

# COURSE SYLLABUS

<b>LAST REVIEW</b>	Spring 2021
<b>COURSE TITLE</b>	Techniques in Strength Training (Athletes)
<b>COURSE NUMBER</b>	EXSC-0187
<b>DIVISION</b>	Math, Science, Business & Technology
<b>DEPARTMENT</b>	Exercise Science
<b>CIP CODE</b>	24.0101
<b>CREDIT HOURS</b>	2
<b>CONTACT HOURS/WEEK</b>	Class: 1                      Lab: 1
<b>PREREQUISITES</b>	None
<b>COURSE PLACEMENT</b>	None

## COURSE DESCRIPTION

Techniques of strength training is designed to improve overall fitness. This is a sport specific course. Topics include proper mechanics of lifting and training, why stretching is important, target zone of heart rate to achieve maximum benefit from running, proper warm up, weight room safety, and injury prevention and care.

## TEXTBOOKS

<http://kckccbookstore.com/>

## METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

## COURSE OUTLINE

- I. Benefits of strength training
  - A. Body adaptation to training
  - B. Results of strength training
- II. Testing
  - A. Testing for strength
  - B. Testing for muscle endurance
  - C. Testing for power
  - D. Testing for cardiorespiratory endurance
- III. Safety and design
  - A. Safety procedures in the weight room

- B. Designing a program for strength
  - C. Designing a program for muscle endurance
  - D. Designing a program for power
  - E. Designing a program for cardiorespiratory endurance
  - F. Designing a program for sport specific situations
- IV. Advanced strength training techniques
- A. Periodization
  - B. Olympic lifts
- V. Flexibility
- A. Importance of being flexible
  - B. Stretching techniques
- VI. Injury prevention and care
- A. Specific injuries incurred in the weight room
  - B. Nutrition
  - C. Drug use and supplements

### **COURSE LEARNING OUTCOMES AND COMPETENCIES**

Upon successful completion of this course, the student will:

- A. The student will be able to demonstrate the knowledge of the benefits of strength training .
  1. The student will be able to explain the benefits of strength training as it relates to individual sport specific training programs.
  2. The student will be able to demonstrate proper lifting techniques.
  3. The student will be able to discuss the body's adaptation to strength training.
  4. The student will be able to describe the different methods of strength training (strength, power, endurance, and functional sport specific training technique).
  
- B. The student will be able to describe the five components of fitness, and their testing procedures.
  5. The student will be able to describe the five components of fitness.
  6. The student will be able to demonstrate testing procedures for strength.
  7. The student will be able to demonstrate procedures for muscle endurance.
  8. The student will be able to demonstrate testing procedures for power.
  9. The student will be able to demonstrate testing procedures for endurance.
  
- C. The student will be able to describe safety procedures, and design training programs.
  10. The student will be able to discuss safety procedures in the weight room.
  11. The student will be able to design a program to develop strength.
  12. The student will be able to design a program to develop endurance.
  13. The student will be able to design a program for sport specific conditioning.
  14. The student will be able to design a program to develop aerobic capacity and anaerobic capacity.

- D. The student will be able to describe advanced training workouts.
  - 15. The student will be able to explain advanced training workouts: pyramids, superset, compound sets, burnouts, circuit training, negatives split routine, total body routine, plyometrics.
  - 16. The student will be able to explain periodization as it relates to individual sport.
  - 17. The student will be able to recall muscles used for certain lifts.
  - 18. The student will be able to analyze Olympic lifts as it relates to individual sport.
  
- E. The student will be able to describe the importance of flexibility as it relates to individual sports performance.
  - 19. The student will be able to explain the importance of flexibility.
  - 20. The student will be able to demonstrate stretching techniques as it applies to individual sport.
  
- F. The student will be able to describe sport specific injuries, prevention, and treatment.
  - 21. The student will be able to discuss sport specific injuries, cause, treatment, and injury prevention.
  - 22. The student will be able to explain nutrition's role in strength training.
  - 23. The student will be able to explain nutrition's role in preparation of a sport specific event.
  - 24. The student will be able to examine drug use and supplements used in strength training.
  - 25. The student will be able to compare free weights and stack weights.

### **ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES**

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

### **COLLEGE POLICIES AND PROCEDURES**

*Student Handbook*

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

*College Catalog*

<https://www.kckcc.edu/academics/catalog/index.html>

*College Policies and Statements*

<https://www.kckcc.edu/about/policies-statements/index.html>

*Accessibility and Accommodations*

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.