KIN A109: CARDIOVASCULAR TRAINING AND STRENGTH DEVELOPMENT LEVEL 1

Item	Value
Curriculum Committee Approval Date	12/06/2023
Top Code	083500 - Physical Education
Units	.5-3 Total Units
Hours	18-108 Total Hours (Lecture Hours 5-32; Lab Hours 13-76)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)
Associate Arts Local General Education (GE)	• OC Life Skills - Activity - AA (OE2)

Course Description

This course is designed for the beginning student who is interested in muscular strength/endurance and cardiovascular fitness training to improve general body strength and endurance. Each student will develop an individual fitness and/or strength program with specific performance goals. Safety procedures and protocols through use of cardiovascular and weight training equipment. Transfer Credit: CSU; UC.

Course Level Student Learning Outcome(s)

1. Evaluate their need for strength and CV improvements and develop exercise programs for improved fitness.

Course Objectives

- 1. Demonstrate understanding of the fitness complex rules for maintaining a safe environment.
- 2. Compare and contrast heart function during rest and physical activity.
- 3. Identify the principles of overload, progression, and specificity as related to exercise.
- 4. Identify individual performance goals based on a general fitness evaluation.
- 5. Explain the connection between weight bearing activities and bone strength.
- 6. Demonstrate the proper use of equipment while maintaining safety.
- 7. Identify the health benefits to physical activity with use of cardio or muscle strength equipment.
- 8. Differentiate between skill-related and health-related physical fitness.
- 9. Consistently perform exercise for a duration of time that reflects individual performance goals for a novice learner.
- 10. Demonstrate improvement in muscle endurance.
- 11. Explain the benefits of exercise and its application to living a healthy lifestyle.
- 12. Analyze the impacts of elevating the heart rate before, during, and after physical activity.
- 13. Contrast the elements of the FIT principle and explain the importance of each element.
- 14. Explain the impact of fitness and activity to general wellness.
- 15. Describe the significance of muscle strength and endurance for motor skill performance.
- 16. Explain the role of hydration during training as a novice.

Lecture Content

Principles of proper use of equipment (video and zoom lessons) Cardiovascular fitness principles Elements of Muscle strength and endurance Utilize equipment for muscle strength and endurance Utilize equipment for cardiovascular endurance Core elements of muscle strength and endurance (Articles and Periodization via video and Zoom) Muscle development Use of equipment for various muscle groups Impacts on bone density Overload, progression, and theories of muscle growth Flexibility and muscle development Utilize equipment for muscle strength and endurance Utilize equipment for cardiovascular endurance Core elements of cardiovascular endurance (Goals setting and disccusion on training) Identification of performance goals Hydration and exercise Flexibility and aerobic activity The Fit principle Body composition as impacted by cardiovascular fitness Safety and inappropriate practices during endurance training Utilize equipment for muscle strength and endurance Utilize equipment for cardiovascular endurance Exercises for Body Development (Video Tool and Zoom lessons for demo) Upper-body development Exercises for developing the core Lower body development Applications for activities outside of fitness center Continuous movement activities Circuit training Resistance exercises Utilize equipment for muscle strength and endurance Utilize equipment for cardiovascular endurance

Lab Content

Audio visual tools will be used for demonstration, discussion, and feedback to all student thoughout this course. Through current technology of zoom, youtube, video, and analysis tools such as dartfish or hudl to name a few Overview of the equipment used in the course cardiovascular equipment strength training equipment muscular endurance development equipment Experimentation/Exploration of muscular strength and muscular endurance Experimentation/ Exploration of cardiovascular endurance Upper body, lower body, etc. Experimentation/Exploration of body development hypertrophy Upper body, lower body, etc. Continuous movements Cross training Equipment vs. no equipment

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- DE Online Lecture (02X)
- Lab (04)
- DE Live Online Lab (04S)
- DE Online Lab (04X)

Instructional Techniques

The following will be provided in the form of recorded tutorials, articles posted, weekly discussions, and video clips provided online through

canvas or zoom. Lecture: Provide informational base and give direction to program development process Seminar/Discussions: Small group lessons and exercises Individual/Small Groups: Skills, fundamentals, technique demonstrations

Reading Assignments

Students will spend approximately 3 hours a week completing conditioning programs outside of class meetings on zoom or discussions on canvas.

Writing Assignments

All written assignments will be submitted via canvas and feedback and discussion will be a part of all assignments. Journals - written record of the training programLab reports - written lab questionnaireEssay - summary of program methodology, procedural progress

Out-of-class Assignments

Students will spend approximately 3 hours a week completing conditioning programs outside of class meetings through zoom, canvas or discussion segments.

Demonstration of Critical Thinking

Essay - summary of program methodology, procedural progress Requirements will be dependent upon units enrolled.

Required Writing, Problem Solving, Skills Demonstration

Journals - written record of training program Lab reports - written lab questionnaire Essay - summary of program methodology, procedural progress Requirements will be dependent upon units enrolled.

Eligible Disciplines

Kinesiology: Masters degree in kinesiology, physical education, exercise science, education with an emphasis in physical education, kinesiology, physiology of exercise, or adaptive physical education OR Bachelors degree in any of the above AND Masters degree in any life science, dance physiology, health education, recreation administration or physical therapy OR the equivalent.

Other Resources

1. Selected handout materials to be provided and distributed by the instructor. 2. Articles will be provided weekly for student summary