Las Positas College
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Course Outline for KIN 6

PERSONAL TRAINER

Effective: Spring 2019

I. CATALOG DESCRIPTION:
KIN 6 — PERSONAL TRAINER — 3.50 units

This course emphasizes the theoretical and hands on skills required of personal trainers, coaches and fitness professionals. This course will bridge the gap between exercise science, kinesiology and practical hands-on learning by integrating the latest in scientific and physiologically based research. This class will have lectures, labs, group work/discussions and assignments.

3.00 Units Lecture 0.50 Units Lab

Grading Methods:
Letter or P/NP

Discipline:
- Kinesiology

	MIN
Lecture Hours:	54.00
Lab Hours:	27.00
Total Hours:	81.00

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. Compare and contrast the structure, role, and the function of skeletal muscle.
2. Identify factors that effect the magnitude and rate of adaptations to resistance training.
3. Differentiate between the positive and the negative coronary risk factors associated with cardiovascular disease.
4. Evaluate and stratify the health status of potential clients.
5. Critique a sample client's diet and estimate his or her energy expenditure and daily requirements.
6. Construct valid and reliable measurements of a theoretical clients' fitness level and select appropriate tests for individual clients utilizing normative data.
7. Identify and illustrate the personal trainers' role in relation to specific orthopedic injury, musculoskeletal and rehabilitation concerns.

V. CONTENT:

A. Structure and Function of the Skeletal, Nervous and Muscular Systems
   1. Introduction to the skeletal, muscular, connective and nervous systems
   2. Biomechanics
   3. Cardiovascular and respiratory system
   4. Resistance training

B. Nutrition and Dietary Assessment
   1. Energy
   2. Nutrients
   3. Weight gain and loss
   4. Evaluating weight loss diets

C. Consultation and Evaluation
   1. Purpose of health appraisal and consult
   2. Fitness assessment and evaluation
   3. Assessment case studies
   4. Fitness testing protocols and norms
   5. Assessment of specific orthopedic or musculoskeletal concerns.

D. Body Composition
   1. Essential body fat and body mass index
   2. Weight management and factors affecting caloric balance
   3. Components of metabolism

E. Aerobic, Anaerobic Training and Flexibility
   1. Resistance training
   2. Cardiovascular training

3. Flexibility and passive stretching

F. Creating a Program
   1. F.I.T.T.
   2. Rest and variation

G. Safety and Special Populations
   1. Facilities
   2. Special populations, geriatrics etc.
   3. Safety and legal concerns

VI. METHODS OF INSTRUCTION:

A. **Critique** - In class and online practice quizzes- The practice quizzes will be incorporated into the curriculum in order to help facilitate further understanding and facilitate clarity from the classroom lectures. The quizzes will be helpful in aiding the students understanding of the material previously covered and with material in the mid-term and final.
B. **Lab** - The labs will be used to enhance the lectures and for the students to obtain practical experience in the implementation, delivery and administration of a personal and group fitness program.
C. **Observation and Demonstration** - The fitness instructor will show and give demonstrations on how to properly train various body parts and muscle systems.
D. **Lecture** - The instructor will give targeted lectures that cover the material that is in the book, covered in handouts or needs to be clarified/delivered.
E. **Discussion** - The instructor will use Scenarios that enhance learning opportunities by augmenting the lab and classroom discussion, for example; Various students- will be asked to prepare and then name/demonstrate eight safety guidelines for weight training.
F. **Student Presentations** - The instructor will critique at least two of the students' projects during the semester.
G. **Projects** - There will be at least one group project during the semester that enhances student cooperation. Students will collaborate in private groups to solve problems, become more proficient in on a certain topic or concept.

VII. TYPICAL ASSIGNMENTS:

A. Writing, problem-solving, critical thinking or performance:
   1. Organize and relate the three basic principles of weight training;
      a. overload principle
      b. variation principle
      c. specificity principle
   2. Students will each keep a four-day log recording everything they eat (two weekdays and two weekend days) utilizing an online program. This record will include the type of food and amount. Then the students will analyze their diets and prepare a written self-assessment.

B. Readings:
   1. Read Chapter 10 and 11, in "Advanced Concepts of Personal Training," be prepared to analyze results and be able to make recommendations based on current percent body fat norms.
   2. Find a journal article on a specific injury in the ACSM journal or the Journal of Strength and Conditioning, and report on it to the class in either the form of a oral presentation or a written report.

C. Group Work:
   1. The students will create a functional training exercise progression model for the upper body musculature in groups of two or four.
   2. The students will work cooperatively to design a fitness program based on the individual needs described in case studies.

D. Term Paper:
   1. Students will choose an appropriate topic (with the guidance of the Instructor) and prepare a research paper and a power-point presentation at the end of the term.
   2. Students will be asked to write about a specific biomechanical pattern and analyse the movement applying Newton's second law of motion. And develop activities that directly apply the correct techniques to the kinesis.

VIII. EVALUATION:

Methods/Frequency

A. Exams/Tests
   at least one
B. Quizzes
   at least three
C. Research Projects
   at least one
D. Papers
   at least one
E. Oral Presentation
   at least two
F. Projects
   at least one
G. Simulation
   at least two
H. Group Projects
   at least one
I. Class Participation
   daily
J. Class Work
   daily
K. Lab Activities
   daily

IX. TYPICAL TEXTS:

1. Haff, Gregory, and Travis Triplett. *Essentials of Strength Training and Conditioning 4th Edition With Web Resource.* 4th ed., Human Kinetics, 2016.
2. Keough, Jeremy, Susan Sain, and Carolyn Roller. *Kinesiology for the Occupational Therapy Assistant: Essential Components of Function and Movement.* 2nd ed., Slack Inc, 2017.
3. Jacobs, Patrick. *NSCA's Essentials of Training Special Populations.* 1st ed., Human Kinetics, 2018.

X. OTHER MATERIALS REQUIRED OF STUDENTS: