KIN A206: WEIGHT TRAINING LEVEL 2

Item	Value
Curriculum Committee Approval Date	12/08/2021
Top Code	083500 - Physical Education
Units	1-2 Total Units
Hours	36-72 Total Hours (Lecture Hours 9-18; Lab Hours 27-54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)
Associate Arts Local General Education (GE)	• Area 7 Life Skills, Lifelong Learning, and Self-Development 7B Activity (OE2)

Course Description

The student will learn the intermediate to advanced principles of weight training and exercises and be able to demonstrate proper biomechanics of weight training exercises appropriate for the student who has experience in weight training. Transfer Credit: CSU; UC.

Course Level Student Learning Outcome(s)

1. Be able to develop and demonstrate proper technique and form through a general fitness program for a lifetime fitness routine.
2. Develop an advanced personalized training program targeting muscular strength, endurance, and core strength.
3. Ability to explain and demonstrate physiological benefits to weight training and lifts based on course content and knowledge
4. .

Course Objectives

- 1. Explain the bioenergetics of exercise as they apply to strength training
- 2. Understand the biomechanics of resistance training
- 3. Have the ability to make adaptations to anaerobic resistance training through understanding of the neural and muscular adaptations
- 4. Describe the implications of overtraining
- 5. Understand how lack of exercise leads to detraining in a short period of time
- 6. Understand the difference in appropriate resistance exercise programs based on age and sex or participant
- 7. Be able to describe the role of nutrition in effective resistance training programs and strength development
- 8. Create a intermediate to advanced strength conditioning program following accepts principles for experienced participants.

Lecture Content

Lecture: I. Concepts and Applications of the Exercise Sciences A. Structure and Function of the Muscular, Neuromuscular, Cardiovascular, and Respiratory Systems 1. Muscular System 2.Neuromuscular System 3.Cardiovascular System 4.Respiratory Syste B. Bioenergetics of Exercise and Training 1.Essential Terminology 2 Biological Energy Systems 3.Metabolic Specificity of Training C. Biomechanics of Resistance Exercise 1. Musculoskeletal System 2.Human Strength and Power 3.Sources of Resistance to Muscle Contraction D. Adaptations to Anaerobic Training Programs 1. Neural Adaptations 2.Muscular Adaptations 3.Overtraining 4.Detraining E. Age- and Sex-Related Differences and Their Implications for Resistance Exercise 1. Children 2. Female Athlete 3. Older Adults F. Nutritional Factors in Health and Performance 1. How to Evaluate the Adequacy of the Diet/ Nutirtion 2. Fluid and Electrolytes 3. Types of InjurySection G. Exercise Techniques 1. Warm-Up and Stretching Warm-Up, Flexibility, Types of Stretching a. Static Stretching Techniques b. Dynamic Stretching Techniques H. Resistance Training and Spotting Techniques 1. Exercise Technique Fundamentals 2. Sp otting Free Weight Exercises 3.Resistance Training Exercises

Lab Content

Pre-test and Post Test General Fitness Evaluation: 1. Sit and Reach 2. Sit up Test 3. Push up test 4. Body Compostion Weight Taining 1 Rep Max test 1. Determining correct form, periodization, and training intensities

Method(s) of Instruction

- Lecture (02)
- Lab (04)

Instructional Techniques

1. Lecture 2. Demonstration of weight training techniques 3. Instructor Supervision and Feedback through weight training program development

Reading Assignments

The students will spend approximately one hour a week reading handouts provided by the instructor and books of their choosing on strength and resistance training.

Writing Assignments

Students will complete journals to document their workout progress. This will include a reflection component. They will spend approximately one hour a week with this activity

Out-of-class Assignments

Students will spend 2 - 4 hours a week practicing and studying weight training form and technique

Demonstration of Critical Thinking

Short Quizzes, Skill Demonstation, weight training program development

Required Writing, Problem Solving, Skills Demonstration

Short Quizzes, Skill Demonstation, weight training program development

Eligible Disciplines

Physical education: Master's degree in physical education, exercise science, education with an emphasis in physical education, kinesiology, physiology of exercise, or adaptive physical education, OR bachelor's

degree in any of the above AND master's degree in any life science, dance, physiology, health education, recreation administration, or physical therapy OR the equivalent. Master's degree required.

Textbooks Resources

1. Required Thomas R. Baechle, Roger W. Earle. Essentials of Strength training and conditioning, 3rd ed. Human Kinetics, 2008 Rationale: ? Essentials of Strength Training and Conditioning, Fourth Edition, provides the most comprehensive information on organization and administration of facilities, testing and evaluation, exercise techniques, training adaptations, program design, and structure and function of body systems. Its scope, precision, and dependability make it the essential preparation text for the CSCS exam as well as a definitive reference for strength and conditioning professionals to consult in their everyday practice.