

Course Outline of Record

1. Course Code: KINE-069
2.
 - a. Long Course Title: Biomechanics of Running
 - b. Short Course Title: BIOMECHANICS/RUNNING
3.
 - a. Catalog Course Description:
 This course provides instruction on proper biomechanics of running. It will cover proper form and technique of the natural, efficient and minimalist style of running. The course will also go over different cardiorespiratory exercise prescription for interval training, endurance and trail running. It will include a component of injury prevention and exercise prescription design to improve individual training safely. In addition basic strength, core and flexibility exercises will be covered to improve biomechanics and fitness for the runner enthusiast.
 - b. Class Schedule Course Description:
 This course covers proper biomechanics, form and techniques of the natural and minimalist style of running.
 - c. Semester Cycle (if applicable): N/A
 - d. Name of Approved Program(s):
 - FITNESS SPECIALIST
4. Total Units: 1.00 Total Semester Hrs: 36.00
 Lecture Units: 0.5 Semester Lecture Hrs: 9.00
 Lab Units: 0.5 Semester Lab Hrs: 27.00
 Class Size Maximum: 40 Allow Audit: Yes
 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 (CCForm I-A)
N/A
6. Textbooks, Required Reading or Software: (List in APA or MLA format.)
 - a. McDougall, Christopher (2011). *Born to Run* (1st/e). New York Random House Inc..
 College Level: Yes
 Flesch-Kincaid reading level: N/A
 - b. Runner's world magazine
7. Entrance Skills: *Before entering the course students must be able:*
8. Course Content and Scope:

Lecture:

The course would go over the Pose Running Technique to include the following.

1. S - like body position with slightly bent knees
2. Forward lean from the ankles to employ gravity and work with it not against it.
3. Pulling or lifting feet under hip
4. Ball of foot landing under your body.

The course would also go over the Minimalist strategy and benefits.

1. Reducing impact
2. Improving training and performance
3. Competitive edge
4. Reduction of Injuries
5. Holistic appreciation of running

Analysis of forefoot and midfoot running. The breakdown of the muscles, tendons and ligaments in the

KINE 069-Biomechanics of Running

feet and legs strengthened during this style of running.

Individual gait analysis and improved efficiency in running.

History of different cultures and forced minimalist strategy due to footwear and terrain.

Cardiorespiratory exercise fitness design over a one year period and it's goal of injury prevention and personal improvement.

Introduction to different running terrain and benefits associated with different terrain.

Strengthening exercises of the core, upper and lower body to be addressed as well to improve running form and fitness.

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

The course will include lab activities each day to apply the natural efficient running methods and minimalist method of running to improve overall biomechanics of running.

The lab activities will be designed with progression over time to include variety of intensities, style of terrain and duration of exercise.

The lab activities will also include flexibility, agility and upper, lower and core strengthening exercises to improve overall fitness.

9. Course Student Learning Outcomes:

1.
Cite the proper biomechanics of pose running.
2.
Identify how the minimalist strategy prevents injuries.
3.
Demonstrate proper running form in cardiorespiratory fitness testing.

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

- a. Demonstrate proper POSE running form.
- b. Identify the minimalist strategies to improving running biomechanics.
- c. Cite how proper biomechanics can improve running performance.
- d. Identify how injuries can be reduced with the minimalist biomechanics.
- e. Apply basic kinesiology principles to improve running efficiency and form.
- f. Demonstrate improved cardiorespiratory endurance levels in fitness testing.

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

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

j. Technology-based instruction

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

In Class Hours: 36.00

Outside Class Hours: 18.00

a. Out-of-class Assignments

1. Reading article critiques and literature
2. Viewing of videos with reports

b. In-class Assignments

- Pre and Post fitness testing
- Partner Gait analysis
- Group Running drills and tests
- Individual goal setting and nutrition concepts and design

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

- College level or pre-collegiate essays
- Written homework
- Critiques
- Portfolios
- Self-paced testing
- Laboratory projects
- Group activity participation/observation
- Student participation/contribution
- Student preparation

14. Methods of Evaluating: Additional Assesment 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
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17. Special Materials and/or Equipment Required of Students:

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:

It will accompany our courses related in content for our Kinesiology program and will provide additional but new courses for students to improve their health and knowledge of the subject matter.

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

KINE 069-Biomechanics of Running

22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000554123
- b. T.O.P. Code [CB03]: 83500.00 - Physical Education
- c. Credit Status [CB04]: D - Credit - Degree Applicable
- d. Course Transfer Status [CB05]: B = Transfer 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: 40

Third Year: 40

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 Wendy Ansley Origination Date 01/06/14