Las Positas College
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Course Outline for KIN CYCL2

CYCLING 2

Effective: Spring 2018

I. CATALOG DESCRIPTION:
KIN CYCL2 — CYCLING 2 — 0.50 - 2.00 units

This course is the second in a series of Indoor Cycling courses. Emphasis is based on beginning to intermediate cycling techniques, heart rate calculations, fitness evaluations, and cardiovascular training and program design. Beginning level principles of physiology are explored including how to train to elicit a desired physiological response. Utilizing a variety of equipment student will develop core endurance and strength. This class is designed for students interested in aerobic fitness improvement through indoor cycling as well as Kinesiology majors.

0.50 - 2.00 Units Lab

Grading Methods:
Letter or P/NP

Discipline:
- Physical Education

Family: Kinesiology Cycling

	MIN	MAX
Lab Hours:	27.00	108.00
Total Hours:	27.00	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:

A. Organize a training goal based upon sprint training principles and create an interval program based on the individual's personal indoor cycling goals.
B. Calculate Target Heart Rate Zone for the purpose of establishing a safe and effective personal indoor sprint-cycling workout and demonstrate an understanding of the benefits of training within a target heart rate zone.
C. Demonstrate effective, safe and appropriate form and safety considerations for various bodypositions during drills (e.g. standing climb, seated sprint, seated climb, etc.)
D. Measure current fitness and formulate an individualized sprint cycling program.
E. Identify training objectives for improving or maintaining healthy weight management.
F. Determine and utilize resting heart rate, recovery heart rate and perceived exertion utilizing a chart to determin mild moderate and maximal efforts

V. CONTENT:
A. Introduction to Cadence/RPM's
1. Timing and technique
2. Checking Revolutions Per Minute
3. Positioning of the Seat
4. Handlebar height adjustment
5. Pedals and Toe straps
6. Hydration and Towels
7. Appropriate attire
B. Spin Techniques and Proper Technique of Stationary Cycling
1. Warm-up
2. Warm-down
3. Importance of Changing Positions
4. Jumps
5. Standing flats
6. Standing hills
7. Seated hills
C. Exercise recovery measurement and analysis
1. Heart Rate (HR) Calculations and Intensity Evaluations
2. Resting HR
3. Exercise recovery measurement and analysis
4. Target heart rate calculation and exercise application

5. 65 - 85% of max HR calculations

D. Perceived Exertion
   1. Perceived Exertion charts
   2. Borg Scale
   3. Talk Test

E. Anaerobic Training
   1. Oxygen Debt
   2. Muscle fuel
   3. Glucose and the Brain

F. Aerobic Training
   1. Fat Burning
   2. Glycogen Burning and Storage

G. Methods of training to meet desired goals
   1. S.M.A.R.T. Goals
   2. Behavior Change Project and Viability

H. Flexibility
   1. Definitions and Application
   2. Types of Stretches
   3. Achilles, Quadriceps, Hamstrings, Gluteal Muscles, Shoulders, Back

I. Fitness Assessment
   1. Pre-test assessment
   2. Post-test assessment
   3. Planning and Behavior Change

VI. METHODS OF INSTRUCTION:

A. **Lab** - A. Audio-visual Activity - B. Classroom Activity - C. Demonstration - D. Guest Lecturers - E. Individualized Instruction - F. Lab - G. Observation and Demonstration -

VII. TYPICAL ASSIGNMENTS:

A. Students are required to turn in written assignments that are designed to develop problem solving in relationship to sprint cycling conditioning requirements.
B. Specific reading assignments from the designated instructional materials are assigned on a regular basis throughout the semester.
C. Laboratory activity is designed for development of student understanding and skill within the course content.
D. A series of exercises/activities to warm-up the body and focuses the mind on the body's potential for movement.
E. Instructor or student demonstration of each exercise/skill, the students must then analyze the exercise/activity for mechanics and sequence.

VIII. EVALUATION:

A. **Methods**

1. Quizzes
2. Class Participation
3. Class Performance
4. Other:
   a. Student participation

B. **Frequency**

1. Quizzes- Written quizzes on anatomy and common terms used in cycling/sprint training training. 1 to 3 times per semester
2. Class Participation- "daily" participation in class "sprint training" is required and proper pace of cycle sprinting
3. Class Performance- proper breathing, pacing and hydration. Every session/class
4. Student participation
   a. Effort demonstrated
      1. Participation is evaluated daily
      2. Performance of proper technique and demonstration of correct technique and form

IX. TYPICAL TEXTS:

1. Fahey, Thomas . *Fit & Well: Core Concepts and Labs in Physical Fitness and Wellness.* 12 ed., McGraw-Hill, 2016.
2. Shechtman, Norma . *Indoor Cycling: Basics & Beyond.* 3 ed., Human Kinetics, 2015.
3. Hobson, W., & Friel, D. . Workouts in a Binder® for Indoor Cycling . Velopress , 2015.

X. OTHER MATERIALS REQUIRED OF STUDENTS: