

## Cardiopulmonary Resuscitation, Recertification



**Industry Sector:** [Health Science and Medical Technology](#), [Public Services](#)



**Pathways:** Patient Care, Mental & Behavioral Health and Emergency Response

The goal of this course is to re-certify participants in high quality Cardiopulmonary Resuscitation. This course is designed to prepare participants to know how to perform CPR in both in- and out-of hospital settings. This course trains the participants to promptly recognize cardiac arrest, give high quality chest compressions, deliver appropriate ventilations, and provide early use of an automated external defibrillator (AED), as part of a team or as an individual. The course includes adult, child and infant rescue techniques.

**Last Revised:** August 11, 2017

Program Information	CTE Certification Elements
<p><b>Industries / Pathways:</b> Health Science and Medical Technology Industry, Public Services Industry: Patient Care, Mental &amp; Behavioral Health, and Emergency Response Pathways</p> <p><b>Grade Levels:</b> 11-12</p> <p><b>CSU/UC Approval:</b> No</p> <p><b>Community College Course:</b> No</p> <p><b>Pathway Sequence(s) That Include This Course:</b></p> <p>1. Patient Care Pathway Course Sequence: Introduction to Health and Human Service Careers or</p>	<p><b>Course Level:</b> Concentrator</p> <p><b>CALPADS Pathway:</b> HLT 198, HLT 195, PUB 233</p> <p><b>CALPADS Course Title:</b> Emergency Response - (8421) Intermediate Emergency Response</p> <p><b>State Course ID:</b> 8421, 7961, 7921</p> <p><b>Total Hours:</b> 8</p> <p><b>Course Length:</b> 1 Semester</p> <p><b>Local Course Number:</b> PC5200, MH6200, ER7200</p> <p><b>Board Approval:</b> No</p>

Health Professions and Organizations  
First Aid, Emergency Response and CPR  
Career Explorations  
Anatomy and Physiology  
Introduction to Public Health or Health and Social Justice or  
Medical Terminology  
Hospital/Clinical Internship (10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>)  
Realities of Nutrition or Substance Abuse and Public Health  
*CPR Recertification*  
Advanced Pre-nursing Seminar or Advanced Internship

**2. Mental & Behavioral Health Pathway Course Sequence:**

Introduction to Health and Human Service Careers or  
Health Professions and Organizations  
First Aid, Emergency Response and CPR  
Career Explorations  
Anatomy and Physiology  
Foundations of Mental & Behavioral Health Careers I or  
Health and Social Justice or Introduction to Public Health  
Mental Health Internship (10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>)  
Foundations of Mental & Behavioral Health Careers II or  
Substance Abuse and Public Health or  
Introduction to Social Work  
*CPR Recertification*  
Specialized Mental Health Seminar Project and Exhibition  
and/or Advanced Mental/Behavioral Health Internship

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**Labor Market Demand:** High  
**Course Type:** Technical Skills- Upgrading

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**Program Information (Continued)**

**3. Emergency Response Pathway Course Sequence:**

Introduction to Health and Human Service Careers or  
Health Professions and Organizations  
First Aid, Emergency Response and CPR  
Career Explorations  
Anatomy and Physiology  
Fire Science and Technology I and II  
Fire Technology Internship (Grades 10-11-12)  
*CPR Recertification*  
Fire Technology III

## Competencies / Outcomes

1. Students will demonstrate Body Substance Isolation Precautions
2. Students will be able to demonstrate appropriate level of care during CPR skills testing
3. Students will be able to perform single and two rescuer CPR on adults, children and infants.
4. Students can safely operate an AED

# Standards

## California's 2013 CTE Standards

- CTE.PS.B.9.6 [Manage an incident scene as the first responder, using emergency response skills appropriate to training and certification.](#)
- CTE.PS.B.9.10 [Demonstrate the ability to receive and provide patient-care information to other medical providers.](#)
- CTE.PS.B.4.1 [Describe the basic elements of safety and survival for emergency response personnel.](#)
- CTE.PS.B.4.2 [Know and use the appropriate personal protective equipment \(PPE\) required for emergency services duties.](#)
- CTE.PS.B.4.3 [Know how to establish situational awareness, identify hazards, and assess personal, team, or environmental risks.](#)
- CTE.PS.B.4.4 [Understand and adhere to comprehensive and systematic risk management strategies to reduce injury and fatalities for self, team, and community.](#)
- CTE.PS.B.4.5 [Demonstrate strategies to identify and eliminate hazards.](#)
- CTE.PS.B.4.6 [Complete certification in emergency care as appropriate—for example, cardiopulmonary resuscitation \(CPR\), automated external defibrillator \(AED\), and first aid.](#)

## Common Core Standards for Literacy in History/Social Studies, Science and Technical Subjects

### Reading

1. RST.9-10.3 (9th and 10th) [Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.](#)
2. RST.11-12.3 (11th and 12th) [Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.](#)
3. RST.9-10.9 (9th-10th) [Compare and contrast findings presented in a text to those from other sources \(including their own experiments\), noting when the findings support or contradict previous explanations or accounts.](#)
4. RST.11-12.9 (11th and 12th) [Synthesize information from a range of sources \(e.g., texts, experiments, simulations\) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.](#)

### Writing

1. WHST.9-10.4, WHST.11-12.4 (9-10 & 11-12) [Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.](#)

## Units

## Unit 1: Chain of Survival

### Description

After completing this unit, students will be able to provide safety knowledge and practices following the policies and procedures set forth by the American Heart Association. Lessons cover scene safety, scene size up, and types of personal protection equipment including gloves, goggles and masks.

### Key Topics/Activities

Upon successful completion of this lesson, students will be able to:

1. List the Standard Precautions needed when responding to a medical emergency
2. Explain the concept of "Scene Safety"
3. Don and doff PPE (Personal Protective Equipment)
4. Promptly recognize cardiac arrest

Assessment of skills will be assessed by written and oral assessment and performance task demonstrations.

## Unit 2: Perform Cardiopulmonary Resuscitation (CPR)

### Description

After completing this unit, students will be able to explain the function of the heart and the lungs. Students will be able to perform CPR, delivering adequate ventilations and chest compressions following the policies and procedures set forth by the American Heart Association.

### Key Topics/Activities

1. Rescuer will perform high quality CPR with C-A-B sequence (adult/child/infant)
  - a. Provide chest compressions of adequate depth
  - b. Allow complete chest recoil after each compression
  - c. Deliver appropriate breaths with minimal interruptions of compressions
  - d. Give two breaths for every 30 compressions
  - e. Rescue breaths at a rate of 1 breath every 6 to 8 seconds
  - f. Provide visible chest rise with each breath
  - g. Avoid excessive ventilation

Assessment of skills will be assessed by performance task demonstrations, written and oral assessments.

## Unit 3: Automated External Defibrillator

### Description

After completing this unit, the student will be able to explain the function of an AED (Automated External Defibrillator) and properly use the AED. Students will be able to use the AED following the policies and procedures set forth by the American Heart Association.

### Key Topics/Activities

1. Automated External Defibrillator Usage and Function
  - a. Turn on AED
  - b. Choose appropriate pads
  - c. Place AED pads appropriately on patient
  - d. Follow all AED prompts

Assessment of skills will be assessed by performance task demonstrations, written and oral assessments.

## Unit 4: Practice Team CPR

### Description

After completing this unit, students will be able to explain the function of the heart and the lungs. The student will be able to perform CPR in-groups of two, delivering adequate ventilations and chest compressions following the policies and procedures set forth by the American Heart Association.

### Key Topics/Activities

1. Team CPR
  - a. Team resuscitation to optimize coordinated CPR
  - b. Change rescuers every two minutes to avoid compressor fatigue
  - c. Provide constructive feedback to other team members