Las Positas College
3000 Campus Hill Drive
Livermore, CA 94551-7650
(925) 424-1000
(925) 443-0742 (Fax)

Course Outline for KIN CYCL1

CYCLING CONDITIONING 1

Effective: Fall 2016

I. CATALOG DESCRIPTION:
KIN CYCL1 — CYCLING CONDITIONING 1 — 1.00 - 2.00 units

This course is an introduction to Physical Fitness through indoor cycling. The cycling program is an individually paced, noncompetitive, group training program designed for all riders and all fitness levels. Cycling is an exercise performed on a stationary bicycle and is performed to music. The course is open to anyone who is interested in developing muscular endurance, improved cardio-respiratory endurance and body composition.

1.00 - 2.00 Units Lab

Grading Methods:
Letter or P/NP

Discipline:

Family: Kinesiology Cycling

	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:

1. Demonstrate effective and safe riding technique to maximize endurance gains.
2. Identify major muscle groups and their function in cycling performance.
3. Demonstrate the biomechanics of proper pedaling.
4. Measure current fitness and formulate an individualized cycling program.
5. Learn the appropriate attire and footwear for efficient cycling conditioning.
6. Improve cardiovascular endurance through target heart rate in a non impact activity.
7. Explain and demonstrate heart rate monitoring techniques at rest, during training, and post exercise recovery.
8. Demonstrate appropriate warm-up, flexibility, and cool down techniques as they relate to cycling conditioning.
9. Acquire breathing and body awareness skills to enhance performance and enjoyment.

V. CONTENT:
Introduction to Equipment

A. Footwear/shoelaces
B. Seat and post height positioning
C. Fore and aft seat positioning
D. Handlebar height adjustment
E. Pedals and Toe straps
F. Hydration and Towels
G. Appropriate attire

Biomechanics and Proper Technique of Cycling

A. Hand positions
B. Core Movements
C. Seated flats
D. Standing flats
E. Seated hills
F. Standing hills
G. Jumps
H. Warm up, Flexibility Work and Cool Down

Description of Proper Breathing Techniques

A. Breathing and abdominals
B. Visualization techniques
C. Relaxation Techniques

Pedaling Cadence and Proper Workload

A. Spinning Routines
B. Jumps
C. Sprints
D. Timed Combination Workouts

Effects of Resistance

A. Jumping on a hill
B. Running with resistance
C. Sprinting on a hill
D. Rhythm release and pedal efficiency

Cycling Technique and Practice

A. Instructor guided rides
B. Heart Rate Monitoring
C. Resting Heart Rate
D. Activity Heart Rate
E. Heart Rate Zone
F. Rate of Perceived Exertion
G. Recovery Heart Rate

Health Risks Associated with Sedentary Lifestyle

A. Obesity
B. Diabetes
C. Heart Disease

VI. METHODS OF INSTRUCTION:

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

VII. TYPICAL ASSIGNMENTS:

Students are required to turn in written assignments that are designed to develop problem solving in relationship to the cycling conditioning requirements.

Specific reading assignments from the designated instructional materials are assigned on a regular basis throughout the semester.

Laboratory activity is designed for development of student understanding and skill within the course content.

A series of exercises/activities to warm-up the body and focuses the mind on the body's potential for movement.

Instructor or student demonstration of each exercise/skill, the students must then analyze the exercise/activity for mechanics and sequence.

Students explore their motor patterns through discussion and analysis of the purpose of each skill. Guiding students to make choices in timing, spatial direction, sequence, and force, will assist with student skill development.

Students work collaboratively to analyze acitivity challenges and strategies, solve them, and then evaluate the result.

Group discussion, facilitated by the instructor, along with possible video viewing, contributes to this evaluation process.

VIII. EVALUATION:

A. **Methods**

1. Exams/Tests
2. Quizzes
3. Group Projects
4. Class Participation
5. Home Work
6. Class Performance

B. **Frequency**

Written work will be evaluated based on class readings, 1-3 assignments per semester

Class Participation, Daily

Several short quizzes will be given during the semester to evaluate the skills developed in relationship to cycling

conditioning skills and strategies. 2-3 per semester

Objective exams will be used to evaluate a student's recall of key concepts and fundamental elements of the course content. 1-2 per semester

Performance exams will be given to students periodically throughout the term to evaluate the student's demonstration of critical thinking and analysis of the physical movement being addressed, quality and effort displayed in the performance of the objective, and tknowledge gained from the experience. 2 per semester

IX. TYPICAL TEXTS:

1. Edwards, Sall, and Sally Reed. *The Heart Rate Workbook for Indoor Cyclist: A Heart Zone Traning Manuel .* 1st ed., Velo Press, 2001.
2. Petereson, James. *RealRyder Indoor Cycling Certified Instructor Manual.* 2nd ed., Healthy Living, 2014.
3. Yeager, Selene, and Leslie Bonci. *Bike Your Butt Off!: A Breakthrough Plan to Lose Weight and Start Cycling (No Experience Necessary!).* 3rd ed., Rodale, 2014.

X. OTHER MATERIALS REQUIRED OF STUDENTS:

A. 1. Towel 2. Water Bottle 3. Cycling Shorts 4. Cycling Shoes or Tennis shoes