

# Kinesiology/Sports Medicine



**School:** SoCal ROC

**Course ID:** 459

**Availability:** Call 310-224-4200

**Weight:** 0.00kg

**Dimensions:** 0.00cm x 0.00cm x 0.00cm

## Short Description

**Build an excellent foundation in the field of Kinesiology!**

## Description

# Accelerate Your Future at SoCal ROC!

Learn how the study of human movement and exercise affects the body in obtaining optimal health, physical skill, and total fitness. Our Kinesiology/Sports Medicine course will increase our student's knowledge and understanding about human physiology and the adaptations that occur during exercise. This course will give the student an excellent foundation in the study of Kinesiology and the ability to explore many career choices applying Kinesiology.

Emphasis is placed on bioenergetics as well as circulatory, respiratory, and neuromuscular responses to the physical stress of exercise. Also discussed are the effects of environmental factors and ergogenic aids on athletic performance.

## Learn Valuable Industry Skills!

### Part 1: Exercising Muscle

- A. Structure and Function of Exercising Muscle
- B. Fuel for Exercising Muscle: Bioenergetics and Muscle Metabolism
- C. Neural Control of Exercising Muscle
- D. Hormonal Control during Exercise
- E. Energy Expenditure and Fatigue

## **Part 2: Cardiovascular and Respiratory Function**

- A. The Cardiovascular System and Its Control
- B. The Respiratory System and Its Regulation
- C. Cardiorespiratory Responses to Acute Exercise

## **Part 3: Exercise Training**

- A. Principles of Exercise Training
- B. Adaptations of Resistance Training
- C. Adaptations to Aerobic and Anaerobic Training

## **Part 4: Environmental Influences on Performance**

- A. Exercise in Hot and Cold Environments
- B. Exercise at Altitude

## **Part 5: Optimizing Performance in Sport**

- A. Training for Sport
- B. Body Composition and Nutrition for Sport
- C. Ergogenic Aids and Pharmacological agents

## **Part 6: Age and Sex Considerations in Sport and Exercise**

- A. Children and Adolescents in Sport and Exercise
- B. Aging in Sport and Exercise
- C. Sex Differences in Sport and Exercise

## **Part 7: Physical Activity for Health and Fitness**

- A. Prescription of Exercise for Health and Fitness
- B. Cardiovascular Disease and Physical Activity
- C. Obesity, Diabetes, and Physical Activity

## **• Professional Certification Opportunities!**

**Designations offered to students completing our Kinesiology/Sports Medicine course include**

1. Certificate of Competency representing foundational knowledge in Kinesiology and Sports Medicine

## **Checkout Potential Career Options!**

Physical Therapist Aide

Fitness Trainer  
Aerobics Instructor  
Athletic Trainer  
Physical Therapist  
Chiropractor  
Licensed Vocational Nurse  
Registered Nurse  
Physicians Assistant  
Physician

## **Prerequisites**

**Thank you for your interest in enrolling in the SoCal ROC  
Kinesiology/Sports Medicine program.**

**In order to enroll in the program, students must:**

### **High school**

- ? Open to Grade Levels 9-12th
- ? Successful completion of Algebra I

### **Adult**

- ? Purchase of the textbook is optional and purchasing information will be given at the first class meeting
- ? Copies of the textbooks are available for classroom use

## **Schedule**

**Complete in 1 Semester:** M/T/W from 4:15pm - 7:00pm (HYBRID)

Our Kinesiology/Sports Medicine course is typically offered in the Fall and alternates with our Physical Therapy Aide course which is offered the Spring. To access the most recent course schedule please call registration or click the link under Course Information. Please be advised schedule is subject to change and dependent on enrollment.

## **High School Info**

**Benefits of CTE**

After completing courses in CTE, you will have a clearer vision of your future career path and what the next steps will be. Career Technical Education allows high school students to see what options are out there and see first-hand what careers they enjoy and thrive in. Whether you decide to enter the workforce, pursue a trade or apprenticeship, or apply to college, CTE adds to the traditional high school experience and is designed to prepare you for the next stage in your life.

## **Earn High School Credit!**

You can earn 10 elective credits and satisfy CSU/UC Admissions Requirements »  
D - Science

## **Ready To Enroll?!**

Call our Career Guidance Specialist or register through your home school counseling offices and receive priority through pre-registration for classes that meet from 1:15 - 4:15 and 4:15 - 7:00 p.m.

### **Course Locations**

Hybrid

**Address:** 2300 Crenshaw Blvd., Torrance, CA 90501 U.S.

**Phone:** 310-224-4200