# EXPANDED COURSE OUTLINE REGULAR BASIC COURSE LEARNING DOMAIN 34 FIRST AID, CPR AND AED

## Effective date of outline: February 1, 2017

#### I. LEARNING NEED

Peace officers must recognize they have a responsibility to act in good faith and to provide emergency medical services (EMS) to the best of their abilities and within the scope of their training.

### LEARNING OBJECTIVES

- A. Discuss the components of the EMS system including:
  - 1. EMS access
  - 2. Interaction with other EMS personnel
  - 3. Local EMS and trauma systems
- B. Identify the primary responsibilities of peace officers as EMS First Responders at an emergency including:
  - 1. Safety
    - a. Exposure to chemical, biological, radiological, or nuclear (CBRN) substances and scene safety
  - 2. Scene size-up
  - 3. Law enforcement actions
  - 4. Assessment and care of victims
- C. Identify the links of the chain of transmission of infectious pathogens
  - 1. Airborne pathogens
  - 2. Blood borne pathogens
- D. Recognize first aid equipment and precautions peace officers may utilize to treat others and to ensure their own personal safety when responding to an emergency including:
  - 1. Types and levels of Personal Protective Equipment (PPE) used to accomplish Body Substance Isolation (BSI)
    - a. Removal of contaminated gloves
  - 2. Decontamination considerations
- E. Identify conditions under which a peace officer is protected from liability when providing emergency medical services

#### II. LEARNING NEED

Peace officers must be able to assess the immediate condition of adult and pediatric victims, a fellow officer, or themselves prior to beginning any form of medical care.

- A. Demonstrate appropriate actions to take during a primary assessment for assessing both conscious and unconscious victims:
  - 1. Responsiveness
  - 2. Airway
  - 3. Breathing
  - 4. Circulation
- B. Demonstrate appropriate actions to take during secondary assessment for both conscious and unconscious victim:
  - 1. Vital signs
  - 2. Head-to-toe assessment
  - 3. Patient history
- C. Identify assessment criteria for establishing priorities when assessing multiple victims at a single scene
  - 1. Breathing
  - 2. Circulation
  - 3. Mental status
- D. Recognize conditions under which an injured victim should be moved from one location to another
  - 1. Imminent danger
  - 2. Unable to assess
- E. Recognize proper procedures for moving a victim including:
  - 1. Shoulder drag
  - 2. Lift and carries which may include using:
    - a. Soft litters
    - b. Manual extractions including fore/aft, side-to-side, shoulder/belt

## III. LEARNING NEED

Peace officers may be required to provide basic life support for a victim, fellow officer, or themselves until additional medical services become available.

- A. Identify the components of the Chain of Survival
- B. Demonstrate Cardiopulmonary Resuscitation (CPR) for adults, children, and infants, following current American Heart Association (AHA) Guidelines for CPR and Emergency Cardiovascular Care (ECC) at the Healthcare provider level including:
  - 1. Ventilation duration
  - 2. Pulse location
  - 3. Compression depth
  - 4. Compression rate
  - 5. Compression-to-ventilation ratio (one-person CPR)
  - 6. Compression-to-ventilation ratio (two-person CPR)

- 7. Automated External Defibrillator (AED) C. Discuss basic Automated External Defibrillator (AED) operation including: 1. Special considerations 2. Troubleshooting Recognize circumstances under which a victim's airway should be opened by using a: D.
- - 1. Head-tilt/chin-lift maneuver
  - 2. Jaw-thrust maneuver
- E. Identify the difference between a mild and severe airway obstruction
  - Mild airway obstruction: ability to speak or cough 1.
  - 2. Severe airway obstruction: Unconscious and unable to be ventilated or conscious but unable to speak, cough or breathe.
- F. Demonstrate procedures for clearing an obstruction from the airway of both a conscious and an unconscious:
  - 1. Adult
  - Child 2.
  - 3. Infant
  - 4. Pregnant or obese individual
- G. Discuss rescue breathing techniques including:
  - 1. Mouth-to-mouth
  - 2. 2. Pocket mask or other barrier devices
  - 3. Bag valve mask
- H. Discuss the recovery position
- I. Discuss bleeding control techniques including:
  - 1. Direct pressure/pressure dressings
  - 2. Tourniquet
  - Types of hemostatic dressings and packing the wound 3.
- J. Demonstrate the general guidelines for controlling bleeding from an open wound
  - 1. Assessment
  - 2. Immediate care
  - 3. Circulation
  - 4. Continued care

- K. Recognize the first aid treatment for traumatic injuries including:
  - 1. Impaled objects
  - 2. Amputations
- L. Recognize the signs and symptoms of shock
  - 1. Altered mental status
  - 2. Pale, cool, clammy skin
  - 3. Profuse sweating
  - 4. Thirst, nausea, vomiting
  - 5. Blue/grey lips
  - 6. Dull eyes, dilated pupils
  - 7. Rapid pulse rate
  - 8. Weak pulse
  - 9. Abnormal respiration rate
  - 10. Shallow, labored breathing
- M. Discuss first aid measures to treat shock including the importance of maintaining normal body temperature

Demonstrate first aid measures to treat shock

- 1. Control all external bleeding and treat other injury
- 2. Gently place the victim in appropriate position
- 3. Be alert for vomiting
- 4. Maintain the victim's body temperature but avoid overheating
- 5. Place victim in a position to help maintain blood flow
- 6. Reassure victim
- 7. Continue to monitor the victim's ABC's and be prepared to take action if necessary (e.g., rescue breathing, CPR)

### IV. LEARNING NEED

Peace officers are often first to respond to the scene of a traumatic incident. They must be capable of activating the EMS system, and providing appropriate first aid to victims, a fellow officer, or themselves of traumatic injuries.

- A. Recognize indicators of a possible head injury
  - 1. Mechanism of injury
  - 2. Mental status
  - 3. Vital signs
  - 4. Visible injury
  - 5. Appearance
- B. Recognize the appropriate first aid measures for treating facial injuries including:
  - 1. Objects in the eye
  - 2. Chemicals in the eye
  - 3. Dental emergency
  - 4. Nose bleed

- C. Recognize appropriate first aid measures for treating open and closed injuries to the:
  - 1. Chest
    - a. Chest seals and dressings
  - 2. Abdomen
- D. Recognize appropriate first aid measures for internal bleeding
- E. Identify appropriate first aid measures for treating injuries or wounds to the bones, muscles, soft tissues of joints
  - 1. Assessment
  - 2. Treatment
- F. Recognize appropriate first aid measures for treating injuries to the head, neck, and back including:
  - 1. Spinal immobilization
- G. Recognize appropriate first aid measures for treating:
  - 1. Thermal burns
  - 2. Chemical burns
  - 3. Electrical burns
  - 4. Radiation burns
- H. Discuss tactical and rescue first aid principles when responding to violent circumstances (e.g. active shooter)
  - 1. Movement to threat versus casualty care
  - 2. Integration with EMS
  - 3. Tactical casualty care

### V. LEARNING NEED

Peace officers must be able to provide basic first aid measures for a number of medical emergencies and conditions they may encounter.

- A. Recognize indicators of, and first aid measures for, a victim experiencing:
  - 1. Cardiac emergency
  - 2. Respiratory emergencies including asthma and Chronic Obstructive Pulmonary Disease (COPD)
  - 3. Drowning
  - 4. Seizure
  - 5. Stroke
  - 6. Altered mental status
  - 7. Severe abdominal pain
  - 8. Allergic reactions and anaphylaxis
    - a. Assisted epinephrine administration
    - b. Accessing EMS

- B. Identify signs and symptoms of psychological emergencies
- C. Differentiate between indicators and first aid measures for treating diabetic emergencies:
  - 1. Low blood sugar (hypoglycemia) including assisted oral glucose administration
  - 2. High blood sugar (hyperglycemia)
- D. Recognize appropriate first aid measures for a victim experiencing signs of:
  - 1. Poisons that have been ingested, inhaled, absorbed, or injected
    - a. Poison control system access
  - 2. Alcohol and/or drug-related emergencies including:
    - a. Assisted Naloxone administration
    - b. Accessing EMS
- E. Differentiate between the indicators and first aid measures for treating:
  - 1. Hypothermia and frostbite
  - 2. Heat cramps, heat exhaustion and heat stroke
- F. Recognize appropriate first aid measures for:
  - 1. Insect bites and stings
  - 2. Animal and human bites

#### VI. LEARNING NEED

Peace officers must have a basic understanding of first aid measures to assist before, during and after childbirth in an emergency situation.

# LEARNING OBJECTIVES

- A. Recognize the signs of imminent birth
  - 1. Contractions
  - 2. Urgent need to bear down
  - 3. Crowning is present
- B. Recognize appropriate first aid measures for each of the following emergency situations that may occur in childbirth:
  - 1. Excessive vaginal bleeding
  - 2. Newborn fails to breathe

## VII. REQUIRED TESTS

A. The POST-Constructed Comprehensive Test on the objectives in Learning Domain #34

- B. An exercise test that requires the student to demonstrate competency in the following skills:
  - 1. Assesses victim
  - 2. Activates emergency response system
  - 3. Checks for pulse
  - 4. Delivery of high-quality CPR
  - 5. Provides effective breaths
  - 6. Automated External Defibrillator (AED) operation

Presenters must use a Skills Exercise Test Form which minimally includes the standards promulgated by the current AHA Guidelines for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiovascular Care (ECC).

# VIII. REQUIRED LEARNING ACTIVITIES

- A. A Learning Activity that requires the student to conduct a primary assessment. The primary assessment shall minimally include:
  - 1. Primary assessment
    - a. Check for responsiveness
    - b. Check pulse
    - c. Check airway
    - d. Check for breathing
- B. A Learning Activity that requires the student to demonstrate the following first aid techniques for controlling bleeding while using personal protective equipment (PPE):
  - 1. Direct pressure
  - 2. Pressure bandages
  - 3. Tourniquet device
  - 4. Hemostatic dressing/wounds packing
  - 5. Chest seals and dressings
- C. A Learning Activity that requires the student to demonstrate the following basic life support techniques:
  - 1. Clearing an obstructed airway on conscious and unconscious victims
    - a. Adult or child
    - b. Infant
    - c. Obese or pregnant
  - 2. Rescue breathing
    - a. Adult
    - b. Child
    - c. Infant

- 3. Cardiopulmonary resuscitation
  - a. Adult
  - b. Child
  - c. Infant
- D. A learning activity that requires the student to treat a victim for shock and answer the following questions related to shock:
  - 1. When should a victim be treated for shock?
  - 2. What are the possible consequences of failing to treat for shock?
  - 3. Are there circumstances under which the consequences of shock may be more dangerous than the injury that caused it?
- E. The student will participate in a learning activity that will demonstrate how to bandage different injuries while using PPE to minimize the dangers associated with infectious diseases and wash hands and disinfect equipment after providing treatment in accordance with the following principles:
  - 1. Use the cleanest material that is available
  - 2. Expose the injury site
  - 3. Cover the entire injury site
  - 4. Bandage snugly but without impairing circulation
  - 5. Leave victim's fingers and toes exposed
  - 6. Immobilize injury site as necessary

## IX. HOURLY REQUIREMENTS

Student shall be provided with a minimum number of instructional hours on first aid and CPR as required by Title 22, Division 9, Chapter 1.5, Section 100017(a) of the California Code of Regulations.

Description	Hours
POST Minimum Required Hours Agency Specific Hours	21
Total Instructional Hours	21