Course Outline

Public Services REVISED: July/2021

Job Title

Emergency Medical Technician

Career Pathway:

Emergency Response

Industry Sector:

Public Services

O*NET-SOC CODE:

29-2041.00

CBEDS Title:

Introduction to Emergency Services

CBEDS No.:

5810

77-50-55

Emergency Medical Technician: Recertification

Credits: 0 Hours: 30

Course Description:

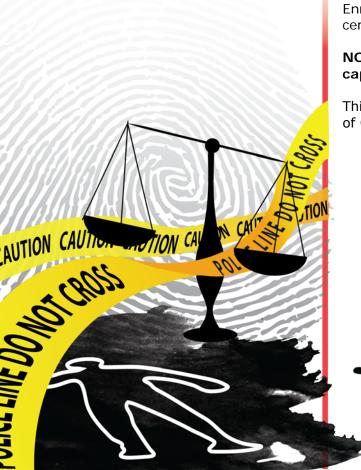
This competency-based course provides review and upgrading in techniques and methods used by the emergency medical technician (EMT). Also reviewed are the laws and the regulations affecting the EMT. This course provides the refresher training required by the State of California for EMT recertification. The competencies in this course are aligned with the California High School Academic Content Standards and the California Career Technical Education Model Curriculum Standards.

Prerequisites:

Enrollment requires a current, valid EMT certification or previous certification as an EMT within the last twelve months.

NOTE: For Perkins purposes this course has been designated as a capstone course.

This course **can** be repeated once a student receives a Certificate of Completion.





COURSE OUTLINE COMPETENCY-BASED COMPONENTS

A course outline reflects the essential intent and content of the course described. Acceptable course outlines have six components. (Education Code Section 52506). Course outlines for all apportionment classes, including those in jails, state hospitals, and convalescent hospitals, contain the six required elements:

(EC 52504; 5CCR 10508 [b]; Adult Education Handbook for California [1977], Section 100)

COURSE OUTLINE COMPONENTS

LOCATION

GOALS AND PURPOSES Cover

The educational goals or purposes of every course are clearly stated and the class periods are devoted to instruction. The course should be broad enough in scope and should have sufficient educational worth to justify the expenditure of public funds.

The goals and purpose of a course are stated in the COURSE DESCRIPTION. Course descriptions state the major emphasis and content of a course, and are written to be understandable by a prospective student.

PERFORMANCE OBJECTIVES OR COMPETENCIES

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Objectives should be delineated and described in terms of measurable results for the student and include the possible ways in which the objectives contribute to the student's acquisition of skills and competencies.

Performance Objectives are sequentially listed in the COMPETENCY-BASED COMPONENTS section of the course outline. Competency Areas are units of instruction based on related competencies. Competency Statements are competency area goals that together define the framework and purpose of a course. Competencies fall on a continuum between goals and performance objectives and denote the outcome of instruction.

Competency-based instruction tells a student before instruction what skills or knowledge they will demonstrate after instruction. Competency-based education provides instruction which enables each student to attain individual goals as measured against pre-stated standards.

Competency-based instruction provides immediate and continual repetition and In competency-based education the curriculum, instruction, and assessment share common characteristics based on clearly stated competencies. Curriculum, instruction and assessment in competency-based education are: explicit, known, agreed upon, integrated, performance oriented, and adaptive.

COURSE OUTLINE COMPETENCY-BASED COMPONENTS (continued)

COURSE OUTLINE COMPONENTS

LOCATION

INSTRUCTIONAL STRATEGIES

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Instructional techniques or methods could include laboratory techniques, lecture method, small-group discussion, grouping plans, and other strategies used in the classroom.

Instructional strategies for this course are listed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructional strategies and activities for a course should be selected so that the overall teaching approach takes into account the instructional standards of a particular program, i.e., English as a Second Language, Programs for Adults with Disabilities.

UNITS OF STUDY, WITH APPROXIMATE HOURS ALLOTTED FOR EACH UNIT

Cover

The approximate time devoted to each instructional unit within the course, as well as the total hours for the course, is indicated. The time in class is consistent with the needs of the student, and the length of the class should be that it ensures the student will learn at an optimum level.

pp. 7-22

Units of study, with approximate hours allotted for each unit are listed in the COMPETENCY AREA STATEMENT(S) of the course outline. The total hours of the course, including work-based learning hours (community classroom and cooperative vocational education) is listed on the cover of every CBE course outline. Each Competency Area listed within a CBE outline is assigned hours of instruction per unit.

EVALUATION PROCEDURES

pp. 24-25

The evaluation describes measurable evaluation criteria clearly within the reach of the student. The evaluation indicates anticipated improvement in performances as well as anticipated skills and competencies to be achieved.

Evaluation procedures are detailed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructors monitor students' progress on a continuing basis, assessing students on attainment of objectives identified in the course outline through a variety of formal and informal tests (applied performance procedures, observations, and simulations), paper and pencil exams, and standardized tests.

REPETITION POLICY THAT PREVENTS PERPETUATION OF STUDENT ENROLLMENT

Cover

After a student has completed all the objectives of the course, he or she should not be allowed to reenroll in the course. There is, therefore, a need for a statement about the conditions for possible repetition of a course to prevent perpetuation of students in a particular program for an indefinite period of time.

ACKNOWLEDGMENTS

Thanks to JOSHUA EFFLE-HOY and JONATHAN SCHAEFFER for developing and editing this curriculum. Acknowledgment is also given to ERICA ROSARIO for designing the original artwork for the course covers.

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CALIFORNIA CAREER TECHNICAL EDUCATION MODEL CURRICULUM STANDARDS Public Services Industry Sector Knowledge and Performance Anchor Standards

1.0 Academics

Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the Public Services academic alignment matrix for identification of standards.

2.0 Communications

Acquire and accurately use Public Services sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.

3.0 Career Planning and Management

Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans.

4.0 Technology

Use existing and emerging technology to investigate, research, and produce products and services, including new information, as required in the Public Services sector workplace environment.

5.0 Problem Solving and Critical Thinking

Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Public Services sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.

6.0 Health and Safety

Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Public Services sector workplace environment.

7.0 Responsibility and Flexibility

Initiate, and participate in, a range of collaborations demonstrating behaviors that reflect personal and professional responsibility, flexibility, and respect in the Public Services sector workplace environment and community settings.

8.0 Ethics and Legal Responsibilities

Practice professional, ethical, and legal behavior, responding thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms.

9.0 Leadership and Teamwork

Work with peers to promote divergent and creative perspectives, effective leadership, group dynamics, team and individual decision making, benefits of workforce diversity, and conflict resolution as practiced in the Cal-HOSA and SkillsUSA career technical student organizations.

10.0 Technical Knowledge and Skills

Apply essential technical knowledge and skills common to all pathways in the Public Services sector, following procedures when carrying out experiments or performing technical tasks.

11.0 Demonstration and Application

Demonstrate and apply the knowledge and skills contained in the Public Services anchor standards, pathway standards, and performance indicators in classroom, laboratory and workplace settings, and through the Cal-HOSA and SkillsUSA career technical student organizations.

Public Services Pathway Standards

B. Emergency Response Pathway

The Emergency Response pathway encompasses standards for designing student coursework in preparation for a number of careers in this field. The standards provide the foundation for further professional education and training at a postsecondary level, leading to certification and employment. By mastering these standards, students gain critical knowledge and skills through classroom and job-site experiences, simulations, and other learning modalities. Careers in this pathway include those in fire services, emergency medical services, wildland services, and emergency management.

Sample occupations associated with this pathway:

- Firefighter I, Firefighter II, Wildland Firefighter
- ♦ Emergency Medical Technician (EMT)
- ♦ Fire Prevention Technician
- ♦ Emergency Response Dispatcher
- ♦ Fire Management Officer
- B1.0 Analyze the characteristics of different career fields within the Emergency Response pathway to develop a perspective on the nature of the work, entry-level requirements, career options, and expectations.
- B2.0 Understand the processes by which emergency management organizations and emergency managers exert command and control over an emergency response and recovery operation.
- B3.0 Demonstrate necessary leadership qualities, team concepts, and personal integrity for emergency response personnel.
- B4.0 Execute safety procedures and protocols associated with local, state, and federal regulations in order to effectively and safely conduct duties within fire and emergency services.
- B5.0 Develop the level of nutrition, fitness, strength, agility, and psychological health and well-being required for safely working in emergency response career fields.
- B6.0 Understand the roles of federal, state, and local agencies in catastrophic event planning, preparation, response, and recovery.
- B7.0 Research and define what is considered to be hazardous materials incidents and threats.
- B8.0 Understand the fundamental mission of fire services occupations and the responsibility to preserve life and property, promote public safety, and reduce fire deaths.
- B9.0 Demonstrate the immediate basic life support and interim medical care for a sick, injured, or compromised person until advanced medical care is provided or transport is initiated.
- B10.0 Analyze and describe the functions and responsibilities of federal, state, and local wildland services.

CBE Competency-Based Education

COMPETENCY-BASED COMPONENTS for the <u>Emergency Medical Technician: Recertification</u> Course

	COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
A.	LAWS, REGULATIONS, AND BASIC SCIENCE REVIEW Review the medical-legal aspects of prehospital care. Review the anatomy and physiology of each body system.	 Identify the legislation which authorizes prehospital care in California. Identify the procedures and practices included in the scope of practice of the EMT at the scene of an emergency or during transport; during interfacility transport. Describe the responsibility of the State Emergency Medical Services (EMS) Authority. Describe the role of the local EMS Agency. Describe the guidelines covering authority for patient care in an emergency. Identify EMT responsibility in reporting child abuse. Identify EMT responsibility in reporting elder/dependent adult abuse. Identify EMT responsibility in reporting a gunshot wound. Identify the criteria for detaining a patient under Section 5150 of the Welfare and Institutions Code. Identify who can authorize an involuntary psychiatric hold. Define "mental disorders" as it relates to an involuntary psychiatric hold. Identify the specific criteria for the EMT to determine death in the field. Identify the importance of assessing a patient's level of consciousness prior to his/her signing an AMA (against medical advice) form. Describe the legal age of consent to include minors who are emancipated, self-supporting, legally married, pregnant, and have children. Identify the prehospital management of an ill or injured minor when parent/guardian is unavailable or an unconscious adult when family is unavailable. Define sexual assault. Identify the role of the EMT in the prehospital treatment of sexual assault. Identify possible reactions a patient may experience after an assault. Discuss situations in which the EMS Agency Medical Director may place an EMT on probation or suspend/revoke certification. Explain how the Good Samaritan Act relates to an EMT. 	Career Ready Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B1.1, B1.2, B2.2, B2.5, B3.3, B3.5, B3.6, B3.7, B3.9, B4.2, B9.3, B9.8, B9.9, B9.11

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
STATEMENTS	21. Define: negligence; informed consent; implied consent; abandonment; malpractice; assault; battery; Patient's Bill of Rights. 22. Identify the four components of negligence. 23. Identify patient situations in which the EMT–Paramedics should never be canceled or diverted by an EMT. 24. Describe the components of a complete EMS report form. 25. Identify equipment required in an ambulance in California. 26. Identify factors to be considered when parking at the scene of an accident. 27. Describe safe body mechanics when loading and unloading with: a. two rescuers b. three rescuers c. four rescuers 28. Describe the safe body mechanics when moving a patient on a gurney. 29. Identify the appropriate position for transporting a patient with: a. dyspnea b. flail-chest c. chest pain d. unconsciousness (non-trauma) e. Cerebral Vascular Accident (CVA) f. C-spine trauma g. pelvic fracture h. patient in shock 30. Identify the appropriate devices for transporting a patient with: a. dyspnea b. flail-chest c. chest pain d. unconsciousness (non-trauma) e. Cerebral Vascular Accident (CVA) with hemiplegia f. C-spine trauma g. pelvic fracture h. shock	STANDANDS
	 31. Identify the supplies and equipment necessary for intravenous (IV) therapy. 32. Describe the initial safety check on IV equipment including: a. correct solution b. expiration date c. clarity of fluid d. sterility of tubing e. integrity of bag 33. Identify the signs/symptoms of: 	

34. Identify the procedure for a complication with an IV.

a. infiltrationb. hematomac. thrombosis

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
	35. Identify the assessments which should be made when	
	monitoring and transporting a patient with an IV.	
	36. Identify factors which may affect IV flow rate.	
	37. Identify principles for the transport of patients with:	
	a. Foley catheter	
	b. nasogastric tube (NG)	
	c. gastrostomy (feeding) tube	
	d. heparin lock	
	e. tracheotomy tube	
	f. indwelling vascular line	
	g. medicine pump	
	h. implant shunt	
	i. chemo spill kit	
	38. Identify the importance of complete and accurate documentation.	
	39. Identify the information that should be included on all reports.	
	40. Identify the procedure to be followed prior to submission of a	
	report.	
	41. Describe the procedure to be followed if additional space is	
	required.	
	42. Identify procedures which should be followed to insure	
	confidentiality of patient information.	
	43. Identify the procedure to be followed if a patient refuses medical assistance.	
	44. Describe special circumstances where additional	
	documentation is required.	
	45. Describe the procedure for reporting possible exposure to	
	blood borne pathogens.	
	46. Describe surface anatomy to include: body positions and body	
	cavities.	
	47. Describe the anatomy of each body system.	
	48. Describe and identify the elements of primary and secondary	
	patient assessment.	
	49. Describe the assessment components:	
	a. environment	
	b. ABCs (Airway, Breathing, Compression)	
	c. level of consciousness (LOC)	
	d. skin signs	
	e. capillary refill	
	f. history	
	g. respirations h. pulse	
	i. puils	
	k. pulse pressure	
	I. head to toe exam	
	m. distal pulse	
	50. Identify the signs and symptoms of shock.	
	51. Describe shock:	

a. hypovolemic

COMPETENCY AREAS AND STATEMENTS Describe the treatment for shock.		1	<u> </u>
C. obstructive d. distributive 52. Describe the treatment for shock. 8. AIRWAY/BASIC LIFE SUPPORT (BCLS) ASEPTIC TECHNIQUES Review airway maintenance techniques; cardiopulmonary ressortation (CPR/BCLS), principles of aseptic technique. 8. Describe the use of an oropharyngeal and/or nasopharyngeal airway. 1. Identify the sale to see of a Constant Positive Airway Pressure (CPAP) device to provide ventilation y assistance to a conscious patient. 7. Describe the use of an oropharyngeal and/or nasopharyngeal airway. 8. Describe the use of mouth-to-mask device. 9. Describe the use of an abag valve mask device for an adult. 10. Describe ventilation frough an advanced airway using a bag- valve device. 11. Describe the technique for rompharyngeal suction using: tonsilar suction; soft catheter. 12. Describe the procedure for connecting a regulator to an oxygen cylinder and correcting any seal leaks that occur. 15. Identify the procedure for connecting a regulator to an oxygen administration equipment. 16. Identify the procedure for connecting a regulator to an oxygen administration equipment. 17. Describe the following terms and identify the most frequent cause of each: anatomical obstruction, rechanical obstruction. 18. Define the following terms and identify the most frequent cause of each: anatomical obstruction, complete airway obstruction. 20. Identify the major signs of cardiopulmonary Resuscitation (CPR) should not be initiated. 21. Identify completations of Cardiopulmonary Arest. 22. Identify completations of Cardiopulmonary Prest. 23. Identify completations of Cardiopulmonary arrest. 24. Identify completations of Cardiopulmonary arrest. 25. Identify completations of Cardiopulmonary arrest. 26. Identify completations of Cardiopulmonary arrest. 26. Identify the major signs of cardiopulmonary arrest.		MINIMAL COMPETENCIES	STANDARDS
Review airway maintenance techniques; cardiopulmonary resuscitation (CPR/BCLS; principles of aseptic technique. Beach make the complete of the suse of oxygen in a patient with an altered level of consciousness. Identify the most appropriate airway adjunct for a patient with suspected head and/or neck trauma. Describe administration of oxygen using a flow meter with: a. a nasal cannula b. a face mask Describe the use of an oropharyngeal and/or nasopharyngeal airway. Identify the use of a Constant Positive Airway Pressure (CPAP) device to provide ventilation of an adult using the mouth-to-mask method. Describe the technique for ventilation of an adult. Describe the technique for ventilation of an adult. Describe precautions implemented for ventilation through an advanced airway using a bag-valve mask device. Describe the use of airway adjuncts for children and neonates. Describe the use of airway adjuncts for children and neonates. Describe the use of airway adjuncts for children and neonates. Describe the technique for oropharyngeal suction using: tonsilar suction; soft catheter. Describe the procedure for connecting a regulator to an oxygen cylinder and correcting any seal leaks that occur. Define the following terms and identify the most frequent cause of each: anatomical obstruction; mechanical obstruction. Define the following terms and identify the most frequent cause of each: anatomical obstruction; mechanical obstruction. Define the following terms and identify the signs/symptoms for: partial airway obstruction; complete airway obstruction. Define the following terms and identify the signs/symptoms for: partial airway obstruction; complete airway obstruction. Identify the prehospital treatment of partial airway obstruction. 21. Identify circumstances when Cardiopulmonary Resuscitation (CPR) should not be initiated. 22. Identify the major signs of cardiopulmonary arrest. 23. Identify complications of CPR when performed: correctly;	(2 hours)	c. obstructive d. distributive	
24. Identify the maximum amount of time CPR can be interrupted.	(BCLS) ASEPTIC TECHNIQUES Review airway maintenance techniques; cardiopulmonary resuscitation (CPR/BCLS;	 administration equipment. Identify the rationale for the use of oxygen in a patient with an altered level of consciousness. Identify the most appropriate airway adjunct for a patient with suspected head and/or neck trauma. Describe administration of oxygen using a flow meter with: a nasal cannula b a face mask Describe the use of an oropharyngeal and/or nasopharyngeal airway. Identify the use of a Constant Positive Airway Pressure (CPAP) device to provide ventilatory assistance to a conscious patient. Describe the technique for ventilation of an adult using the mouth-to-mask method. Describe the use of mouth-to-mask device. Describe the use of a bag-valve mask device for an adult. Describe precautions implemented for ventilation through an advanced airway using a bag-valve ventilating device. Describe ventilation through an endotracheal tube using a bag-valve device. Describe the use of airway adjuncts for children and neonates. Describe the use of airway adjuncts for children and neonates. Describe the procedure for connecting a regulator to an oxygen cylinder and correcting any seal leaks that occur. Identify the procedure for cleaning and disinfecting ventilation and/or oxygen administration equipment. Identify the possible complications of oropharyngeal suctioning. Define stridor and state its significance. Define the following terms and identify the most frequent cause of each: anatomical obstruction; mechanical obstruction. Define the following terms and identify the signs/symptoms for: partial airway obstruction; complete airway obstruction. Identify the prehospital treatment of partial airway obstruction. Identify the major signs of cardiopulmonary arrest.	Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway:

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(3 hours)	 25. Identify circumstances when CPR may be discontinued. 26. Identify the techniques for determining if CPR is effective. 27. Describe the use of an automated external defibrillator (AED) to include maintenance, safety, storage, and equipment testing. 28. Identify the procedure for disposal of contaminated needles and other equipment/supplies. 	
C. MEDICAL EMERGENCIES Review the measures implanted for medical emergencies.	 Identify causes of altered level of consciousness. Identify the body position employed for a patient with an altered level of consciousness. Identify assessment parameters for a patient with an altered level of consciousness using the mnemonic AVPU (Alert, Verbal, Pain, Unresponsive). Identify the significance of fixed and dilated pupils in a patient with an altered level of consciousness. Identify the significance of unequal pupils in a patient with an altered level of consciousness. Identify the general prehospital treatment for a patient with an altered level of consciousness. Define cerebrovascular accident. Identify the signs/symptoms of a CVA/Stroke. Identify the techniques for communication with aphasic patient. Identify the prehospital treatment of a patient with hypertension and/or CVA, to include TPA Protocol. Define: epilepsy seizure generalized seizure post-ictal status epilepticus focal seizure Identify the significant information obtained from the past medical history of a seizure patient. Identify the significant information obtained from the past medical history of a seizure patient. Identify the methods of maintaining an open airway during the post-ictal state. Identify the methods of maintaining an open airway during the post-ictal state. Identify the most common cause of death in a seizing patient. Identify to complications of seizures. Define: syncope transient ischemic attack (TIA) 	Career Ready Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B9.3

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS

- c. vasovagal response
- 21. Define the terms Primary Stroke Center and Comprehensive Stroke Center (PSC and CSC).
- 22. Identify the appropriate destination for a patient experiencing the signs/symptoms of a neurological emergency.
- 23. Identify the prehospital treatment for all syncopal episodes.
- 24. Identify the parameters to be assessed in a patient complaining of chest pain using the mnemonic OPQRST (Onset, Provocation, Quality, Radiation, Severity, and Time).
- 25. Identify the following possible causes of chest pain:
 - a. myocardial
 - b. vascular
 - c. pulmonary
 - d. gastrointestinal
- 26. Describe general pathophysiology, signs/symptoms and prehospital treatment of:
 - a. angina pectoris
 - b. myocardial infarction
 - c. aortic aneurysm
- 27. Identify the most common cause of death following an acute myocardial infarction.
- 28. Identify complications of a myocardial infarction.
- 29. Define the following:
 - a. dyspnea
 - b. tachypnea
 - c. hypoxia
 - d. hypoventilation
 - e. anoxia
 - f. stridor
 - g. rales
 - h. wheezing
- 30. Identify the parameters to be assessed in a patient complaining of shortness of breath using the mnemonics OPQRST and SAMPLE (Signs and Symptoms, Allergies, Medications, past pertinent history, Last oral intake, liquid & solid, Events leading to the incident).
- 31. Describe and illustrate the following respiratory patterns:
 - a. apnea
 - b. Cheyne-Stokes
 - c. ataxic breathing
- 32. Identify the signs/symptoms and treatment of:
 - a. acute asthma
 - b. bronchitis
 - c. emphysema
 - d. chronic obstructive pulmonary disease (COPD)
 - e. congestive heart failure (CHF)
 - f. pulmonary edema
 - g. pulmonary embolism
 - h. pneumonia/coronavirus

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
	22 Identify the gyggen flow rates and devices for a nationt with	

- 33. Identify the oxygen flow rates and devices for a patient with COPD and inhaler for asthma.
- 34. Define:
 - a. glucose
 - b. insulin
 - c. diabetes
 - d. hypoglycemia
 - e. hyperglycemia
- 35. Identify the role of insulin in body metabolism.
- 36. Identify the signs/symptoms and appropriate prehospital treatment of:
 - a. diabetic coma (hyperglycemia)
 - b. insulin shock/reaction (hypoglycemia)
- 37. Identify common long-term complications of diabetes.
- 38. Describe the procedure implemented for oral glucose administration.
- 39. Demonstrate use, calibration, and maintenance of a glucometer.
- 40. Demonstrate clean technique for a blood draw using appropriate PPE and sharps disposal.
- 41. Perform a finger stick for the purpose of performing blood glucometry.
- 42. Interpret glucometer readings to determine a patient's need for additional assistance.
- 43. Describe the use and function of an insulin implant.
- 44. Define the following:
 - a. abdominal aneurysm
 - b. appendicitis
 - c. esophageal varices
 - d. hematemesis
 - e. hemorrhoid
 - f. melena
 - g. ulcer
- 45. Describe the implications of:
 - a. bright red rectal bleeding
 - b. coffee-ground emesis
 - c. bright red emesis
- 46. Describe the general signs/symptoms and prehospital treatment for non-traumatic abdominal emergencies and prehospital treatment.
- 47. Describe the signs/symptoms and prehospital treatment for gastrointestinal bleeding.
- 48. Describe information necessary in the assessment of abdominal pain.
- 49. Describe the specific signs/symptoms of:
 - a. kidney stones
 - b. pelvic inflammatory disease
 - c. ectopic pregnancy
 - d. abdominal aneurysm
- 50. Identify the procedure for assessing the abdomen.

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
l hours)	 51. Define communicable disease and identify the factors which must be present for a disease to be communicable. 52. Demonstrate technique to draw medications from a vial into a syringe. 53. Demonstrate the administration of an intramuscular injection and proper disposal of a needle and syringe. 54. Identify the responsibility of the EMT when assisting a patient with a communicable disease. 55. Identify common risks of exposure to communicable disease. 56. Identify precautions which should be taken to prevent transmission of disease. 57. Define: a. kidney stones b. pelvic inflammatory disease c. host d. incubation period e. disinfections f. exposure g. decontamination h. suspect i. universal precautions 58. Identify communicable diseases which are preventable by immunization. 59. Identify the mode of transmission for: a. hepatitis (A, B, &C) b. HIV infection c. influenza d. meningitis (viral/meningococcal) e. tuberculosis f. coronavirus 60. Describe scene size-up, initial assessment, focused history and physical exam. 61. Describe on-going detailed physical exam. 	
D. TRAUMA EMERGENCIES Review the measures implemented for trauma victims.	 Identify the functions of the skin. Identify the characteristics of superficial, partial-thickness, and full-thickness burns. Identify the criteria for determining if burns are minor, moderate, or critical. Identify the most frequent cause of death from a burn: a. during the initial 24 hours b. after 24 hours Identify critical body areas in relation to burns. Identify the prehospital treatment for the following types of burns: a. thermal b. chemical c. electrical d. radiant 	Career Ready Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B2.2, B9.3, B9.8

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
	 Identify the importance of determining whether a burn injury was received in a closed area. Identify signs/symptoms of a respiratory burn. Assess a burn using the "rule of nines." Identify the prehospital treatment for burns. Identify the appropriate destination in Los Angeles County for burn victims. 	

- 12. Identify the prehospital treatment of chemical burns of the
- 13. Identify the prehospital treatment of suspected respiratory burns.
- 14. Define and identify the prehospital treatment for the following:
 - a. contusion
 - b. hematoma
 - c. abrasion
 - d. puncture
 - e. laceration
 - f. avulsion
 - g. amputation
- 15. Identify differences between arterial and venous bleeding.
- 16. Identify the use and potential dangers of a tourniquet.
- 17. Identify the prehospital treatment of mouth wounds, including impaled objects through the cheek.
- 18. Locate pressure points.
- 19. Demonstrate the application of dressings to include pressure dressings.
- 20. Define the term hemostatic dressing.
- 21. Identify appropriate uses of hemostatic dressings.
- 22. Demonstrate use of a combat action tourniquet (CAT).
- 23. Identify the field treatment of a bleeding neck wound.
- 24. Identify the field treatment for an impaled object.
- 25. Identify the prehospital treatment for eye injuries.
- 26. Identify the precautions to be taken with facial trauma.
- 27. Identify the major functions of:
 - a. muscles
 - b. ligaments
 - c. tendons
 - d. bones
- 28. Identify the signs/symptoms and the prehospital treatments of the following:
 - a. sprain/strain
 - b. dislocation
 - c. closed fracture
 - d. open fracture
 - e. contusion
- 29. Identify possible complications common to all fractures.
- 30. Identify three areas that must be assessed before and after immobilization of an extremity.
- 31. Identify the signs/symptoms of hip fracture.
- 32. Identify possible complications specific for the following:

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
	 a. pelvic fractures b. open fractures c. clavicle fractures d. elbow fractures e. femur fractures f. rib fractures 33. Identify reasons for splinting a fracture. 34. Identify the principles of splinting. 35. Identify the indications for realignment of a fracture. 36. Identify indications for use of a traction splint. 37. Demonstrate the technique for application of a rigid splint. 38. Identify the technique for splinting a fracture of the following: a. clavicle/shoulder/humerus/elbow b. wrist/hand c. pelvis/hip d. femur 	
	e. knee/leg/ankle/foot39. Demonstrate the technique for application of a traction splint.40. Identify three structures which protect the brain and spinal cord.	
	 41. Define: a. subdural hematoma b. concussion 42. Identify the significance of clear or bloody drainage from the ear or nose following head trauma and the treatment 	
	instituted. 43. Identify the signs and symptoms of increased intracranial pressure.	

- 44. Identify the significance of deteriorating neurological status following head trauma.
- 45. Identify the most likely cause of shock in an adult patient with head trauma.
- 46. Define:
 - a. paraplegia
 - b. quadriplegia
 - c. hemiplegia
- 47. Identify signs/symptoms of cervical spine trauma.
- 48. Identify the techniques for maintaining a patent airway in a patient with suspected head or spine trauma.
- 49. Identify the reasons for using full spinal precautions in a patient with suspected head and/or spinal cord trauma.
- 50. Identify the technique for assessing neurological status in a patient with suspected head and/or spinal cord trauma.
- 51. Identify one technique for moving a patient with suspected head and/or spinal cord trauma.
- 52. Describe removing a helmet using spinal precautions.
- 53. Describe full spinal stabilization.
- 54. Identify the prehospital treatment for:
 - a. hematoma of scalp
 - b. laceration of scalp

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
	c. depressed skull fracture	
	d. impaled object in skull	
	55. Identify the signs/symptoms and prehospital treatment for the	
	following: a. rib fracture	
	b. flail chest	
	c. pneumothorax	
	d. tension pneumothorax	
	e. cardiac tamponade	
	f. myocardial contusion	
	56. Identify prehospital treatment for a sucking chest wound.	
	57. Identify the prehospital treatment for an impaled object in the	
	chest.	
	58. Identify the location with reference to surface anatomy of:	
	a. stomach	
	b. liver	
	c. spleen	
	d. kidney e. appendix	
	f. intestines	
	g. bladder	
	59. Identify the signs/symptoms of blunt abdominal trauma.	
	60. Identify prehospital treatment of the following:	
	a. patient with blunt abdominal trauma	
	b. abdominal evisceration	
	c. patient with trauma to the external genitalia	
	d. patient with an impaled object in the abdomen	
	61. Identify the importance of determining the mechanism of	
	injury in trauma extrication.	
	62. Identify techniques of lifting/or moving patients which may	
	help prevent body strain or injury to the EMT.	
	63. Describe the basic rules for body mechanics.64. Demonstrate techniques for the use of extrication tools	
	including Kendrick's Extrication Device.	
	65. Identify the following safety procedures at the scene of a	
	motor vehicle accident to include:	
	a. Safety triangles	
	b. vehicle placement	
	c. traffic control	
	d. control of fire hazards	
	66. Identify the purpose of a Multi-Casualty Incident (MCI)	
	command system.	
	67. Define triage.	
	68. Describe the functions of the triage personnel in a MCI	
	situation. 69. Identify the four categories which a patient may be placed	
	during an MCI	

70. Identify four types of emergency which meet criteria for implementing an incident command system.71. Identify the function of the Medical Alert Center (MAC).

during an MCI.

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(4 hours)	 72. Define the mnemonic "START" (Simple Triage and Rapid Treatment) and identify parameters of triage assessment. 73. Identify patient care activities during initial assessment in a multi-casualty incident. 	
E. ENVIRONMENTAL PROBLEMS Review the procedures used to treat: bites/stings; poisoning/overdose; heat/cold; inhalation injuries; hazardous material exposure; near drowning/diving injuries.	 Identify the signs/symptoms and prehospital treatment of: a. poisonous snakebite b. black widow/brown recluse spider bites c. scorpion sting d. bee sting Identify the signs/symptoms and treatment of an allergic reaction (anaphylaxis). Describe use of epinephrine auto-injector. Define anaphylaxis Discern the differences between an allergic reaction and anaphylaxis Demonstrate appropriate techniques for epinephrine administration. Identify four routes by which drugs/poisons may enter the body. Identify signs/symptoms and prehospital treatment for victims of poisoning. Identify the prehospital treatment for a patient who has ingested a caustic substance. Identify the appropriate treatment of a poisoned patient who is: a. conscious b. unconscious Identify the signs/symptoms and prehospital treatment of a patient who has overdosed on:	Career Ready Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1, 10.3 CTE Pathway: B9.3, B9.8

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(2 hours)	 Identify the signs/symptoms and prehospital treatment of: a. frostbite b. hypothermia Identify the signs/symptoms and prehospital treatment for inhalation of toxic substances. Identify the signs/symptoms and prehospital treatment of: a. carbon monoxide (CO) inhalation b. smoke inhalation c. cyanide inhalation Identify the principles involved in hazardous materials incident. Identify the signs/symptoms and prehospital treatment of near drowning. Identify the procedure for transporting a near drowning victim. 	
F. PEDIATRICS/OBSTETRICS Review the procedures implemented in pediatric and obstetric emergencies.	 Identify the techniques for promoting rapport with a pediatric patient. Identify the major differences between adults and children and infants when comparing: a. normal vital signs b. body proportions Identify signs/symptoms of dehydration in a child. Identify the role of the EMT in sudden infant death syndrome. Identify causes and prehospital treatment of fever in children. Identify signs/symptoms and the prehospital treatment of: a. croup b. epiglottis c. foreign body aspiration d. asthma Identify signs/symptoms suggestive to pediatric meningitis. Identify cooling measures for children. Identify the most frequent cause of cardiopulmonary arrest in children. Define: a. fetus b. uterus c. placenta d. umbilical cord e. amniotic cord f. cervix g. crowning Identify the prehospital treatment of abortion/miscarriage to include preserving the products of conception. Identify the history which is important when assessing a pregnant patient to include: a. gravida b. para c. abortion Identify the significance of blood-tinged mucous and/or clear 	Career Ready Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B9.3, B9.8

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(2 hours)	fluid discharge during labor. 15. Identify the three stages of labor. 16. Identify the signs/symptoms of imminent delivery. 17. Identify the signs/symptoms and the prehospital treatment of: a. prolapsed cord b. abnormal fetal presentation c. pregnancy induced hypertension d. premature labor/delivery e. breech presentation f. postpartum hemorrhage g. placenta abruption h. placenta previa 18. Identify the prehospital care of a multiple birth. 19. Identify techniques for evaluating the status of a newborn (including signs of distress) in the following areas: a. respiratory b. cardiovascular c. neurological 20. Identify the technique used for evaluation and timing uterine contractions. 21. Describe assisting with a normal emergency childbirth. 22. Describe the management of the placenta. 23. Perform neonatal resuscitation. 24. Identify the management of a cord around the infant's neck. 25. Describe the prehospital care of a neonate to include a premature infant. 26. Describe tapport with adolescents.	
G. BEHAVIORAL EMERGENCIES Review methods for management of disruptive behavior	 Define behavioral emergency. Identify possible causes for patients displaying disruptive behavior. Identify steps the EMT can take to stabilize a disruptive situation. Identify possible responses a family may have to a sudden death or crisis. Identify possible responses that the EMT may have to sudden death or stress reaction. Identify steps the EMT can take to manage a sudden death situation. Define: crisis critical incident stress debriefing (CISD) palliative care hospice Demonstrate the methods of restraining and transporting patients in the ambulance. Identify possible responses displayed by a terminally ill patient. Identify steps the EMT can take when dealing with problems of 	Career Ready Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B5.5, B6.4, B9.3, B9.8, B9.11

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(1 hour)	the terminally ill. 11. Identify the EMT's management of behavioral emergencies. 12. Identify patients with special communication considerations. 13. Identify the management of patients with special communication considerations. 14. Identify the treatment for victims of violence. 15. Identify the techniques used for assessing a patient who may be suicidal. 16. Identify measures an EMT should take if a patient exhibits signs/symptoms of stress reaction.	
H. DEFIBRILLATOR REVIEW Understand the parts and use the automated external defibrillator (AED).	 Locate and place the landmarks for the AED. Identify the purpose of an AED and the advantages of early use. Demonstrate the use of an AED in various scenarios. Identify the rhythms that an AED unit will recognize. Explain the difference between shockable and non-shockable rhythms. Discuss the importance of maintenance schedules of the AED units. Identify the situations when the AED unit should be carried to the patient's side. Identify the EMT interaction with paramedics on the scene. Identify restocking procedures; record keeping. Describe pediatric utilization. 	Career Ready Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B9.3
SCOPE OF PRACTICE Review expanded scope of practice as related to EMT-1 authorization.	 Describe treatment protocols (re: use of medications the EMT may initiate). Describe and review the additional activities that EMT may perform under the Los Angeles County expanded scope of practice. Describe and review optional skills as defined by the Los Angeles County EMS Agency. Describe and review the Prehospital Care Policy Manual. 	Career Ready Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B1.1, B1.5, B9.3,

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
J. TESTING Demonstrate understanding of concepts by taking pre and posttests. (4 hours)	 Obtain a minimum score of 80% on written posttest. Demonstrate accurately skills from the Los Angeles County Core Curriculum. 	Career Ready Practice: 1 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B1.5, B9.3

SUGGESTED INSTRUCTIONAL MATERIALS and OTHER RESOURCES

TEXTBOOKS

American Academy of Orthopedic Surgeons (AAOS). <u>Emergency Care and Transportation of the Sick and Injured,</u> <u>12th Edition</u>, Jones and Bartlett Learning, 2021.

American Heart Association (AHA), <u>2020 Handbook of Emergency Cardiovascular Care</u>, American Heart Association, 2020.

American Heart Association (AHA), <u>BLS Provider Manual</u>, American Heart Association, 2020.

Daniel J. Limmer, Michael F. O'Keefe, Harvey Grant, Bob Murray, J. David Bergeron, and Edward T. Dickinson, <u>Emergency Care, 14th Edition,</u> Pearson Prentice Hall, 2020.

Mistovich, Joseph J., Brent, Hafen, and Keith J. Karren. Prehospital Emergency Care, 9th Edition, Prentice Hall, 2009.

National Association of Emergency Medical Technicians (NAEMT), <u>Prehospital Trauma Life Support</u>, 9th Edition, Jones and Bartlett Learning, 2019.

RESOURCES

Employer Advisory Board members

CDE Model Curriculum Standards for Public Service http://www.cde.ca.gov/ci/ct/sf/documents/pubservices.pdf

National Association of Emergency Medical Technicians (NAEMT) &, P.O. Box 1400, Clinton, MS 39060-1400. Phone: (800) 346-2368. Fax: (601) 924-7325.

National Highway Transportation Safety Administration (NHTSA), EMS Division &, 400 7th St. SW, NTS-14, Washington, DC 20590.

National Registry of Emergency Medical Technicians (NREMT) , Rocco V. Morando Bldg., 6610 Busch Blvd., P.O. Box 29233, Columbus, OH 43229. Phone: (614) 888-4484. Fax: (614) 888-8920.

Los Angeles County Emergency Medical Services Agency (LACoEMS), 10100 Pioneer Blvd., Santa Fe Springs, CA 90670 Phone: (562) 378-1500.

COMPETENCY CHECKLIST

TEACHING STRATEGIES and EVALUATION

METHODS AND PROCEDURES

- A. Lectures and discussions
- B. Multimedia presentations
- C. Demonstrations and participation
- D. Individualized instruction
- E. Peer teaching
- F. Role-playing
- G. Guest speakers
- H. Ambulance internship
- I. Clinical internship

EVALUATION

SECTION A – Laws, Regulations, and Basic Science Review – Pass all assignments and exams on laws, regulations, and basic science review with a minimum score of 80% or higher.

SECTION B – Airway/Basic Cardiac Life Support (BCLS) Aseptic Techniques – Pass all assignments and exams on airway/basic life support (BCLS) aseptic techniques with a minimum score of 80% or higher.

SECTION C – Medical Emergencies – Pass all assignments and exams on medical emergencies with a minimum score of 80% or higher.

SECTION D – Trauma Emergencies – Pass all assignments and exams on trauma emergencies with a minimum score of 80% or higher.

SECTION E – Environmental Problems – Pass all assignments and exams on environmental problems with a minimum score of 80% or higher.

SECTION F – Pediatrics/Obstetrics – Pass all assignments and exams on pediatrics/obstetrics with a minimum score of 80% or higher.

SECTION G – Behavioral Emergencies – Pass all assignments and exams on behavioral emergencies with a minimum score of 80% or higher.

SECTION H – Defibrillator Review – Pass all assignments and exams on defibrillator review with a minimum score of 80% or higher.

SECTION I – Scope of Practice – Pass all assignments and exams on scope of practice with a minimum score of 80% or higher.

SECTION J – Testing – Pass all assignments and exams on testing with a minimum score of 80% or higher.

Standards for Career Ready Practice

1. Apply appropriate technical skills and academic knowledge.

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education. They make connections between abstract concepts with real-world applications and recognize the value of academic preparation for solving problems, communicating with others, calculating measures, and performing other work-related practices.

2. Communicate clearly, effectively, and with reason.

Career-ready individuals communicate thoughts, ideas, and action plans with clarity, using written, verbal, electronic, and/or visual methods. They are skilled at interacting with others: they are active listeners who speak clearly and with purpose, and they are comfortable with terminology that is common to workplace environments. Career-ready individuals consider the audience for their communication and prepare accordingly to ensure the desired outcome.

3. Develop an education and career plan aligned with personal goals.

Career-ready individuals take personal ownership of their educational and career goals and manage their individual plan to attain these goals. They recognize the value of each step in the educational and experiential process, and they understand that nearly all career paths require ongoing education and experience to adapt to practices, procedures, and expectations of an ever-changing work environment. They seek counselors, mentors, and other experts to assist in the planning and execution of education and career plans.

4. Apply technology to enhance productivity.

Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring and using new technology. They understand the inherent risks—personal and organizational—of technology applications, and they take actions to prevent or mitigate these risks.

5. Utilize critical thinking to make sense of problems and persevere in solving them

Career-ready individuals recognize problems in the workplace, understand the nature of the problems, and devise effective plans to solve the problems. They thoughtfully investigate the root cause of a problem prior to introducing solutions. They carefully consider options to solve a problem and, once agreed upon, follow through to ensure the problem is resolved.

6. Practice personal health and understand financial literacy.

Career-ready individuals understand the relationship between personal health and workplace performance. They contribute to their personal well-being through a healthy diet, regular exercise, and mental health activities. Career-ready individuals also understand that financial literacy leads to a secure future that enables career success.

7. Act as a responsible citizen in the workplace and the community.

Career-ready individuals understand the obligations and responsibilities of being a member of a community and demonstrate this understanding every day through their interactions with others. They are aware of the impacts of their decisions on others and the environment around them, and they think about the short-term and long-term consequences of their actions. They are reliable and consistent in going beyond minimum expectations and in participating in activities that serve the greater good.

8. Model integrity, ethical leadership, and effective management.

Career-ready individuals consistently act in ways that align with personal and community-held ideals and principles. They employ ethical behaviors and actions that positively influence others. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the direction and actions of a team or organization, and they recognize the short-term and long-term effects that management's actions and attitudes can have on productivity, morale, and organizational culture.

9. Work productively in teams while integrating cultural and global competence.

Career-ready individuals contribute positively to every team, as both team leaders and team members. To avoid barriers to productive and positive interaction, they apply an awareness of cultural differences. They interact effectively and sensitively with all members of the team and find ways to increase the engagement and contribution of other members.

10. Demonstrate creativity and innovation.

Career-ready individuals recommend ideas that solve problems in new and different ways and contribute to the improvement of the organization. They consider unconventional ideas and suggestions by others as solutions to issues, tasks, or problems. They discern which ideas and suggestions may have the greatest value. They seek new methods, practices, and ideas from a variety of sources and apply those ideas to their own workplace practices.

11. Employ valid and reliable research strategies.

Career-ready individuals employ research practices to plan and carry out investigations, create solutions, and keep abreast of the most current findings related to workplace environments and practices. They use a reliable research process to search for new information and confirm the validity of sources when considering the use and adoption of external information or practices.

12. Understand the environmental, societal, and economic impacts of decisions.

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact other people, organizations, the workplace, and the environment. They are aware of and utilize new technologies, understandings, procedures, and materials and adhere to regulations affecting the nature of their work. They are cognizant of impacts on the social condition, environment, workplace, and profitability of the organization.

Statement for Civil Rights

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