# **KIN R148: POWER LIFTING AND FREE WEIGHTS**

Originator dfrehlich

College

Oxnard College

Discipline (CB01A) KIN - Kinesiology

Course Number (CB01B) R148

**Course Title (CB02)** Power Lifting and Free Weights

Banner/Short Title Power Lifting and Free Weights

**Credit Type** Credit

Start Term Fall 2021

#### Formerly

PE R107 - Power Lifting and Free Weights

#### **Catalog Course Description**

This course builds strength, power and bulk using exercises which center on the development of core strength and multi-joint power lifts. Through the implementation of competitive drills and routines, the development of agility, quickness, coordination, balance and speed in the conditioning phase are emphasized. Course is offered Pass/No Pass at student's option. Course is offered Pass/No Pass (P/NP) at student's option. Transfer credit: CSU;UC.

Taxonomy of Programs (TOP) Code (CB03)

0835.00 - Physical Education

Course Credit Status (CB04)

D (Credit - Degree Applicable)

#### Course Transfer Status (CB05) (select one only)

A (Transferable to both UC and CSU)

#### **Course Basic Skills Status (CB08)**

N - The Course is Not a Basic Skills Course

## SAM Priority Code (CB09)

E - Non-Occupational

#### **Course Cooperative Work Experience Education Status (CB10)**

N - Is Not Part of a Cooperative Work Experience Education Program

#### **Course Classification Status (CB11)**

Y - Credit Course

Educational Assistance Class Instruction (Approved Special Class) (CB13) N - The Course is Not an Approved Special Class

**Course Prior to Transfer Level (CB21)** Y - Not Applicable Course Noncredit Category (CB22)

Y - Credit Course

**Funding Agency Category (CB23)** Y - Not Applicable (Funding Not Used)

**Course Program Status (CB24)** 1 - Program Applicable

**General Education Status (CB25)** Y - Not Applicable

Support Course Status (CB26) N - Course is not a support course

**Field trips** Will not be required

**Grading method** Letter Graded

Alternate grading methods Student Option- Letter/Pass Pass/No Pass Grading

Does this course require an instructional materials fee? No

Repeatable for Credit No

Is this course part of a family? No

## **Units and Hours**

Carnegie Unit Override No

## **In-Class**

Lecture

Activity

Laboratory Minimum Contact/In-Class Laboratory Hours 52.5 Maximum Contact/In-Class Laboratory Hours 52.5

## **Total in-Class**

Total in-Class Total Minimum Contact/In-Class Hours 52.5 Total Maximum Contact/In-Class Hours 52.5

## **Outside-of-Class**

Internship/Cooperative Work Experience

Paid

Unpaid

# **Total Outside-of-Class**

**Total Outside-of-Class** 

## **Total Student Learning**

Total Student Learning Total Minimum Student Learning Hours 52.5 Total Maximum Student Learning Hours 52.5

### Minimum Units (CB07)

1

#### Maximum Units (CB06)

1

## Student Learning Outcomes (CSLOs)

	Upon satisfactory completion of the course, students will be able to:
1	Assess their one repetition maximum and use it to build a periodized training program for muscular strength
2	Demonstrate which weight training systems (i.e. split routines, peripheral heart actions, supersets, circuits, compound sets and power sets)
3	Apply the principles of fitness program design to build a specific exercise program to meet their individualized fitness goals including: repetitions, sets, rest periods, tempo, volume, path of motion, and range of motion

#### **Course Objectives**

	Upon satisfactory completion of the course, students will be able to:
1	Develop and apply a training program which includes muscular strength, muscular endurance, muscular hypertrophy, power, flexibility, balance training, improvements in coordination and body composition management.
2	Apply proper lifting, breathing, and spotting techniques associated with a variety of resistance training exercises
3	Develop a comprehensive weight training program that will successfully meet their physical needs and goals.
4	Monitor and adjust weight training programs, using exercise science principles to optimize improvement in muscular strength, hypertrophy, and endurance using a variety of training systems.
5	Define and apply to their exercise program the principles of: repetition, set, rest period, tempo, volume, path of motion, range of motion, specificity, overload, periodization, and progression resistance.
6	Differentiate between weight training systems using split routines, peripheral heart actions, supersets, circuits, compound sets and power sets.
7	Describe the function and importance of nutrition in exercise performance, health, and body composition.
8	Demonstrate proper weight room etiquette and safety.

## **Course Content**

## Lecture/Course Content

- 1. Introduction
  - a. Components of fitness
  - b. Weight room organization
  - c. Weight room etiquette

- d. Partner training principles
- e. Safety guidelines
- 2. Workout Program Design
- a. Goals
  - i. Endurance
  - ii. Strength
  - iii. Power
  - iv. Hypertrophy
  - b. Principles
    - i. Progressive Overload: FITT
    - ii. Specificity
    - iii. Rest and Recuperation
    - iv. Reversibility
  - c. Training Methods
    - i. Split routines
    - ii. Peripheral heart action
    - iii. Supersets
    - iv. Circuit
    - v. Compound sets
    - vi. Multi-joint power lifts
- 3. Nutrition for training and body composition
  - a. Bioenergetics
  - b. Macronutrients
- 4. Biomechanics of Physical Activity
  - a. Proper lifting mechanics
  - b. Force
    - i. Push-Pull
    - ii. Power
    - iii. Work
    - iv. Torque
  - c. Laws of Nature
    - i. Newton's First Law: Law of inertia
    - ii. Newton's Second Law: Law of Acceleration
    - iii. Newton's Third Law: Law of Action and Reaction
  - d. Assessment and Evaluation
    - i. Repetition Maximum
  - e. Anatomical Locations
    - i. Anterior
    - ii. Posterior
    - iii. Midline
    - iv. Medial
    - v. Lateral
    - vi. Superior
    - vii. Inferior
    - viii. Proximal
    - ix. Distal
    - x. Cephalad
    - xi. Caudal
    - xii. Superficial
    - xiii. Deep
    - xiv. Prone
    - xv. Supine
  - f. Planes of motion
    - i. Sagittal
    - ii. Frontal
    - iii. Horizontal (transverse)
    - iv. Axis of rotation
    - v. Anterior-posterior (abduction/adduction)

- vi. Medial-lateral (flexion/extension)
- vii. Vertical (rotation)
- viii. Circumduction
- ix. Protraction
- x. Retraction
- g. Muscle
  - i. Isometric
  - ii. Concentric
  - iii. Eccentric
  - iv. Stretch -Shorten Cycle
  - v. Origin
  - vi. Insertion
- h. Joint Movements
  - i. Open Chain
  - ii. Closed Chain

## Laboratory or Activity Content

- 1. Introduction
  - a. Components of fitness
  - b. Weight room organization
  - c. Weight room etiquette
  - d. Partner training principles
  - e. Safety guidelines
- 2. Workout Program Design
  - a. Goals
    - i. Endurance
    - ii. Strength
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    - iv. Hypertrophy
  - b. Principles
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# **Methods of Evaluation**

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

Skills demonstrations Written expression

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

Individual projects Oral analysis/critiques Projects Quizzes Skills demonstrations Skill tests

# Instructional Methodology

#### Specify the methods of instruction that may be employed in this course

Audio-visual presentations Class activities Class discussions Distance Education Demonstrations Instructor-guided interpretation and analysis Lecture

#### Describe specific examples of the methods the instructor will use:

- 1. Lecture on developing muscular hypertrophy.
- 2. Physical demonstration and explanation of how to use weight training equipment by the instructor
- 3. Physical demonstration of how to perform weight training exercises by the instructor
- 4. Instructor-led training conditioning
- 5. Presentation of written articles by professionals in the field of weight training
- 6. Media demonstrating weight training mechanics

## **Representative Course Assignments**

#### Writing Assignments

1. Periodic revisions of power-training program

#### **Critical Thinking Assignments**

- 1. Designing a strength-training program based on individual goals and metrics.
- 2. Analyze a case study to formulate a program designed to promote muscular strength or muscular hypertrophy dependent on scenario goals.

#### **Reading Assignments**

1. Textbook and journal articles

#### **Skills Demonstrations**

- 1. Weight lifting techniques for free weights
- 2. Weight lifting techniques for each exercise machine
- 3. Spotting free-weight exercises
- 4. Chest: flat bench press and incline dumbbell bench press
- 5. Back: bent-over-row, lat pull-down and seated row
- 6. Shoulders: seated shoulder press, machine shoulder press and upright row
- 7. Biceps: biceps curl and hammer curl
- 8. Triceps: lying triceps extension and triceps pushdown
- 9. Forearms: wrist curl and wrist extension
- 10. Hips/thighs: back squat, front squat, forward lunges, dead-lift, leg extensions and leg curls
- 11. Calves: seated calve machine and heel raises

## **Outside Assignments**

## Articulation

Comparable Courses within the VCCCD KIN M33 - Power Lifting/Free Weights KIN V32 - Power Body Building: Athletes

- **District General Education**
- **A. Natural Sciences**
- **B. Social and Behavioral Sciences**
- C. Humanities
- **D. Language and Rationality**
- E. Health and Physical Education/Kinesiology

**E2. Physical Education** Approved

F. Ethnic Studies/Gender Studies

**CSU GE-Breadth** 

- Area A: English Language Communication and Critical Thinking
- Area B: Scientific Inquiry and Quantitative Reasoning
- **Area C: Arts and Humanities**
- **Area D: Social Sciences**
- Area E: Lifelong Learning and Self-Development

E Lifelong Learning and Self-Development Approved

CSU Graduation Requirement in U.S. History, Constitution and American Ideals:

## IGETC

- **Area 1: English Communication**
- Area 2A: Mathematical Concepts & Quantitative Reasoning
- **Area 3: Arts and Humanities**
- Area 4: Social and Behavioral Sciences
- **Area 5: Physical and Biological Sciences**
- Area 6: Languages Other than English (LOTE)

Textbooks and Lab Manuals Resource Type Textbook

## Description

dos Remedios, R. Boyle, M. (2007). *Men's Health Power Training: Building Bigger, Stronger Muscles through Performance-Based Conditioning*. Rodale.

**Resource Type** Other Instructional Materials

#### Description

Instructional videos.

#### **Resource Type**

Textbook

#### Description

Human Kinetics (2021). Science and Practice of Strength Training With CE Exam-3rd Edition. Human Kinetics.

## **Distance Education Addendum**

## **Definitions**

#### **Distance Education Modalities**

Hybrid (51%–99% online) Hybrid (1%–50% online) 100% online

## **Faculty Certifications**

Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.

Yes

Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents. Yes

## **Regular Effective/Substantive Contact**

#### Hybrid (1%-50% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Regular use of asynchronous discussion boards will encourage various types of interaction and critical thinking skills among all course participants. Questions and topics posed will allow students to discuss, compare and contrast, identify, and analyze elements of the course content. Other discussion boards may be used for Q&A and general class discussion by students and instructor to facilitate student success and strengthen student learning outcomes.
E-mail	E-mail, class announcements and various learning management system tools such as "Message Students Who" and "Assignment Comments", will be used to regularly communicate with all students on matters such as clarification of class content, reminders of upcoming assignments and/or course responsibilities, to provide prompt feedback to students on coursework to facilitate student learning outcomes, or to increase the role of an individual educator in the academic lives of a student. Students will be given multiple ways to email instructor through both the learning management system inbox and district-provided email accounts.

Other DE (e.g., recorded lectures)	A variety of ADA compliant tools and media integrated within the learning management system to help students reach competency. Tools may include: recorded lectures, narrated slides, screencasts, online library resources, 3rd party (publisher-created) tools, websites and blogs, multimedia and streaming platforms like YouTube, Films on Demand, 3CMedia, Khan Academy, etc.
Hybrid (51%–99% online) Modality:	
Method of Instruction	Document typical activities or assignments for each method of instruction
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Synchronous Dialog (e.g., online chat)	A set time each week may be provided when the instructor is available for synchronous chat to answer questions.
100% online Modality:	
Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Regular use of asynchronous discussion boards will encourage various types of interaction and critical thinking skills among all course participants. Questions and topics posed will allow students to discuss, compare and contrast, identify, and analyze elements of the course content. Other discussion boards may be used for Q&A and general class discussion by students and instructor to facilitate student success and strengthen student learning outcomes.
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Synchronous Dialog (e.g., online chat)	A set time each week may be provided when the instructor is available for synchronous chat to answer questions.
Face to Face (by student request; cannot be required)	The instructor may hold regularly scheduled office hours either in person or via-web conferencing, for students to be able to meet and discuss course materials or individual progress. Students can request additional in-person or web conferencing meetings with faculty member as needed. Faculty may encourage online students to form "study groups" in person or online.
Video Conferencing	Video tools such as ConferZoom may be used to provide live synchronous or asynchronous sessions with students. ADA compliance will be upheld with Closed Captioning during the session or of the recorded session. Student-to-student group meetings will also be encouraged.

# Examinations

**Hybrid (1%–50% online) Modality** Online

Hybrid (51%–99% online) Modality Online

# Primary Minimum Qualification

PHYSICAL EDUCATION

# **Review and Approval Dates**

Department Chair 09/07/2020

**Dean** 09/07/2020

Technical Review 10/14/2020

Curriculum Committee 10/14/2020

Curriculum Committee 11/25/2020

CCCCO MM/DD/YYYY

Control Number CCC000579725

DOE/accreditation approval date MM/DD/YYYY