

Adopted

Career Technical Credit Transfer (CT²) Emergency Medical Technician-Basic (EMT-B) Career Technical Assurance Guide (CTAG) October 17, 2008

The following course or Career-Technical Assurance Number (CTAN) is eligible for transfer between career-technical education, adult workforce education, and post-secondary education.

CTEMTB002 – Emergency Medical Technician – Basic (EMT-B)

Credits: 7 Semester/10 Quarter Hours

Advising Notes: Submitted course work must include proof of laboratory and clinical components. Those persons holding current Ohio certification as an EMT-Basic will be given what the receiving institution is offering as credit for its CT² approved EMT-B course. The awarding of credit for the EMT-B course of study may decrease the time to associate degree completion, when such a degree is offered, but will not replace any portion of the EMT-Intermediate or EMT-Paramedic curricula as the later two are separate courses of study.

Prerequisite: Current Ohio EMT-Basic Certification

Module I Preparatory

Module II Patient Assessment

Module III Airway and Cardiac Arrest Management

Module IV Trauma Patient Management

Module V Medical Patient Management

Clinical Experience and/or Pre-Hospital Internship

Minimum Hours = 120 Didactic

10 Clinical Experience and/or Pre-Hospital Internship

Note: Credit hours assigned to CTANs are “relative values,” which are used to help determine the equivalency of submitted coursework or content. Once approved by a validation panel as a CT² course, students will be given what the receiving institution is offering as credit for its CT² approved course.

The CTAN illustrates the learning outcomes that are equivalent or common in introductory technical courses. In order for completers to receive the indicated credit, institutions must document that their course/program content matches the learning outcomes in the CTANs. The program outcomes identified below represent the **technical course/content** found in EMT-B programs as defined by The State Board of Emergency Medical Services in Ohio Revised Code 4765. In some cases, completers must also hold certain licenses and/or certifications or have satisfied specific external validators such as the examination to acquire a certification as an Ohio EMT-Basic. Pertinent to H. B. 66 legislation, industry standards and certifications provide documentation of student learning.

Recognized industry standards are expectations established by business, industry, state agencies, or professional associations that defines training program curricular requirements, establishes certification or licensure criteria, and often serves as the basis for program accreditation.

Institutional Requirements and Credit Conditions:

1. The receiving institution must have accreditation from the Ohio Department of Public Safety Division of Emergency Medical Services to offer an EMT-Basic training program or course of study.
2. The applicant must provide proof to the receiving institution that she/he holds current Ohio EMT-B certification.
3. The applicant must provide proof to the receiving institution that she/he has completed an EMT-B training course offered by a public assisted career-technical institution (secondary or adult) or state supported college.
4. Candidates for graduation from collegiate or university programs may have to satisfy additional degree requirements associated with the basic related or general education studies.
5. Admission requirements of individual institutions and/or programs are unaffected by the implementation of CT² outcomes.
6. Institutional residency requirements may affect the amount of transfer credit.

Description of the Profession

EMT-Basic

EMT-Basics have fulfilled prescribed requirements by a credentialing agency to practice the art and science of out-of-hospital medicine in conjunction with medical direction. Through performance of assessments and providing medical care, their goal is to prevent and reduce mortality and morbidity due to illness and injury for emergency patients in the out-of hospital setting. EMT-Basics possess the knowledge, skills and attitudes consistent with the expectations of the public and the profession. EMT-Basics recognize that they are an essential component of the continuum of care and serve as a link for emergency patients to acute care resources. The primary roles and responsibilities of EMT-Basics are to maintain high quality out-of-hospital emergency care.

Ancillary roles of the EMT-Basic may include public education and health promotion programs as deemed appropriate by the community. EMT-Basics are responsible and accountable to medical direction, the public, and their peers. EMT-Basics recognize the importance of research and actively participate in the design, development, evaluation and publication of research. EMT-Basics seek to take part in life-long professional development, peer evaluation, and assume an active role in professional and community organizations.

Emergency Medical Technician –Basic Course Description

EMT-B

Emergency Medical Technician-Basic (EMT-B) - a combination of specialized subject matter, laboratory, clinical and vehicle experiences designed to prepare technicians to become members of the pre-hospital health care team, working under the direction of a physician. Instruction includes patient assessment, pathophysiology and treatment of shock, airway management, cardiac management, trauma-triage, epinephrine auto-injector administration illness and injury management, and delivery and newborn care and the personnel trained may be members of fire departments, police departments, or other agencies that are involved in the emergency treatment and rescue of people.

Learning Outcomes

Summary of Learning Outcomes

All outcomes essential

Note: In an effort to limit the size of the CTAG, the learning outcomes for each of the listed modules were taken from the EMT-B Training Schedule that precedes the detailed behavioral objectives. Thus the listed outcomes summarize the specific behavioral objectives of the EMT-B training course. For greater detail the reader is referred to www.ems.ohio.gov/educationsite.asp. The reader should click on “initial training” and then chose “curriculum.”

MODULE I PREPARATORY

At the completion of this section the student shall be able to understand the roles and responsibilities of EMT-B, related basic anatomy and physiology to the foundations of medicine, respond to emergency calls and take appropriate action to reduce mortality and morbidity in pre-hospital settings.

MODULE I LESSON I PREPARATORY: INTRODUCTION TO EMS

At the completion of this section the student shall be able to:

- 1-1.1. Define Emergency Medical Services (EMS) systems
- 1-1.2. Differentiate the roles and responsibilities of the EMT-B from other pre-hospital care providers.
- 1-1.3. Define quality improvement and discuss the EMT-B’s role in the process.
- 1-1.4. Define medical direction and discuss the EMT-B’s role in the process.
- 1-1.5. State the specific statutes and regulations in Ohio regarding the EMS system.
- 1-1.6. Assess areas of personal attitude and conduct of the EMT-B.
- 1-1.7. Characterize the various methods used to access the EMS system in your community.
- 1-1.8. Define the EMT-B scope of practice.
- 1-1.9. Describe basic concepts of incident management.

MODULE I LESSON II PREPARATORY: EMT SAFETY AND WELL BEING

At the completion of this section the student shall be able to:

- 1-2.1. Describe the roles and responsibilities related to personal safety.
- 1-2.2. Discuss the roles and responsibilities of the EMT-B towards the safety of the crew, the patient and bystanders.
- 1-2.3. Explain the need to determine scene safety.
- 1-2.4. List the personal protective equipment necessary for each of the following situations: Hazardous materials, Rescue operations, Violent scenes, Crime scenes, Exposure to blood borne pathogens, Exposure to airborne pathogens.
- 1-2.5. Explain the rationale for serving as an advocate for the use of appropriate protective equipment.
- 1-2.6. Discuss the importance of body substance isolation (BS).
- 1-2.7. Describe the steps the EMT-B should take for personal protection from airborne and blood borne pathogens.
- 1-2.8. Use appropriate personal protective equipment, given a scenario with potential infectious exposure.

- 1-2.9. Complete disinfection/cleaning and all reporting documentation, given a scenario with potential infectious exposure.
- 1-2.10. Distinguish among the terms cleaning, disinfection, high-level disinfection, and sterilization.
- 1-2.11. Describe how to clean or disinfect items following patient care.
- 1-2.12. List possible emotional reactions that the EMT-B may experience when faced with trauma, illness, death and dying.
- 1-2.13. Discuss the possible reactions that a family member may exhibit when confronted with death and dying.
- 1-2.14. State the steps in the EMT-B's approach to the family confronted with death and dying. State the possible reactions that the family of the EMT-B may exhibit due to their outside involvement in EMS.
- 1-2.15. Recognize the signs and symptoms of critical incident stress.
- 1-2.16. State possible steps that the EMT-B may take to help reduce or alleviate stress.
- 1-2.17. Recognize need for EMT-Basic, debriefing following a difficult infant or child transport.
- 1-2.18. Understand the provider's own response (emotional) to caring for infants or children

MODULE I LESSON III PREPARATORY: SCENE SAFETY

At the completion of this section the student shall be able to:

- 1-3.1. Explain the EMT-B's role during a call involving hazardous materials.
- 1-3.2. Describe what the EMT-B should do if there is reason to believe that there is a hazard at the scene.
- 1-3.3. Describe the actions that an EMT-B should take to ensure bystander safety.
- 1-3.4. State the role the EMT-B should perform until appropriately trained personnel arrive at the scene of a hazardous material situation.
- 1-3.5. Break down the steps to approaching a hazardous situation.
- 1-3.6. Discuss the various environmental hazards that affect EMS.
- 1-3.7. Explain the methods for preventing contamination of self, equipment and facilities.
- 1-3.8. Discuss the role of the EMT-B in extrication.

MODULE I LESSON IV PREPARATORY: MOVING AND HANDLING PATIENTS

At the completion of this section the student shall be able to:

- 1-4.1. Define body mechanics.
- 1-4.2. Discuss the guidelines and safety precautions that need to be followed when lifting a patient.
- 1-4.3. Describe the safe lifting of cots and stretchers.
- 1-4.4. Describe the guidelines and safety precautions for carrying patients and/or equipment.
- 1-4.5. Discuss one-handed carrying techniques.
- 1-4.6. Describe correct and safe carrying procedures on stairs.
- 1-4.7. State the guidelines for reaching and their application.
- 1-4.8. Describe correct reaching for log rolls.
- 1-4.9. State the guidelines for pushing and pulling.
- 1-4.10. Discuss the general considerations of moving patients.
- 1-4.11. State three situations that may require the use of an emergency move.

- 1-4.12. Identify the following patient carrying devices: Wheeled ambulance stretcher, Portable ambulance s-stretcher, Stair chair, Scoop stretcher, Long spine board, Basket stretcher, Flexible stretcher.
- 1-4.13. Explain the rationale for properly lifting and moving patients.
- 1-4.14. Differentiate between the various methods of moving a patient to the unit based upon injury or illness.
- 1-4.15. Describe the appropriate methods for immobilizing infants and children, including the use of child safety seats.

MODULE I LESSON V PREPARATORY: MOVING AND HANDLING PATIENTS – LABORATORY

At the completion of this section the student shall be able to:

- 1-5.1 Working with a partner, prepare each of the following devices for use, transfer a patient to the device, properly position the patient on the device, move the device to the ambulance and load the patient into the ambulance: wheeled ambulance stretcher, portable ambulance stretcher, stair chair, scoop stretcher, long spine board, basket stretcher, flexible stretcher.
- 1-5.2 Working with a partner, the EMT-B will demonstrate techniques for the transfer of a patient from an ambulance stretcher to a hospital stretcher.

MODULE I LESSON VI PREPARATORY: ANATOMY AND PHYSIOLOGY

At the completion of this section the student shall be able to:

- 1-6.1. Identify the following topographic terms: medial, lateral, proximal, distal, superior, inferior, anterior, posterior, midline, right and left, mid-clavicular, bilateral, and mid-axillary.
- 1-6.2. Describe the anatomy and function of the following major body systems: Respiratory, circulatory, musculoskeletal, nervous and endocrine.
- 1-6.3. Explain the pathophysiology of airway compromise.
- 1-6.4. Identify and describe the airway anatomy in the infant, child and the adult.
- 1-6.5. Differentiate between the airway anatomy in the infant, child, and the adult.
- 1-6.6. State the major functions of the skin.
- 1-6.7. List the layers of the skin.
- 1-6.8. Describe the function of the muscular system.
- 1-6.9. Describe the function of the skeletal system.
- 1-6.10. List the major bones or bone groupings of the spinal column; the thorax; the upper extremities; the lower extremities.
- 1-6.11. State the components of the nervous system.
- 1-6.12. List the functions of the central nervous system.
- 1-6.13. Define the structure of the skeletal system as it relates to the nervous system.
- 1-6.14. List the structure and function of the circulatory system.
- 1-6.15. List the structure and function of the respiratory system.
- 1-6.16. Describe the structure and function of the cardiovascular system.

MODULE I LESSON VII PREPARATORY: MEDICAL-LEGAL CONSIDERATIONS / EMS DRIVING

At the completion of this section the student shall be able to:

- 1-7.1. Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or state provisions regarding EMS application.
- 1-7.2. Define consent and discuss the methods of obtaining consent.

- 1-7.3. Differentiate between expressed and implied consent.
- 1-7.4. Explain the role of consent of minors in providing care.
- 1-7.5. Discuss the implications for the EMT-B in patient refusal of transport.
- 1-7.6. Discuss the issues of abandonment, negligence, and battery and their implications to the EMT-B.
- 1-7.7. State the conditions necessary for the EMT-B to have a duty to act.
- 1-7.8. Explain the importance, necessity and legality of patient confidentiality.
- 1-7.9. Discuss the considerations of the EMT-B in issues of organ retrieval.
- 1-7.10. Differentiate the actions that an EMT-B should take to assist in the preservation of a crime scene.
- 1-7.11. State the conditions that require an EMT-B to notify local law enforcement officials.
- 1-7.12. Explain the role of EMS and the EMT-B regarding patients with DNR orders.
- 1-7.13. Explain the rationale for the needs, benefits and usage of advance directives and/or Living Wills.
- 1-7.14. Explain the rationale for the concept of varying degrees of DNR.
- 1-7.15. Describe the medical legal responsibilities in suspected child abuse.
- 1-7.16. Discuss the medical and non-medical equipment needed to respond to a call.
- 1-7.17. List the phases of an ambulance call.
- 1-7.18. Describe the general provisions of state laws relating to the operation of the ambulance and privileges in any or all of the following categories: Speed, Warning lights, Sirens, Right-of-way, Parking, and Turning.
- 1-7.19. List contributing factors to unsafe driving conditions.
- 1-7.20. Describe the considerations that should be given to: request for escorts, following an escort vehicle, and intersections.
- 1-7.21. Discuss "Due Regard for Safety of All Others" while operating an emergency vehicle.
- 1-7.22. State what information is essential in order to respond to a call.
- 1-7.23. Discuss various situations that may affect response to a call.
- 1-7.24. Apply the components of the essential patient information in a written report.
- 1-7.25. Summarize the importance of preparing the unit for the next response.
- 1-7.26. Identify what is essential for completion of a call.
- 1-7.27. Explain the rationale for appropriate report of patient information.
- 1-7.28. Explain the rationale for having the unit prepared to respond.
- 1-7.29. Explain the components of the written report and list the information that should be included on the written report.
- 1-7.30. Identify the various sections of the written report.
- 1-7.31. Describe what information is required in each section of the pre-hospital care report and how it should be entered.
- 1-7.32. Define the special considerations concerning patient refusal.
- 1-7.33. Describe the legal implications associated with the written report.
- 1-7.34. Discuss all state and/or local record and reporting requirements.
- 1-7.35. Explain the rationale for patient care documentation.
- 1-7.36. Explain the rationale for the EMS system gathering data.
- 1-7.37. Explain the rationale for using medical terminology correctly.
- 1-7.38. Explain the rationale for using an accurate and synchronous clock so that information can be used in trending.

MODULE II – PATIENT ASSESSMENT

At the completion of this section the student shall be able to evaluate the nature of the emergency, perform initial and on-going patient assessment and complete accurate documentation.

MODULE II LESSON I PATIENT ASSESSMENT: VITAL SIGNS – ASSESSMENT AND INTERPRETATION

At the completion of this section the student shall be able to:

- 2-1.1. Identify the components of the extended vital signs.
- 2-1.2. Describe the methods to obtain a breathing rate.
- 2-1.3. Identify the attributes that should be obtained when assessing breathing.
- 2-1.4. Differentiate between shallow, labored and noisy breathing.
- 2-1.5. Describe the methods to obtain a pulse rate.
- 2-1.6. Identify the information obtained when assessing a patient's pulse.
- 2-1.7. Differentiate between a strong, weak, regular and irregular pulse.
- 2-1.8. Describe the methods to assess the skin color, temperature, condition.
- 2-1.9. Identify the normal and abnormal skin colors.
- 2-1.10. Differentiate between pale, blue, red and yellow skin color.
- 2-1.11. Identify the normal and abnormal skin temperature.
- 2-1.12. Differentiate between hot, cool and cold skin temperature.
- 2-1.13. Describe normal and abnormal findings when assessing skin temperature.
- 2-1.14. Identify normal and abnormal skin conditions.
- 2-1.15. Describe the methods to assess the pupils.
- 2-1.16. Identify normal and abnormal pupil size.
- 2-1.17. Differentiate between dilated and constricted pupil size.
- 2-1.18. Differentiate between reactive and non-reactive pupils and equal and unequal pupils.
- 2-1.19. Describe the methods to assess blood pressure.
- 2-1.20. Define systolic pressure.
- 2-1.21. Define diastolic pressure.
- 2-1.22. Explain the difference between auscultation and palpation for obtaining a blood pressure.
- 2-1.23. Identify the components of the SAMPLE history.
- 2-1.24. Differentiate between a sign and a symptom.
- 2-1.25. State the importance of accurately reporting and recording the baseline vital signs.
- 2-1.26. Discuss the need to search for additional medical identification.
- 2-1.27. Explain the value of performing the baseline vital signs.
- 2-1.28. Recognize and respond to the feelings patients experience during assessment.
- 2-1.29. Explain the need for obtaining and recording an accurate set of vital signs.
- 2-1.30. Explain the rationale of recording additional sets of vital signs.

2-1.31. Explain the importance of obtaining a SAMPLE history.

MODULE II LESSON II PATIENT ASSESSMENT: SCENE SIZE UP/INITIAL/FOCUSED ASSESSMENT

At the completion of this section the student shall be able to:

- 2-2.1. Recognize hazards/potential hazards.
- 2-2.2. Describe common hazards found at the scene of a trauma and a medical patient.
- 2-2.3. Determine if the scene is safe to enter.
- 2-2.4. Discuss common mechanisms of injury/nature of illness.
- 2-2.5. Discuss the reason for identifying the total number of patients at the scene.
- 2-2.6. Explain the reason for identifying the need for additional help or assistance.
- 2-2.7. Explain the rationale for crew members to evaluate scene safety prior to entering.
- 2-2.8. Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness.
- 2-2.9. Observe various scenarios and identify potential hazards.
- 2-2.10. Summarize the reasons for forming a general impression of the patient.
- 2-2.11. Discuss methods of assessing altered mental status.
- 2-2.12. Discuss methods of assessing the airway.
- 2-2.13. State reasons for management of the cervical spine once the patient has been determined to be a trauma patient.
- 2-2.14. Describe methods used for assessing if a patient is breathing.
- 2-2.15. State what care should be provided to a patient with adequate breathing.
- 2-2.16. State what care should be provided to a patient without adequate breathing.
- 2-2.17. Differentiate between a patient with adequate and inadequate breathing.
- 2-2.18. Distinguish between methods of assessing breathing in the adult, child and infant patient.
- 2-2.19. Describe the methods used to obtain a pulse.
- 2-2.20. Discuss the need for assessing the patient for external bleeding.
- 2-2.21. Explain the reason for prioritizing a patient for care and transport.
- 2-2.22. Explain the importance of forming a general impression of the patient.
- 2-2.23. Explain the value of performing an initial assessment.
- 2-2.24. Discuss the reasons for reconsideration concerning the mechanism of injury.
- 2-2.25. State the reasons for performing a rapid trauma assessment.
- 2-2.26. Recite examples and explain why patients should receive a rapid trauma assessment.
- 2-2.27. Describe the areas included in the rapid trauma assessment and discuss what should be evaluated.
- 2-2.28. Differentiate when the rapid assessment may be altered in order to provide patient care.
- 2-2.29. Discuss the reason for performing a focused history and physical exam.
- 2-2.30. Recognize and respect the feelings that patients might experience during assessment.
- 2-2.31. Describe the unique needs for assessing an individual with a specific chief complaint with no known prior history.
- 2-2.32. Differentiate between the history and physical exam that is performed for responsive patients with no known prior history and patients responsive with a known prior history.

- 2-2.33. Describe the unique needs for assessing an individual who is unresponsive or has an altered mental status.
- 2-2.34. Differentiate between the assessment that is performed for a patient who is unresponsive or has an altered mental status and other medical patients requiring assessment.
- 2-2.35. Attend to the feelings that these patients might be experiencing.

MODULE II LESSON III PATIENT ASSESSMENT: DETAIL ASSESSMENT / MCI / COMMUNICATION

At the completion of this section the student shall be able to:

- 2-3.1. Discuss the components of the detailed physical exam.
- 2-3.2. State the area of the body that are evaluated during the detailed physical exam.
- 2-3.3. Explain what additional care should be provided while performing the detailed physical exam.
- 2-3.4. Distinguish between the detailed physical exam that is performed on a trauma patient and that of the medical patient.
- 2-3.5. Explain the rationale for the feelings that these patients might be experiencing.
- 2-3.6. Discuss the reasons for repeating the initial assessment as part of the on-going assessment.
- 2-3.7. Describe the components of the on-going assessment.
- 2-3.8. Describe trending of assessment components.
- 2-3.9. Explain the value of performing an on-going assessment.
- 2-3.10. Recognize and respect the feelings that patients might experience during assessment.
- 2-3.11. Explain the value of trending assessment components to other health professionals who assume care of the patient.
- 2-3.12. Describe the criteria for a multiple-casualty situation.
- 2-3.13. Evaluate the role of the EMT-B in the multiple-casualty situation.
- 2-3.14. Summarize the components of basic triage.
- 2-3.15. Define the role of the EMT-B in a disaster operation.
- 2-3.16. Review the local mass casualty incident plan.
- 2-3.17. Given a scenario of a mass casualty incident, perform triage.
- 2-3.18. List the proper methods of initiating and terminating a radio call.
- 2-3.19. State the proper sequence for delivery of patient information.
- 2-3.20. Explain the importance of effective communication of patient information in the verbal report.
- 2-3.21. Identify the essential components of the verbal report.
- 2-3.22. Describe the attributes for increasing effectiveness and efficiency of verbal communications.
- 2-3.23. State legal aspects to consider in verbal communication.
- 2-3.24. Discuss the communication skills that should be used to interact with the patient.
- 2-3.25. Discuss the communication skills that should be used to interact with the family, bystanders, individuals from other agencies while providing patient care and the difference between skills used to interact with the patient and those used to interact with others.
- 2-3.26. List the correct radio procedures in the following phases of a typical call: To the scene, At the scene, To the facility, At the facility, To the station, At the station.
- 2-3.27. Explain the rationale for providing efficient and effective radio communications and patient reports.

MODULE II LESSON IV PATIENT ASSESSMENT: PEDIATRIC ASSESSMENT

At the completion of this section the student shall be able to:

- 2.4.1. Identify the developmental considerations for the following age groups: infants, toddlers, pre-school, school age, and adolescent.
- 2.4.2. Describe differences in anatomy and physiology of the infant, child and adult patient.
- 2.4.3. Differentiate the response of the ill or injured infant or child (age specific) from that of an adult.
- 2.4.4. Differentiate between assessing the altered mental status in the adult, child and infant patient.
- 2.4.5. Discuss methods of assessing the airway in the child and infant patient.
- 2.4.6. State what care should be provided to the adult, child and infant patient with adequate breathing.
- 2.4.7. State what care should be provided to the adult, child and infant patient without adequate breathing.
- 2.4.8. Differentiate between a patient with adequate and inadequate breathing.
- 2.4.9. Distinguish between methods of assessing breathing in the adult, child and infant patient.
- 2.4.10. Compare the methods of providing airway care to the adult, child and infant patient.
- 2.4.11. Differentiate between obtaining a pulse in an adult, child and infant patient.
- 2.4.12. Identify the signs and symptoms of shock (hypo perfusion) in the infant and child patient.
- 2.4.13. Describe the methods to assess the capillary refill in infants and children.
- 2.4.14. Identify normal and abnormal capillary refill in infants and children.
- 2.4.15. Describe normal and abnormal findings when assessing skin capillary refill in the infant and child patient.
- 2.4.16. Describe the methods of determining end organ perfusion in the infant and child patient.
- 2.4.17. State the usual cause of cardiac arrest in infants and children versus adults.
- 2.4.18. Summarize the indicators of possible child abuse and neglect.
- 2.4.19. Explain the rationale for having knowledge and skills appropriate for dealing with the infant and child patient.
- 2.4.20. Attend to the feelings of the family when dealing with an ill or injured infant or child.
- 2.4.21. Describe normal and abnormal findings when assessing skin color.
- 2.4.22. Describe normal and abnormal findings when assessing skin temperature.
- 2.4.23. Describe normal and abnormal findings when assessing skin condition.
- 2.4.24. Describe emergency situations involving infants and children with special health care needs.

MODULE II – LESSON V PATIENT ASSESSMENT: ASSESSMENT LABORATORY – ADULT / PEDIATRIC

At the completion of this section the student shall be able to:

- 2.5.1. Demonstrate the skills involved in assessment of breathing.
- 2.5.2. Demonstrate the skills associated with obtaining a pulse.
- 2.5.3. Demonstrate the skills associated with assessing the skin color, temperature, condition, and capillary refill in infants and children.
- 2.5.4. Demonstrate the skills associated with assessing the pupils.
- 2.5.5. Demonstrate the skills associated with obtaining blood pressure.
- 2.5.6. Demonstrate the techniques for assessing mental status.
- 2.5.7. Demonstrate the techniques for assessing the airway.
- 2.5.8. Demonstrate the techniques for assessing if the patient is breathing.

- 2.5.9. Demonstrate the techniques for assessing if the patient has a pulse.
- 2.5.10. Demonstrate the techniques for assessing the patient for external bleeding.
- 2.5.11. Demonstrate the techniques for assessing the patient's skin color, temperature, condition and capillary refill (infants and children only).
- 2.5.12. Demonstrate the ability to prioritize patients.
- 2.5.13. Demonstrate the rapid trauma assessment that should be used to assess a patient based on mechanism of Injury.
- 2.5.14. Demonstrate the patient care skills that should be used to assist with a patient who is responsive with no known history.
- 2.5.15. Demonstrate the patient care skills that should be used to assist with a patient who is unresponsive or has an altered mental status.
- 2.5.16. Demonstrate the skills that should be used to obtain information from the patient, family, or bystanders at the scene.
- 2.5.17. Demonstrate the skills involved in performing the detailed physical exam.
- 2.5.18. Demonstrate the skills involved in performing the on-going assessment.
- 2.5.19. Demonstrate the assessment of the infant and child.
- 2.5.20. Perform a simulated, organized, concise radio transmission.
- 2.5.21. Perform an organized, concise patient report that would be given to the staff at a receiving facility.
- 2.5.22. Perform a brief, organized report that would be given to an ALS provided arriving at an incident scene at which the EMT-B was already providing care.
- 2.5.23. Complete a pre-hospital care report.

MODULE II LESSON VI PATIENT ASSESSMENT: TEST AND EVALUATION OF PREPARATORY AND ASSESSMENT

At the completion of this section the student shall be able to:

- 2-6.1. Achieve at least a 70% on a written examination covering the Preparatory and Patient Assessment modules.
- 2-6.2. Achieve a passing score on the practical skill application of patient assessment.

MODULE III – AIRWAY AND CARDIAC ARREST MANAGEMENT

At the completion of this section the student shall be able to evaluate the nature of the emergency, demonstrate appropriate airway and cardiac management, operate and monitor EKG and automated defibrillation equipment and take action to reduce mortality and morbidity in pre-hospital settings.

MODULE III LESSON I AIRWAY & CARDIAC ARREST MANAGEMENT : AIRWAY OBSTRUCTION & OXYGEN THERAPY

At the completion of this section the student shall be able to:

- 3-1.1. Describe the equipment and method of suctioning the airway and pharynx.
- 3-1.2. Describe the methods and management of an obstructed airway in the adult, child and infant patient.
- 3-1.3. List the steps in the management of foreign body airway obstruction in the adult, child and infant patient.
- 3-1.4. State the importance of having a suction unit ready for immediate use when providing emergency care.
- 3-1.5. Describe the techniques of suctioning.
- 3-1.6. Explain the rationale for providing adequate oxygenation through high inspired oxygen concentrations to patients who, in the past, may have received low concentrations.
- 3-1.7. Define the components of an oxygen delivery system.
- 3-1.8. Identify a nonrebreather face mask and state the oxygen flow requirements needed for its use.
- 3-1.9. Describe the indications for using a nasal cannula versus a nonrebreather face mask.

- 3-1.10. Identify a nasal cannula and state the flow requirements needed for its use.
- 3-1.11. Given a list of statements, the student should be able to identify the statement that best describes the purpose of suctioning a patient.
- 3-1.12. Given that there are various types of suction catheters, the EMT-B should be able to list at least three different types, determined by difference in use and material composition.
- 3-1.13. Given a list of situations describing patients who require suctioning, the student should indicate which type of catheter should be used.

MODULE III LESSON II AIRWAY & CARDIAC ARREST MANAGEMENT: RESPIRATORY ARREST & MANAGEMENT

At the completion of this section the student shall be able to:

- 3-2.1. Name and label the major structures of the respiratory system on a diagram.
- 3-2.2. Describe how pulmonary ventilation (inhalation and exhalation) is accomplished.
- 3-2.3. List the signs of adequate breathing.
- 3-2.4. List the signs of inadequate breathing.
- 3-2.5. Describe the steps in performing the head-tilt chin-lift.
- 3-2.6. Relate mechanism of injury to opening the airway.
- 3-2.7. Describe the steps in performing jaw thrust.
- 3-2.8. Describe how to artificially ventilate a patient with a pocket mask.
- 3-2.9. Describe the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask while using the jaw thrust.
- 3-2.10. List the parts of a bag-valve-mask system.
- 3-2.11. Describe the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask for one and two rescuers.
- 3-2.12. Describe the signs of adequate artificial ventilation using the bag-valve-mask.
- 3-2.13. Describe the signs of inadequate artificial ventilation using the bag-valve-mask.
- 3-2.14. Describe the steps in artificially ventilating a patient with a flow restricted, oxygen-powered ventilation device.
- 3-2.15. List the steps in performing the actions taken when providing mouth-to-mouth and mouth-to-stoma artificial ventilation.
- 3-2.16. Describe how to measure and insert an oropharyngeal (oral) airway.
- 3-2.17. Describe how to measure and insert a nasopharyngeal (nasal) airway.
- 3-2.18. Explain the rationale for basic life support artificial ventilation and airway protective skills taking priority over most other basic life support skills.
- 3-2.19. Given a list of statements, the student should be able to identify the statement that best describes the purpose of using the double lumen airway.
- 3-2.20. Given a list of situations describing airway maintenance problems or potential airway maintenance problems, the to identify situations in which the use of the double lumen airway is indicated and contraindicated.
- 3-2.21. The student should be able to identify those situations in which the double lumen airway may be removed.
- 3-2.22. The student should be able to identify the advantages of using the double lumen airway over other methods of airway control.
- 3-2.23. The student should be able to match airway adjuncts with their advantages and disadvantages.
- 3-2.24. Given a list of equipment and material, the student should be able to identify those items that must be available before esophageal obstruction is begun.
- 3-2.25. Given a diagram of the double lumen airway, the student should be able to label and describe the function of all component parts.
- 3-2.26. Given a list of equipment and materials, the student should be able to list the procedures for insertion of the double lumen airway, including all steps in the proper sequence.
- 3-2.27. Given a list of errors, the student should be able to identify common errors involved in the use of the double lumen airway.

- 3-2.28. Discuss methods of assuring and maintaining correct placement of double lumen tube.
- 3-2.29. Describe how the cervical spine is protected throughout these maneuvers.
- 3-2.30. Discuss the techniques for evaluating the effectiveness of ventilation including: Visualization, Auscultation, Oximetry.
- 3-2.31. Describe the problems associated with ventilation.
- 3-2.32. Describe the indications, contraindications, and technique for insertion of nasal gastric tubes.
- 3-2.33. Describe how to perform the Sellick maneuver (cricoid pressure).
- 3-2.34. Describe the indications for advanced airway management.
- 3-2.35. List the equipment required for orotracheal intubation.
- 3-2.36. Describe the proper use of the curved blade for orotracheal intubation.
- 3-2.37. Describe the proper use of the straight blade for orotracheal intubation.
- 3-2.38. State the reasons for and proper use of the stylet in orotracheal intubation.
- 3-2.39. Describe the methods of choosing the appropriate size endotracheal tube in an adult patient.
- 3-2.40. State the formula for sizing an infant or child endotracheal tube.
- 3-2.41. List complications associated with advanced airway management.
- 3-2.42. Define the various alternative methods for sizing the infant and child endotracheal tube.
- 3-2.43. Describe the skill of orotracheal intubation in the adult patient.
- 3-2.44. Describe the skill of orotracheal intubation in the infant and child patient.
- 3-2.45. Describe the skill of confirming endotracheal tube placement in the adult, infant and child patient.
- 3-2.46. State the consequence of and the need to recognize unintentional esophageal intubation.
- 3-2.47. Describe the skill of securing the endotracheal tube in the adult, infant and child patient.
- 3-2.48. Recognize and respect the feelings of the patient and family during advanced airway procedures.
- 3-2.49. Explain the value of performing advanced airway procedures.
- 3-2.50. Explain the need for the EMT to perform advanced airway procedures.
- 3-2.51. Explain the rationale for the use of a stylet.
- 3-2.52. Explain the rationale for having a section unit immediately available during intubation attempts.
- 3-2.53. Explain the rationale for confirming breath sounds.
- 3-2.54. Explain the rationale for securing the endotracheal tube.

MODULE III LESSON III AIRWAY & CARDIAC ARREST MANAGEMENT: AIRWAY LABORATORY 1

At the completion of this section the student shall be able to:

- 3-3.1. Demonstrate the steps in the management of foreign body airway obstruction in the adult, child and infant patient.
- 3-3.2. Demonstrate the techniques of suctioning.
- 3-3.3. Demonstrate the correct operation of oxygen tanks and regulators.
- 3-3.4. Demonstrate the use of a nonrebreather face mask and state the oxygen flow requirements for its use.
- 3-3.5. Demonstrate the use of a nasal cannula and state the flow requirements needed for its use.
- 3-3.6. Demonstrate the techniques of foreign body airway obstruction removal in the child and infant.
- 3-3.7. Demonstrate bag-valve-mask artificial ventilations for the child and infant.

- 3-3.8. Demonstrate oxygen delivery for the infant and child.
- 3-3.9. Demonstrate how to artificially ventilate the infant and child patient.
- 3-3.10. Demonstrate oxygen administration for the infant and child patient.
- 3-3.11. Demonstrate the steps in performing the head-tilt chin-lift.
- 3-3.12. Demonstrate the steps in performing the jaw thrust.
- 3-3.13. Demonstrate the steps in providing mouth-to-mouth artificial ventilation with body substance isolation (barrier shields).
- 3-3.14. Demonstrate how to use a pocket mask to artificially ventilate a patient.
- 3-3.15. Demonstrate the assembly of a bag-valve-mask unit.
- 3-3.16. Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask for one and two rescuers.
- 3-3.17. Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask while using the jaw thrust.
- 3-3.18. Demonstrate artificial ventilation of a patient with a flow restricted, oxygen-powered ventilation device.
- 3-3.19. Demonstrate how to artificially ventilate a patient with a stoma.
- 3-3.20. Demonstrate how to insert an oropharyngeal (oral) airway.
- 3-3.21. Demonstrate how to insert a nasopharyngeal (nasal) airway.
- 3-3.22. Given an adult intubation manikin, a double lumen airway, and a ventilation device, the student should be able to demonstrate the techniques for the insertion of the airway.
- 3-3.23. Demonstrate how to perform the Sellick maneuver (cricoid pressure).
- 3-3.24. Demonstrate the skill of orotracheal intubation in the adult patient.
- 3-3.25. Demonstrate the skill of orotracheal intubation in the infant and child patient.
- 3-3.26. Demonstrate the skill of confirming endotracheal tube placement in the adult patient.
- 3-3.27. Demonstrate the skill of confirming endotracheal tube placement in the infant and child patient.
- 3-3.28. Demonstrate the skill of securing the endotracheal tube in the adult patient.
- 3-3.29. Demonstrate the skill of securing the endotracheal tube in the infant and child patient.

MODULE III LESSON IV AIRWAY & CARDIAC ARREST MANAGEMENT: AIRWAY LABORATORY 11

At the completion of this section the student shall be able to:

- 3-4.1. Demonstrate the steps in the management of foreign body airway obstruction in the adult, child and infant patient.
- 3-4.2. Demonstrate the techniques of suctioning.
- 3-4.3. Demonstrate the correct operation of oxygen tanks and regulators.
- 3-4.4. Demonstrate the use of a nonrebreather face mask and state the oxygen flow requirements needed for its use.
- 3-4.5. Demonstrate the use of a nasal cannula and state the flow requirements needed for its use.
- 3-4.6. Demonstrate the techniques of foreign body airway obstruction removal in the child and infant.
- 3-4.7. Demonstrate bag-valve-mask artificial ventilations for the child and infant.
- 3-4.8. Demonstrate oxygen delivery for the infant and child.
- 3-4.9. Demonstrate how to artificially ventilate the infant and child patient.
- 3-4.10. Demonstrate oxygen administration for the infant and child patient.
- 3-4.11. Demonstrate the steps in performing the head-tilt chin-lift.

- 3-4.12. Demonstrate the steps in performing the jaw thrust.
- 3-4.13. Demonstrate the steps in providing mouth-to-mouth artificial ventilation with body substance isolation (barrier shields).
- 3-4.14. Demonstrate how to use a pocket mask to artificially ventilate a patient.
- 3-4.15. Demonstrate the assembly of a bag-valve-mask unit.
- 3-4.16. Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask for one and two rescuers.
- 3-4.17. Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask while using the jaw thrust.
- 3-4.18. Demonstrate artificial ventilation of a patient with a flow restricted, oxygen-powered ventilation device.
- 3-4.19. Demonstrate how to artificially ventilate a patient with a stoma.
- 3-4.20. Demonstrate how to insert an oropharyngeal (oral) airway.
- 3-4.21. Demonstrate how to insert a nasopharyngeal (nasal) airway.
- 3-4.22. Given an adult intubation manikin, a double lumen airway, and a ventilation device, the student should be able to demonstrate the techniques for the insertion of the airway.
- 3-4.23. Demonstrate how to perform the Sellick maneuver (cricoid pressure).
- 3-4.24. Demonstrate the skill of orotracheal intubation in the adult patient.
- 3-4.25. Demonstrate the skill of orotracheal intubation in the infant and child patient.
- 3-4.26. Demonstrate the skill of confirming endotracheal tube placement in the adult patient.
- 3-4.27. Demonstrate the skill of confirming endotracheal tube placement in the infant and child patient.
- 3-4.28. Demonstrate the skill of securing the endotracheal tube in the adult patient.
- 3-4.29. Demonstrate the skill of securing the endotracheal tube in the infant and child patient.

MODULE III LESSON V AIRWAY & CARDIAC ARREST MANAGEMENT: CARDIAC ARREST MANAGEMENT

At the completion of this section the student shall be able to:

- 3-5.1. Describe the pathophysiology of cardiac arrest.
- 3-5.2. Discuss the differences in outcome for medical and trauma related cardiac arrest.
- 3-5.3. Explain the primary causes of cardiac arrest in the adult, child and infant patient.
- 3-5.4. Describe and discuss the primary interventions that the EMT-B can provide to the adult, child and infant patient in cardiac arrest.
- 3-5.5. Explain the proper application of chest compression in the adult, child and infant patient in cardiac arrest.
- 3-5.6. Explain the proper ventilation to compression ratio for one and two person CPR in the adult, child and infant patient of cardiac arrest.
- 3-5.7. Discuss the use of mechanical cardiopulmonary resuscitation devices in the pre-hospital setting.
- 3-5.8. Explain the importance of pre-hospital ACLS intervention if it is available.
- 3-5.9. Define the role of EMT-B in the emergency cardiac care system.
- 3-5.10. Explain the importance of urgent transport to a facility with Advanced Cardiac Life Support if it is not available in the pre-hospital setting.
- 3-5.11. List the indications for Automated External Defibrillation (AED).
- 3-5.12. List the contraindications for automated external defibrillation.
- 3-5.13. Explain the impact of age and weight on defibrillation.
- 3-5.14. Discuss the fundamentals of early defibrillation.
- 3-5.15. Explain the rationale for early defibrillation.

- 3-5.16. Explain that not all chest pain patients result in cardiac arrest and do not need to be attached to an automated external defibrillator.
- 3-5.17. Discuss the various types of automated external defibrillators.
- 3-5.18. Differentiate between the fully automated and the semi-automated defibrillator.
- 3-5.19. Discuss the procedures that must be taken into consideration for standard operations of the various types of automated external defibrillators.
- 3-5.20. State the reasons for assuring that the patient is pulseless and apneic when using the automated external defibrillator.
- 3-5.21. Discuss the circumstances which may result in inappropriate shocks.
- 3-5.22. Explain the considerations for interruption of CPR, when using the automated external defibrillator.
- 3-5.23. Discuss the advantages and disadvantages of automated external defibrillators.
- 3-5.24. Summarize the speed of operation of automated external defibrillation.
- 3-5.25. Discuss the use of remote defibrillation through adhesive pads.
- 3-5.26. Discuss the special considerations for rhythm monitoring.
- 3-5.27. List the steps in the operation of the automated external defibrillator.
- 3-5.28. Discuss the standard of care that should be used to provide care to a patient with persistent ventricular fibrillation and no available ACLS.
- 3-5.29. Discuss the standard of care that should be used to provide care to a patient with recurrent ventricular fibrillation and no available ACLS.
- 3-5.30. Differentiate between the single rescuer and multi-rescuer care with an automated external defibrillator.
- 3-5.31. Explain the reason for pulses not being checked between shocks with an automated external defibrillator.
- 3-5.32. Discuss the importance of coordinating ACLS trained providers with personnel using automated external defibrillators.
- 3-5.33. Explain the importance of frequent practice with the automated external defibrillator.
- 3-5.34. Discuss the need to complete the Automated Defibrillator, Operator's Shift Checklist.
- 3-5.35. Explain the role medical direction plays in the use of automated external defibrillation.
- 3-5.36. State the reasons why a case review should be completed following the use of the automated external defibrillator.
- 3-5.37. Discuss the components that should be included in a case review.
- 3-5.38. Discuss the goal of quality improvement in automated external defibrillation.
- 3-5.39. Define the function of all controls on an automated external defibrillator, and describe event documentation and battery defibrillator maintenance.
- 3-5.40. Discuss the reasons for obtaining initial training in automated external defibrillation and the importance of continuing education.
- 3-5.41. Discuss the reason for maintenance of automated external defibrillators.
- 3-5.42. Discuss the importance of post-resuscitation care.
- 3-5.43. List the components of post-resuscitation care.

MODULE III LESSON VI AIRWAY & CARDIAC ARREST MANAGEMENT: CARDIAC ARREST/AED/CPR LAB I

At the completion of this section the student shall be able to:

- 3-6.1. Demonstrate effective cardiopulmonary resuscitation for an adult, child and infant patient in accordance with the current American Medical Association guidelines.
- 3-6.2. Demonstrate the application and operation of the automated external defibrillator.
- 3-6.3. Demonstrate the maintenance of an automated external defibrillator.
- 3-6.4. Demonstrate the assessment and documentation of patient response to the automated external defibrillator.
- 3-6.5. Demonstrate the skills necessary to complete the Automated Defibrillator, Operator's Shift Checklist.

MODULE III LESSON VII AIRWAY AND CARDIAC ARREST MANAGEMENT: CARDIAC ARREST/AED/CPR LAB II

At the completion of this section the student shall be able to:

- 3-7.1. Demonstrate effective cardiopulmonary resuscitation for an adult, child and infant patient in accordance with the current American Medical Association guidelines.
- 3-7.2. Demonstrate the application and operation of the automated external defibrillator.
- 3-7.3. Demonstrate the maintenance of an automated external defibrillator.
- 3-7.4. Demonstrate the assessment and documentation of patient response to the automated external defibrillator.
- 3-7.5. Demonstrate the skills necessary to complete the Automated Defibrillator, Operator's Shift Checklist.

MODULE III LESSON VIII AIRWAY AND CARDIAC ARREST MANAGEMENT: TEST & EVALUATION

At the completion of this section the student shall be able to:

- 3-8.1. Achieve at least a 70% on a written examination covering the Airway and Cardiac Arrest module.
- 3-8.2. Achieve a passing score on the practical skill application of Airway Obstruction, Basic Airway, Advanced Airway, CPR and AED.

MODULE IV – TRAUMA PATIENT MANAGEMENT

At the completion of this section the student shall be able to respond to emergency calls, to evaluate the nature of the emergency, perform patient assessment and take appropriate action to reduce mortality and morbidity in pre-hospital settings.

MODULE IV LESSON I TRAUMA PATIENT MANAGEMENT: BLEEDING AND SHOCK

At the completion of this section the student shall be able to:

- 4-1.1. Differentiate between arterial, venous and capillary bleeding.
- 4-1.2. State methods of emergency medical care of external bleeding.
- 4-1.3. Establish the relationship between body substance isolation and bleeding.
- 4-1.4. Establish the relationship between airway management and the trauma patient.
- 4-1.5. Establish the relationship between mechanism of injury and internal bleeding.
- 4-1.6. List the signs of internal bleeding.
- 4-1.7. List the steps in the emergency medical care of the patient with signs and symptoms of internal bleeding.
- 4-1.8. List signs and symptoms of shock (hypoperfusion).
- 4-1.9. State the steps in the emergency medical care of the patient with signs and symptoms of shock (hypoperfusion).
- 4-1.10. Explain the sense of urgency to transport patients that are bleeding and show signs of shock (hypoperfusion).
- 4-1.11. Differentiate between the injury patterns in adults, infants, and children.
- 4-1.12. Discuss the field management of the infant and child trauma patient.
- 4-1.13. Discuss the use of the PASG in bleeding control.*

MODULE IV LESSON 2 TRAUMA PATIENT MANAGEMENT: SOFT TISSUE INJURY / BURNS

At the completion of this section the student shall be able to:

- 4-2.1. Establish the relationship between body substance isolation (BSI) and soft tissue injuries.
- 4-2.2. List the types of closed soft tissue injuries.
- 4-2.3. Describe the emergency medical care of the patient with a closed soft tissue injury.
- 4-2.4. State the types of open soft tissue injuries.
- 4-2.5. Describe the emergency medical care of the patient with an open soft tissue injury.
- 4-2.6. Discuss the emergency medical care considerations for a patient with a penetrating chest injury.
- 4-2.7. State the emergency medical care considerations for a patient with an open wound to the abdomen.
- 4-2.8. Differentiate the care of an open wound to the chest from an open wound to the abdomen.
- 4-2.9. List the classifications of burns.
- 4-2.10. Define superficial burn.
- 4-2.11. List the characteristics of a superficial burn.
- 4-2.12. Define partial thickness burn.
- 4-2.13. List the characteristics of a partial thickness burn.
- 4-2.14. Define full thickness burn.
- 4-2.15. List the characteristics of a full thickness burn.
- 4-2.16. Describe the emergency medical care of the patient with a superficial burn.
- 4-2.17. Describe the emergency medical care of the patient with a partial thickness burn.
- 4-2.18. Describe the emergency medical care of the patient with a full thickness burn.
- 4-2.19. List the functions of dressing and bandaging.
- 4-2.20. Describe the purpose of a bandage.
- 4-2.21. Describe the steps in applying a pressure dressing.
- 4-2.22. Establish the relationship between airway management and the patient with chest injury, burns, blunt and penetrating injuries.
- 4-2.23. Describe the effects of improperly applied dressings, splints and tourniquets.
- 4-2.24. Describe the emergency medical care of a patient with an impaled object.
- 4-2.25. Describe the emergency medical care of a patient with an amputation.
- 4-2.26. Describe the emergency care for a chemical burn.
- 4-2.27. Describe the emergency care for an electrical burn.

MODULE IV LESSON III TRAUMA PATIENT MANAGEMENT: BLEEDING/SHOCK/SOFT TISSUE INJURY/BURNS LAB

At the completion of this section the student shall be able to:

- 4-3.1. Demonstrate direct pressure as a method of emergency medical care of external bleeding.
- 4-3.2. Demonstrate the use of diffuse pressure as a method of emergency medical care of external bleeding.
- 4-3.3. Demonstrate the use of pressure points and tourniquets as a method of emergency medical care of external bleeding.
- 4-3.4. Demonstrate the care of the patient exhibiting signs and symptoms of internal bleeding.
- 4-3.5. Demonstrate the care of the patient exhibiting signs and symptoms of shock (hypoperfusion).
- 4-3.6. Demonstrate completing a pre-hospital care report for patient with bleeding and/or shock (hypoperfusion).
- 4-3.7. Demonstrate the steps in the emergency medical care of closed soft tissue injuries.

- 4-3.8. Demonstrate the steps in the emergency medical care of open soft tissue injuries.
- 4-3.9. Demonstrate the steps in the emergency medical care of a patient with an open chest wound.
- 4-3.10. Demonstrate the steps in the emergency medical care of a patient with open abdominal wounds.
- 4-3.11. Demonstrate the steps in the emergency medical care of a patient with an impaled object.
- 4-3.12. Demonstrate the steps in the emergency medical care of a patient with an amputation.
- 4-3.13. Demonstrate the steps in the emergency medical care of an amputated part.
- 4-3.14. Demonstrate the steps in the emergency medical care of a patient with superficial burns.
- 4-3.15. Demonstrate the steps in the emergency medical care of a patient with partial thickness burns.
- 4-3.16. Demonstrate the steps in the emergency medical care of a patient with full thickness burns.
- 4-3.17. Demonstrate the steps in the emergency medical care of a patient with a chemical burn.
- 4-3.18. Demonstrate completing a pre-hospital care report for patients with soft tissue injuries.
- 4-3.19. Demonstrate the application of the PASG for bleeding control.*

MODULE IV LESSON IV TRAUMA PATIENT MANAGEMENT: MUSCULOSKELETAL CARE – UPPER EXTREMITIES

At the completion of this section the student shall be able to:

- 4-4.1. Differentiate between an open and a closed painful, swollen, deformed extremity.
- 4-4.2. State the reasons for splinting.
- 4-4.3. List the general rules of splinting.
- 4-4.4. List the complications of splinting.
- 4-4.5. List the emergency medical care for a patient with a painful, swollen, deformed extremity.
- 4-4.6. Explain the rationale for splinting at the scene versus load and go.
- 4-4.7. Explain the rationale for immobilization of the painful, swollen, deformed extremity.

MODULE IV LESSON V TRAUMA PATIENT MANAGEMENT: MUSCULOSKELETAL CARE– PELVIS & LOWER EXTREMITIES

At the completion of this section the student shall be able to:

- 4-5.1. Discuss the advantages and the disadvantages of the use of the PASG for stabilization of a pelvic fracture.*
- 4-5.2. Discuss the advantages of traction for hip and/or femur fractures.*
- 4-5.3. Explain the rationale for the use of the PASG for stabilization of multiple lower extremity fractures.*

MODULE IV LESSON VI TRAUMA PATIENT MANAGEMENT: HEAD AND SPINE INJURY

At the completion of this section the student shall be able to:

- 4-6.1. Relate mechanism of injury to potential injuries of the head and spine.
- 4-6.2. Describe the implications of not properly caring for potential spine injuries.
- 4-6.3. State the signs and symptoms of a potential spine injury.
- 4-6.4. Describe the method of determining if a responsive patient may have a spine injury.
- 4-6.5. Relate the airway emergency medical care techniques to the patient with a suspected spine injury.
- 4-6.6. Describe how to stabilize the cervical spine.

- 4-6.7. Discuss indications for sizing and using a cervical spine immobilization device.
- 4-6.8. Establish the relationship between airway management and the patient with head and spine injuries.
- 4-6.9. Describe a method for sizing a cervical spine immobilization device.
- 4-6.10. Describe how to log roll a patient with a suspected spine injury.
- 4-6.11. Describe how to secure a patient to a long spine board.
- 4-6.12. List instances when a short spine board should be used.
- 4-6.13. Describe how to immobilize a patient using a short spine board.
- 4-6.14. Describe the indications for the use of rapid extrication.
- 4-6.15. List steps in performing rapid extrication.
- 4-6.16. State the circumstances when a helmet should be left on the patient.
- 4-6.17. Discuss the circumstances when a helmet should be removed.
- 4-6.18. Identify different types of helmets.
- 4-6.19. Describe the unique characteristics of sports helmets.
- 4-6.20. Explain the preferred methods to remove a helmet.
- 4-6.21. Discuss alternative methods for removal of a helmet.
- 4-6.22. Describe how the patient's head is stabilized to remove the helmet.
- 4-6.23. Differentiate how the head is stabilized with a helmet compared to without a helmet.
- 4-6.24. Explain the rationale for immobilization of the entire spine when a cervical spine injury is suspected.
- 4-6.25. Explain the rationale for utilizing immobilization methods apart from the straps on the cots.
- 4-6.26. Explain the rationale for utilizing a short spine immobilization device when moving a patient from the sitting to the supine position.
- 4-6.27. Discuss the reasons for leaving a helmet in place for transport of a patient.
- 4-6.28. Discuss the reasons for removal of a helmet prior to transport of a patient.

MODULE IV LESSON VII TRAUMA PATIENT MANAGEMENT: FRACTURE AND SPINAL CARE LABORATORY

At the completion of this section the student shall be able to:

- 4-7.1. Demonstrate the emergency medical care of a patient with a painful, swollen, deformed extremity.
- 4-7.2. Demonstrate completing a pre-hospital care report for patients with musculoskeletal injuries.
- 4-7.3. Demonstrate opening the airway in a patient with suspected spinal cord injury.
- 4-7.4. Demonstrate evaluating a responsive patient with a suspected spinal cord injury.
- 4-7.5. Demonstrate stabilization of the cervical spine.
- 4-7.6. Demonstrate the four person log roll for a patient with a suspected spinal cord injury.
- 4-7.7. Demonstrate how to log roll a patient with a suspected spinal cord injury using two people.
- 4-7.8. Demonstrate securing a patient to a long spine board.
- 4-7.9. Demonstrate using the short board immobilization technique.
- 4-7.10. Demonstrate preferred methods for stabilization of a helmet.
- 4-7.11. Demonstrate helmet removal techniques.
- 4-7.12. Demonstrate alternative methods for stabilization of a helmet.

- 4-7.13. Demonstrate completing a pre-hospital care report for patients with head and spinal injuries.
- 4-7.14. Demonstrate using a traction device for a hip and femur fracture.*
- 4-7.15. Demonstrate using the PASG for stabilization of a pelvic fracture.*

MODULE IV LESSON VIII TRAUMA PATIENT MANAGEMENT: EXTRICATION LABORATORY

At the completion of this section the student shall be able to:

- 4-8.1. Describe the purpose of extrication.
- 4-7.2. Identify what equipment for personal safety is required for the EMT-B.
- 4-7.3. Define the fundamental components of extrication.
- 4-7.4. State the steps that should be taken to protect the patient during extrication.
- 4-7.5. Evaluate various methods of gaining access to the patient.
- 4-7.6. Distinguish between simple and complex access.
- 4-7.7. Explain the rationale for utilizing rapid extrication approaches only when they indeed will make the difference between life and death.
- 4-7.8. Demonstrate procedure for rapid extrication.
- 4-7.9. Explain the rationale for packaging of a trauma patient for transport with a cervical collar, backboard and PASG.*

MODULE IV LESSON IX TRAUMA PATIENT MANAGEMENT: TRAUMA MANAGEMENT – TEST AND EVALUATION

At the completion of this section the student shall be able to:

- 4-9.1. Achieve at least a 70% on a written examination covering the Trauma Patient Management modules.
- 4-9.2. Achieve a passing score on the practical skill application of Splints, Cervical Collars, Short Spine Board, Long Spine Board, Bandages and Dressings, Bleeding Control and Rapid Extrication.

MODULE V MEDICAL PATIENT MANAGEMENT

At the completion of this section the student shall be able to evaluate the nature of the emergency, perform patient assessment, provide appropriate patient care and medical management, understand general pharmacology, and provide delivery and care of newborn in medical emergencies.

MODULE V LESSON I MEDICAL PATIENT MANAGEMENT: PHARMACOLOGY/RESPIRATORY EMERGENCIES

At the completion of this section the student shall be able to:

- 5-1.1. Identify which medications will be carried on the unit.
- 5-1.2. State the medications carried on the unit by the generic name.
- 5-1.3. Identify the medications with which the EMT-B may assist the patient with administering.
- 5-1.4. State the medications the EMT-B can assist the patient with by the generic name.
- 5-1.5. Discuss the forms in which the medications may be found.
- 5-1.6. Explain the rationale for the administration of medications.
- 5-1.7. Demonstrate general steps for assisting patient with self administration of medications.
- 5-1.8. Read the labels and inspect each type of medication.
- 5-1.9. State the signs and symptoms of a patient with breathing difficulty.

- 5-1.10. Describe the emergency medical care of the patient with breathing difficulty.
- 5-1.11. Recognize the need for medical direction to assist in the emergency medical care of the patient with breathing difficulty.
- 5-1.12. Describe the emergency medical care of the patient with breathing distress.
- 5-1.13. Establish the relationship between airway management and the patient with breathing difficulty.
- 5-1.14. List signs of adequate air exchange.
- 5-1.15. State the generic name, medication forms, dose, administration, action, indications and contraindications for the prescribed inhaler.
- 5-1.16. Distinguish between the emergency medical care of the infant, child and adult patient with breathing difficulty.
- 5-1.17. Discuss the EMT-B treatment regimens for various respiratory emergencies.
- 5-1.18. Explain the rationale for administering an inhaler.
- 5-1.19. Discuss the advantages and disadvantages of high concentration and low concentration oxygen to the patient having difficulty breathing.
- 5-1.20. Indicate various causes of respiratory emergencies in the adult patient.
- 5-1.21. Summarize emergency medical care strategies for respiratory distress and respiratory failure.
- 5-1.22. Recognize the patient experiencing an allergic reaction.
- 5-1.23. Describe the emergency medical care of the patient with an allergic reaction.
- 5-1.24. Establish the relationship between the patient with an allergic reaction and airway management.
- 5-1.25. Describe the mechanisms of allergic response and the implications for airway management.
- 5-1.26. State the generic and trade names, medication forms, dose, administration, action, and contraindications for the epinephrine auto-injector.
- 5-1.27. Evaluate the need for medical direction in the emergency medical care of the patient with an allergic reaction.
- 5-1.28. Differentiate between the general category of those patients having an allergic reaction and those patients having an allergic reaction and requiring immediate medical care, including immediate use of epinephrine auto-injector.
- 5-1.29. Explain the rationale for administering epinephrine using an auto-injector.

MODULE V LESSON II MEDICAL PATIENT MANAGEMENT: CARDIAC/DIABETIC/ALTERED LOC/SEIZURE

At the completion of this section the student shall be able to:

- 5-2.1. Describe the emergency medical care of the patient experiencing chest pain/discomfort.
- 5-2.2. Discuss the position of comfort for patients with various cardiac emergencies.
- 5-2.3. Establish the relationship between airway management and the patient with cardiovascular compromise.
- 5-2.4. Predict the relationship between the patient experiencing cardiovascular compromise and basic life support.
- 5-2.5. Recognize the need for medical direction of protocols to assist in the emergency medical care of the patient with chest pain.
- 5-2.6. List the indications for the use of nitroglycerin.
- 5-2.7. State the contraindications and side effects for the use of nitroglycerin.
- 5-2.8. Explain the rationale for administering nitroglycerin to a patient with chest pain or discomfort.
- 5-2.9. Identify the patient taking diabetic medications with altered mental status and the implications of a diabetes history.
- 5-2.10. State the steps in the emergency medical care of the patient taking diabetic medicine with an altered mental status and a history of diabetes.
- 5-2.11. Establish the relationship between airway management and the patient with altered mental status.
- 5-2.12. State the generic and trade names, medication forms, dose, administration, action, and contraindications for oral glucose.
- 5-2.13. Evaluate the need for medical direction in the emergency medical care of the diabetic patient.

- 5-2.14. Explain the rationale for administering oral glucose.
- 5-2.15. Explain the rationale for obtaining a blood sugar level through the use of a glucose monitoring system before administering oral glucose.*
- 5-2.16. Explain and discuss the normal and abnormal blood sugar level reading obtained by glucose monitoring and the appropriate medical care for those readings.
- 5-2.17. Explain the steps in providing emergency medical care for patients who have an altered mental status.
- 5-2.18. Explain the steps in providing emergency medical care for the patient who is experiencing a seizure.
- 5-2.19. Explain the steps in providing emergency medical care for the patient in the post seizure state.*
- 5-2.20. Discuss the various conditions that may cause seizure activity in the adult patient.*

MODULE V MEDICAL PATIENT MANAGEMENT LESSON III ENVIRONMENTAL EMERGENCIES/DROWNING/ POISONING

At the completion of this section the student shall be able to:

- 5-3.1. Describe the various ways that the body loses heat.
- 5-3.2. List the signs and symptoms of exposure to cold.
- 5-3.3. Explain the steps in providing emergency medical care to a patient exposed to cold.
- 5-3.4. List the signs and symptoms of exposure to heat.
- 5-3.5. Explain the steps in providing emergency care to a patient exposed to heat.
- 5-3.6. Recognize the signs and symptoms of water-related emergencies.
- 5-3.7. Describe the complications of near drowning.
- 5-3.8. Discuss the emergency medical care of bites and stings.
- 5-3.9. List various ways that poisons enter the body.
- 5-3.10. List signs/symptoms associated with poisoning.
- 5-3.11. Describe the steps in the emergency medical care for the patient with suspected poisoning.
- 5-3.12. Establish the relationship between the patient suffering from poisoning and airway management.
- 5-3.13. State the generic and trade names, indications, contraindications, medication form, dose, administration, actions, side effects and re-assessment strategies for activated charcoal.
- 5-3.14. Recognize the need for medical direction in caring for the patient with poisoning.
- 5-3.15. Explain the rationale for administering activated charcoal.
- 5-3.16. Explain the rationale for contacting medical direction early in the pre-hospital management of the poisoning patient.

MODULE V LESSON IV MEDICAL PATIENT MANAGEMENT: OVERDOSE/BEHAVIORAL EMERGENCIES

At the completion of this section the student shall be able to:

- 5-4.1. Discuss the emergency medical care for the patient with possible overdose.
- 5-4.2. Establish the relationship between the patient suffering from overdose and airway management.
- 5-4.3. Recognize the need for medical direction in caring for the patient with overdose.
- 5-4.4. Explain the rationale for contacting medical direction early in the pre-hospital management of the overdose patient.
- 5-4.5. Demonstrate the steps in the emergency medical care for the patient with possible overdose.
- 5-4.6. Demonstrate completing a pre-hospital care report for patients with a overdose emergency.

- 5-4.7. Define behavioral emergencies.
- 5-4.8. Discuss the general factors that may cause an alteration in a patient's behavior.
- 5-4.9. State the various reasons for psychological crises.
- 5-4.10. Discuss the characteristics of an individual's behavior which suggests that the patient is at risk for suicide.
- 5-4.11. Discuss special medical/legal considerations for managing behavioral emergencies.
- 5-4.12. Discuss the special considerations for assessing a patient with behavioral problems.
- 5-4.13. Discuss the general principles of an individual's behavior which suggests that he is at risk for violence.
- 5-4.14. Discuss methods to calm behavioral emergency patients.
- 5-4.15. Explain the rationale for learning how to modify your behavior toward the patient with a behavioral emergency.
- 5-4.16. Demonstrate the assessment and emergency medical care of the patient experiencing a behavioral emergency.
- 5-4.17. Demonstrate various techniques to safely restrain a patient with a behavioral problem.

MODULE V LESSON V MEDICAL PATIENT MANAGEMENT: OBSTETRICS AND GYNECOLOGICAL EMERGENCIES

At the completion of this section the student shall be able to:

- 5-5.1. Identify the following structures: Uterus, vagina, fetus, placenta, umbilical cord, amniotic sac, perineum.
- 5-5.2. Identify and explain the use of the contents of an obstetrics kit.
- 5-5.3. Identify pre-delivery emergencies.
- 5-5.4. State indications of an imminent delivery.
- 5-5.5. Differentiate the emergency medical care provided to a patient with pre-delivery emergencies from a normal delivery.
- 5-5.6. State the steps in the pre-delivery preparation of the mother.
- 5-5.7. Establish the relationship between body substance isolation and childbirth.
- 5-5.8. State the steps to assist in the delivery.
- 5-5.9. Describe care of the baby as the head appears.
- 5-5.10. Describe how and when to cut the umbilical cord.
- 5-5.11. Discuss the steps in the delivery of the placenta.
- 5-5.12. List the steps in the emergency medical care of the mother post-delivery.
- 5-5.13. Summarize neonatal resuscitation procedures in accordance with American Medical Association guidelines.
- 5-5.14. Describe the procedures for the following abnormal deliveries: Breech birth, prolapsed cord, limb presentation.
- 5-5.15. Differentiate the special considerations for multiple births.
- 5-5.16. Describe special considerations of meconium.
- 5-5.17. Describe special considerations of a premature baby.
- 5-5.18. Discuss the emergency medical care of a patient with a gynecological emergency.
- 5-5.19. Explain the rationale for understanding the implications of treating to patients (mother and baby).
- 5-5.20. Demonstrate the steps to assist in the normal cephalic delivery.
- 5-5.21. Demonstrate necessary care procedures of the fetus as the head appears.
- 5-5.22. Demonstrate infant neonatal procedures.
- 5-5.23. Demonstrate post delivery care of infant.

- 5-5.24. Demonstrate how and when to cut the umbilical cord.
- 5-5.25. Attend to the steps in the delivery of the placenta.
- 5-5.26. Demonstrate the post-delivery care of the mother.
- 5-5.27. Demonstrate the procedures for the following abnormal deliveries: vaginal bleeding, breech birth, prolapsed cord, limb presentation.
- 5-5.28. Demonstrate the steps in the emergency medical care of the mother with excessive bleeding.
- 5-5.29. Demonstrate completing a pre-hospital care report for patients with obstetrical/gynecological emergencies.

MODULE V LESSON VI MEDICAL PATIENT MANAGEMENT: MEDICAL EMERGENCIES LABORATORY

At the completion of this section the student shall be able to demonstrate mastery of the following knowledge and skill objectives:

- 5-6.1. Demonstrate the emergency medical care for breathing difficulty.
- 5-6.2. Perform the steps in facilitating the use of an inhaler.
- 5-6.3. Demonstrate the emergency medical care of the patient experiencing an allergic reaction.
- 5-6.4. Demonstrate the use of epinephrine auto-injector.
- 5-6.5. Demonstrate the assessment and documentation of patient response to an epinephrine injection.
- 5-6.6. Demonstrate proper disposal of auto-injector.
- 5-6.7. Demonstrate completing a pre-hospital care report for patients with allergic emergencies.
- 5-6.8. Demonstrate the assessment and emergency medical care of a patient experiencing chest pain/discomfort.
- 5-6.9. Perform the steps in facilitating the use of nitroglycerin for chest pain or discomfort.
- 5-6.10. Demonstrate the assessment and documentation of patient response to nitroglycerin.
- 5-6.11. Practice completing a pre-hospital care report for patients with cardiac emergencies.
- 5-6.12. Given a glucose monitoring system, demonstrate the proper methods for obtaining a blood sugar level reading.*
- 5-6.13. Demonstrate the steps in the emergency medical care for the patient taking diabetic medicine with an altered mental status and a history of diabetes.
- 5-6.14. Demonstrate the steps in the administration of oral glucose.
- 5-6.15. Demonstrate the assessment and documentation of patient response to oral glucose.
- 5-6.16. Demonstrate how to complete a pre-hospital care report for patients with diabetic emergencies.
- 5-6.17. Demonstrate the assessment and emergency medical care of a patient with exposure to cold.
- 5-6.18. Demonstrate the assessment and emergency medical care of a patient with exposure to heat.
- 5-6.19. Demonstrate the assessment and emergency medical care of a near drowning patient.
- 5-6.20. Demonstrate completing a pre-hospital care report for patients with environmental emergencies.
- 5-6.21. Demonstrate the steps in the emergency medical care for the patient with suspected poisoning.
- 5-6.22. Perform the necessary steps required to provide a patient with activated charcoal.
- 5-6.23. Demonstrate the assessment and documentation of patient response to activated charcoal.
- 5-6.24. Demonstrate proper disposal of administration of activated charcoal equipment.
- 5-6.25. Demonstrate completing a pre-hospital care report for patients with a poisoning emergency.
- 5-6.26. Demonstrate the steps to assist in the normal cephalic delivery.
- 5-6.27. Demonstrate infant neonatal procedures.
- 5-6.28. Demonstrate post delivery care of infant.

- 5-6.29. Demonstrate how and when to cut the umbilical cord.
- 5-6.30. Demonstrate the post-delivery care of the mother.

MODULE V LESSON VII MEDICAL PATIENT MANAGEMENT: PEDIATRIC MEDICAL EMERGENCIES

At the completion of this section the student shall be able to:

- 5-7.1. Indicate various causes of respiratory emergencies in the child and infant patient.
- 5-7.2. Differentiate between respiratory distress and respiratory failure in the child and infant patients.
- 5-7.3. Differentiate between upper airway obstruction and lower airway disease in the infant and child patient.
- 5-7.4. List the common causes of seizures in the infant and child patient.
- 5-7.5. Describe the management of seizures in the infant and child patient.

MODULE V LESSON VIII MEDICAL PATIENT MANAGEMENT: MEDICAL EMERGENCIES TEST & EVALUATION

At the completion of this section the student shall be able to:

- 5-8.1. Achieve at least a 70% on a written examination covering the Medical Patient management module.
- 5-8.2. Achieve a passing score on the practical skill application of Self Administered Medications, Patient Restraint, Administration of Oral Glucose and Activated Charcoal and Normal Childbirth.

CLINICAL EXPERIENCE Ten Hours

Five, written, patient assessments must be completed and returned to the Instructor for evaluation.*

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File: Final CTAG EMT-B October 17, 2008.doc