

Course Outline of Record

1. Course Code: KINE-095
2.
 - a. Long Course Title: Exercise Science
 - b. Short Course Title: EXERCISE SCIENCE
3.
 - a. Catalog Course Description:
 This course is a study of the body systems and physiological processes of response and adaptation which enhance and improve both health and fitness of people who exercise regularly. An overview of exercise physiology, biomechanics, sport nutrition, safety considerations, and physical conditioning is covered. Current technologies to achieve strength, fitness, and maximum performance are utilized.
 - b. Class Schedule Course Description:
 This course will focus on theory and the latest research in the biomechanics and physiology of muscle development of people who exercise regularly.
 - c. Semester Cycle (if applicable): N/A
 - d. Name of Approved Program(s):
 - FITNESS SPECIALIST Certificate of Achievement
4. Total Units: 2.00 Total Semester Hrs: 72.00
 Lecture Units: 1 Semester Lecture Hrs: 18.00
 Lab Units: 1 Semester Lab Hrs: 54.00
 Class Size Maximum: 30 Allow Audit: No
 Repeatability No Repeats Allowed
 Justification 0
5. Prerequisite or Corequisite Courses or Advisories:
Course with requisite(s) and/or advisory is required to complete Content Review Matrix (CCForm1-A)
N/A
6. Textbooks, Required Reading or Software: (List in APA or MLA format.)
 - a. Potteiger, J. A (2017). ACSM's Introduction to Exercise Science (3rd/e). LWW. ISBN: 9781496339614
 College Level: Yes
 Flesch-Kincaid reading level: N/A
 - b. Instructor Handouts
7. Entrance Skills: *Before entering the course students must be able:*
8. Course Content and Scope:

Lecture:

1. Introduction to the sciences of human movement
2. Basic human anatomy and applied terminology.
3. Anatomical Kinesiology
4. Program design and exercise prescription
5. Training intensity levels
6. Energy pathways
7. Biomechanics
8. Powerlifting
9. Exercise Physiology
10. Motor development, learning, and control
11. Fitness and health across a lifespan

Lab: (if the "Lab Hours" is greater than zero this is required)

1. Mechanical factors related to human movement
2. Acute and chronic conditions associated to the human body's responses to exercise
3. Field evaluative processes
4. Injury prevention techniques
5. Conditioning techniques
6. Exercise prescription
7. Bioenergetics
8. Application of interrelationship between structure and physical function
9. Data collection, analysis, and discussion of results

9. Course Student Learning Outcomes:

1.
Analyze biomechanics in relation to human movement across a lifespan.
2.
Demonstrate procedures that are used to assess exercise capacity and health risk.

10. Course Objectives: *Upon completion of this course, students will be able to:*

- a. Explore a basic introduction to human anatomy.
- b. Understand the fundamentals of strength training, fatigue, injury, periodization, and specificity in training.
- c. Demonstrate awareness of research tools and knowledge of the scientific process.
- d. Examine the scientific process of human movement and its historical beginnings.
- e. Describe the structure and function of the human nervous, skeletal, and muscular systems.
- f. Develop an understanding of the anaerobic and aerobic processes that provide energy for the working muscle.
- g. Explore the many and varied benefits of regular exercise and physical training.
- h. Examine the interaction of exercise, nutrition, and body composition.
- i. Assess exercise capacity and health risk.
- j. Examine the influence of personality, motivation, stress, and social factors on participation in physical activity.
- k. Understand the diversity of human motor performance and learning.

11. Methods of Instruction: (*Integration: Elements should validate parallel course outline elements*)

- a. Activity
- b. Collaborative/Team
- c. Demonstration, Repetition/Practice
- d. Discussion
- e. Individualized Study
- f. Lecture
- g. Observation
- h. Participation
- i. Self-exploration

12. Assignments: (*List samples of specific activities/assignments students are expected to complete both in and outside of class.*)

In Class Hours: 72.00

Outside Class Hours: 36.00

a. In-class Assignments

1. Individual assessments of techniques
2. Fitness testing
3. Group or partner review of applicable techniques
4. Exercise prescription

b. Out-of-class Assignments

1. Reading assignments from handouts
2. Independent skill practice
3. Additional conditioning worksheets
4. Written analysis of individual performance and progress
5. Case study and application of biomechanical principles
6. Case study and application of exercise prescription

13. Methods of Evaluating Student Progress: *The student will demonstrate proficiency by:*

- College level or pre-collegiate essays
- Written homework
- Critiques
- Reading reports
- Self-paced testing
- Laboratory projects
- Field/physical activity observations
- Presentations/student demonstration observations
- Group activity participation/observation
- True/false/multiple choice examinations
- Student participation/contribution
- Student preparation

14. Methods of Evaluating: Additional Assessment Information:

15. Need/Purpose/Rationale -- *All courses must meet one or more CCC missions.*

PO-GE C5 – Personal Growth and Development

Exhibit habits of intellectual exploration, personal responsibility, and well being.

IO - Personal and Professional Development

Demonstrate an understanding of ethical issues to make sound judgments and decisions.

16. Comparable Transfer Course

University System	Campus	Course Number	Course Title	Catalog Year
CSU	CSU San Bernardino	KINE 240	Exercise Science Software	

17. Special Materials and/or Equipment Required of Students:

On lab unit days: appropriate workout clothing (T-shirts, shorts, and athletic shoes)

18. Materials Fees: Required Material?

Material or Item	Cost Per Unit	Total Cost
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19. Provide Reasons for the Substantial Modifications or New Course:

The course outline of record reads like a weightlifting theory and practicum course rather than a true exercise science course. The outline is being modified to better align with what is required for transfer and what is expected for skill development in exercise science.

20. a. Cross-Listed Course (*Enter Course Code*): N/A
- b. Replacement Course (*Enter original Course Code*): N/A

21. Grading Method (*choose one*): Letter Grade Only

22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000513228
- b. T.O.P. Code [CB03]: 83500.00 - Physical Education
- c. Credit Status [CB04]: D - Credit - Degree Applicable
- d. Course Transfer Status [CB05]: A = Transfer to UC, CSU
- e. Basic Skills Status [CB08]: 2N = Not basic skills course
- f. Vocational Status [CB09]: Not Occupational
- g. Course Classification [CB11]: Y - Credit Course
- h. Special Class Status [CB13]: N - Not Special
- i. Course CAN Code [CB14]: N/A
- j. Course Prior to College Level [CB21]: Y = Not Applicable
- k. Course Noncredit Category [CB22]: Y - Not Applicable
- l. Funding Agency Category [CB23]: Y = Not Applicable
- m. Program Status [CB24]: 1 = Program Applicable

Name of Approved Program (if program-applicable): FITNESS SPECIALIST

Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.)

23. Enrollment - Estimate Enrollment

First Year: 25

Third Year: 30

24. Resources - Faculty - Discipline and Other Qualifications:

- a. Sufficient Faculty Resources: Yes
- b. If No, list number of FTE needed to offer this course: N/A

25. Additional Equipment and/or Supplies Needed and Source of Funding.

N/A

26. Additional Construction or Modification of Existing Classroom Space Needed. (Explain:)

N/A

27. FOR NEW OR SUBSTANTIALLY MODIFIED COURSES

Library and/or Learning Resources Present in the Collection are Sufficient to Meet the Need of the Students Enrolled in the Course: Yes

28. Originator Courtney Doussett Origination Date 12/11/17