskeletal Strength Versus Muscular Endurance
  2. Variables of Training - sets, repetition, resistance, recovery,tempo,
  3. Principles of Training - overload, progression, rest, diminishing returns
  4. Basic musculoskeletal anatomy & anatomical terminology
- D. Cardio Training Principles
  1. Aerobic versus anaerobic training
  2. Assessment of Intensity
     a. Target Heart Rate - Karvonen Formula
     b. Perceived Exertion Scale
     c. "Talk" Test
  3. Cardio-Physiology
     a. Oxygen Uptake (VO2 uptake)
     b. Ejection Fraction
     c. Lower Heart Rates - exercising & resting
- E. Energy Systems used in Training
  1. Aerobic endurance - glycogen system - cardio equipment
  2. Anaerobic exercise - ATP system - strength equipment
  3. Lactic Acid System
  4. Thresholds of Training
- F. Benefits of Physical Training for Healthy Lifestyle

VI. METHODS OF INSTRUCTION:

A. **Individualized Instruction** -
B. **Discussion** -

VII. TYPICAL ASSIGNMENTS:
A. Student will be asked to read specific chapters in text that are related to subject matter being discussed in lecture content.
B. Student will design a personal exercise routine to be used as the activity component of class.
C. Students will perform pre and post fitness assessments relative to circuit training programs.
D. Student will complete an anatomy handout with correct basic musculoskeletal anatomy.
E. Student will research the benefits of resistance and cardio training programs relative to healthy lifestyle.

VIII. EVALUATION:
A. **Methods**

1. Exams/Tests
2. Class Performance
3. Other:
    a. Daily attendance will be taken and noted
    b. Active Participation will be observed and documented
    c. Pre and Post Fitness Assessments - muscular and cardio endurance evaluations
        1. 1 mile walk, Core Assessment, 40 Second Muscular Endurance

B. **Frequency**

1. Final Exam will be given during Finals Week as determined by College
2. Each class session attendance and performance will be documented
3. Third week of semester - pre fitness assessment conducted
4. Fifteenth week of semester - post fitness assessment conducted

IX. TYPICAL TEXTS:

X. OTHER MATERIALS REQUIRED OF STUDENTS:
A. Student shall provide appropriate exercise attire for relative activity, personal towel, and water bottle.
B. Student should have access to Blackboard for Instructor postings and internet access for reference materials.