

Las Positas College
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Course Outline for KIN BC3

BOOT CAMP FOR POWER & STRENGTH TRAINING

Effective: Spring 2015

I. CATALOG DESCRIPTION:

KIN BC3 — BOOT CAMP FOR POWER & STRENGTH TRAINING — 1.00 - 2.00 units

Improve muscle strength & power through a variety of drills and military style movements. Functional training delivered in an intense environment.

1.00 - 2.00 Units Lab

Grading Methods:

Letter or P/NP

Discipline:

Family: Kinesiology Boot Camp

	<u>MIN</u>	<u>MAX</u>
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:

- Specify the the body's physiological responses when a person performs power and strength (anaerobic) exercise.
- Identify training methods used to enhance power and strength
- Perform measurable power and strength fitness tests
- Recite the body's physiological responses when undertaking power and strength exercise

V. CONTENT:

- Power and strength training techniques
 - Squats
 - Deadlifts
 - Power cleans
 - Snatches
- The benefits of strenght and power exercises
 - Muscular co-ordination of whole body movements
 - Fast twitch fibre recruitment
 - Elastic tendon energy relaease
- Power and strength measures
 - Vertical jumps (squat jump, standing broad jump, counter movement jump and drop jumps from heights of 30, 50 and 80 cm)
 - Maximal strength tests for specific exercises, for example safe version of the 1RM Bench Press
- Body's responses when undertaking strength and power exercises
 - Response of phosphogen system
 - Response of lactic acid system

VI. METHODS OF INSTRUCTION:

- Classroom Activity** -
- Lecture** -
- Audio-visual Activity** -
- Student Participation in class workouts
- Demonstration** -

VII. TYPICAL ASSIGNMENTS:

- Follow instructor through strength and power activites
- Demonstrate knowledge of how the body responds to strength and power training
- Recite current research findings in the field of strength and power training and apply it to a sport/activity of students' choice
- Design a six-week training program to prepare an athlete to participate in a sport/event which requires strength & power

VIII. EVALUATION:

- Methods**

1. Research Projects
2. Papers
3. Class Participation
4. Class Performance
5. Other:
 - a. Student participation in strength and power activities
 - b. Perform various tests to assess power and strength. For example; squat jump, standing broad jump, counter movement jump and drop jumps from heights of 30, 50 and 80 cm) are performed. Maximal strength tests for specific exercises should be conducted, safe versions of the 1RM Bench Press for example.
 - c. Project to illustrate understanding of strength and power training methods
 - d. Project to demonstrate comprehension of the body's physiological responses when the he phosphogen system and the lactic acid system are utilized

B. Frequency

1. Pre/Post Evaluation
2. Daily evaluation of student's participation
3. Projects assigned periodically to assess understanding of training methods and body's responses to strength and power training.

IX. TYPICAL TEXTS:

1. Reynolds, G *The First 20 Minutes: Surprising Science Reveals How We Can: Exercise Better, Train Smarter, Live Longer.*, Hudson Street Press, 2012.
2. Heyward, V. *Advanced Fitness Assessment and Exercise Prescription.*, Human Kinetics, 2010.
3. Instructors' hand-outs

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Students are to provide their own workout clothes, appropriate shoes, and a towel.
- B. Personal water bottle is optional (water fountain is available.)