Law, Public Safety, Corrections and Security Cluster Health Science Cluster Emergency Medical Technician Course Number: 25.46000

Course Description:

The Emergency Medical Technician (EMT) course prepares students to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician is a link from the scene to the emergency health care system. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians EMT certification examination and apply for Georgia licensure as an EMT. Criminal background checks and drug screens may be required based on the requirements for participation in clinical experiences.

The course will include Healthcare Provider CPR/AED Certification from a nationally recognized body (American Heart Association or Red Cross, etc.). If this course is also approved by the Georgia State Office of Emergency Medical Services and Trauma (SOEMST), successful completion will allow the student to be eligible to take the National Registry of Emergency Medical Technicians (NREMT) Emergency Medical Technician (EMT) certification. Topics include: Preparatory; Anatomy and Physiology; Medical Terminology; Pathophysiology; LifeSpan Development; Public Health; Pharmacology; Airway; Management; Respiration and Artificial Ventilation; Assessment; Medicine; Shock and Resuscitation; Trauma; Special Patient Populations; EMS Operations; and Integration of Patient Assessment and Management.

Link for teacher qualifications:

http://ems.ga.gov/programs/ems/emsdocs/FORM%20C-11-A%20EMS%20Instructor%20Application%201-2013.pdf Link for national standards NHTSA: http://www.ems.gov/EducationStandards.htm

Link for the required equipment: http://ems.ga.gov/emsdocs/R-T-11-
EMRC%20Minimum%20EquipmentRequired%20for%20an%20EMR%20Initial%20Education%20Program.pdf Link to become a training center: http://ems.ga.gov/programs/ems/emsdocs/PRO-T-
06%20Request%20for%20EMS%20Program%20Site%20Code%201-10-07-1.pdf

The prerequisites for the Health Science Cluster are Introduction to Healthcare Science and Essentials of Healthcare. The prerequisites for the Law, Public Safety, Corrections and Security Cluster are Introduction to Law, Public Safety, Corrections & Security and Fire and Emergency Services.

Course Standard 1

LPSCS-EMT-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry. The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person	Telephone and	Cell Phone and	Communicating At	Listening
Etiquette	Email Etiquette	Internet Etiquette	Work	
Interacting with Your	Telephone	Using Blogs	Improving	Reasons, Benefits,
Boss	Conversations		Communication Skills	and Barriers
Interacting with	Barriers to Phone	Using Social Media	Effective Oral	Listening Strategies
Subordinates	conversations		Communication	
Interacting with Co-	Making and		Effective Written	Ways We Filter
workers	Returning Calls		Communication	What We Hear
Interacting with	Making Cold Calls		Effective Nonverbal	Developing a
Suppliers	_		Skills	Listening Attitude
	Handling		Effective Word Use	Show You Are
	Conference Calls			Listening
	Handling		Giving and Receiving	Asking Questions
	Unsolicited Calls		Feedback	
				Obtaining Feedback
				Getting Others to
				Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette	
Thinking Creatively	Preparation and Participation in Meetings	
Taking Risks	Conducting Two-Person or Large Group Meetings	
Building Team Communication	Inviting and Introducing Speakers	
	Facilitating Discussions and Closing	
	Preparing Visual Aids	
	Virtual Meetings	

1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

Problem	Customer Service	The Application Process	Interviewing Skills	Finding the
Solving				Right Job
Transferable Job	Gaining Trust and	Providing Information,	Preparing for an	Locating Jobs and
Skills	Interacting with	Accuracy and Double	Interview	Networking
	Customers	Checking		
Becoming a	Learning and Giving	Online Application	Questions to Ask in	Job Shopping
Problem Solver	Customers What	Process	an Interview	Online
	They Want			

Identifying a	Keeping Customers	Following Up After	Things to Include in	Job Search
Problem	Coming Back	Submitting an Application	a Career Portfolio	Websites
Becoming a	Seeing the	Effective Résumés:	Traits Employers are	Participation in
Critical Thinker	Customer's Point		Seeking	Job Fairs
Managing	Selling Yourself and	Matching Your Talents to	Considerations	Searching the
	the Company	a Job	Before Taking a Job	Classified Ads
	Handling Customer	When a Résumé Should be		Using
	Complaints	Used		Employment
				Agencies
	Strategies for			Landing an
	Customer Service			Internship
				Staying Motivated
				to Search n

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team-work skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

Course Standard 2

LPSCS-EMT-2

Examines the Emergency Medical Services (EMS) system and the role of Emergency Medical Technicians within the system. Applies fundamental knowledge of the emergency medical services (EMS) system, safety/well-being of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care.

- 2.1 Define emergency medical services (EMS) systems.
- 2.2 Name the four levels of EMT training and licensure.
- 2.3 Describe EMT licensure criteria; including how the Americans with Disabilities Act (ADA) applies to employment as an EMT.
- 2.4 Discuss the historical background of the development of the EMS system.
- 2.5 Describe the levels of EMT training in terms of skill sets needed for each of the following: EMR, EMT, AEMT, and paramedic.
- 2.6 Recognize the possible presence of other first responders at a scene with EMR training, some knowledge of first aid, or merely good intentions, and their need for direction.
- 2.7 Name the 14 components of the EMS system.
- 2.8 Describe how medical direction of an EMS system works, and the EMT's role in the process.
- 2.9 Define mobile integrated healthcare and community paramedicine.
- 2.10 Discuss the purpose of the EMS continuous quality improvement (CQI) process.
- 2.11 Characterize the EMS system's role in disease and injury prevention and public education in the community.
- 2.12 Describe the roles and responsibilities of the EMT.
- 2.13 Describe the attributes an EMT is expected to possess.
- 2.14 Understand the impact of the Health Insurance Portability and Accountability Act (HIPAA) on patient privacy.

Course Standard 3

LPSCS-EMT-3

Evaluate the necessity of scene safety, emotional and physical well-being, and stress management of the Emergency Medical Services provider. Applies fundamental knowledge of the emergency medical services (EMS) system, safety/well-being of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care. The student will understand the importance of recognizing important hazards; coping with physical and mental stress; assisting patients and families with the emotional aspect of injuries, illness, and/or death; taking appropriate preventive actions to ensure personal safety; dealing with patients and coworkers with sensitivity; taking proper precautions when dealing with infectious diseases; and preventing on-the-job injuries.

- 3.1 State the steps that contribute to wellness and their importance in managing stress.
- 3.2 Define infectious disease and communicable disease.
- 3.3 Describe the routes of disease transmission.
- 3.4 Describe the routes of transmission and the steps to prevent and/or deal with an exposure to hepatitis, tuberculosis, and HIV/AIDS.
- 3.5 Know the standard precautions used in treating patients to prevent infection.
- 3.6 Describe the steps to take for personal protection from airborne and bloodborne pathogens.
- 3.7 Explain proper handwashing techniques.
- 3.8 List the ways immunity to infectious diseases is acquired.
- 3.9 Explain post-exposure management of exposure to patient blood or body fluids, including completing a post-exposure report.
- 3.10 Describe the steps necessary to determine scene safety and to prevent work-related injuries at the scene.
- 3.11 Describe the different types of protective clothing worn to prevent injury.
- 3.12 Explain the care of critically ill and injured patients.

- 3.13 Describe issues concerning care of the dying patient, death, and the grieving process of family members.
- 3.14 Know the physiologic, physical, and psychological responses to stress.
- 3.15 Describe posttraumatic stress disorder (PTSD) and steps that can be taken, including critical incident stress management, to decrease the likelihood that PTSD will develop.
- 3.16 Identify the emotional aspects of emergency care.
- 3.17 Recognize the stress inherent in many situations, such as mass-casualty scenes.
- 3.18 Recognize the possibility of violent situations and the steps to take to deal with them.
- 3.19 Describe how to handle behavioral emergencies.
- 3.20 Discuss workplace issues such as cultural diversity, sexual harassment, and substance abuse.
- 3.21 Demonstrate how to properly remove gloves.
- 3.22 Demonstrate the steps necessary to manage a potential exposure situation.

Course Standard 4

LPSCS-EMT-4

Applies fundamental knowledge of the emergency medical services (EMS) system, safety/well-being of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care.

Define consent and how it relates to decision making. The student will understand the ethical responsibilities and medicolegal directives and guidelines pertinent to the EMT. The EMT's approach to patient care relating to confidentiality, consent to treat, refusal of care, and advance directives is explained. Organ donor systems and policies, evidence preservation, and end-of-life issues are also discussed.

- 4.1 Define consent and how it relates to decision making.
- 4.2 Compare expressed consent, implied consent, and involuntary consent.
- 4.3 Discuss consent by minors for treatment or transport.
- 4.4 Describe local EMS system protocols for using forcible restraint.
- 4.5 Discuss the EMT's role and obligations if a patient refuses treatment or transport.
- 4.6 Describe the relationship between patient communications, confidentiality, and the Health Insurance Portability and Accountability Act (HIPAA).
- 4.7 Discuss the importance of do not resuscitate (DNR) orders and local protocols as they relate to the EMS environment.
- 4.8 Describe the physical, presumptive, and definitive signs of death.
- 4.9 Explain how to manage patients who are identified as organ donors.
- 4.10 Recognize the importance of medical identification devices in treating the patient.
- 4.11 Discuss the scope of practice and standards of care.
- 4.12 Describe the EMT's legal duty to act.
- 4.13 Discuss the issues of negligence, abandonment, assault and battery, and kidnapping and their implications for the EMT.
- 4.14 Explain the reporting requirements for special situations, including abuse, drug- or felony-related injuries, childbirth, and crime scenes.
- 4.15 Define ethics and morality, and discuss their implications for the EMT.
- 4.16 Describe the roles and responsibilities of the EMT in court.

Course Standard 5

LPSCS-EMT-5

Applies fundamental knowledge of the emergency medical services (EMS) system, safety/well-being of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care. The student will have an understanding of therapeutic communication; means to communicate effectively with special populations such as children, geriatric patients, and hearing- and visually impaired patients; methods and procedures for effective communication; components of effective written reports, types of written reports, and ways to correct errors found within written reports; documentation of refusal of care; special reporting situations; use of

medical terminology; communications systems and equipment; regulations and protocols governing radio communications; and communication with medical control and hospitals.

- 5.1 Describe the factors and strategies to consider for therapeutic communication with patients.
- 5.2 Discuss the techniques of effective verbal communication.
- 5.3 Explain the skills that should be used to communicate with family members, bystanders, people from other agencies, and hospital personnel.
- 5.4 Discuss special considerations in communicating with older people, children, patients who are hard of hearing, visually impaired patients, and non-English-speaking patients.
- 5.5 Describe the use of written communications and documentation.
- 5.6 State the purpose of a patient care report (PCR) and the information required to complete it.
- 5.7 Explain the legal implications of the PCR.
- 5.8 Describe how to document refusal of care, including the legal implications.
- 5.9 Discuss state and/or local special reporting requirements, such as for gunshot wounds, dog bites, and abuse.
- 5.10 Describe the basic principles of the various types of communications equipment used in EMS.
- 5.11 Describe the use of radio communications, including the proper methods of initiating and terminating a radio call.
- 5.12 List the correct radio procedures in the following phases of a typical call: initial receipt of call, en route to call, on scene, arrival at hospital (or point of transfer), and return to service.
- 5.13 List the proper sequence of information to communicate in radio delivery of a patient report.
- 5.14 Demonstrate the techniques of successful cross-cultural communication.
- 5.15 Demonstrate completion of a PCR.
- 5.16 Demonstrate how to make a simulated, concise radio transmission with dispatch.

Course Standard 6

LPSCS-EMT-6

Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals able to use foundational and anatomical medical terms and abbreviations in written and oral communication with colleagues and health care professionals. They will understand the purpose of medical terminology, be able to identify its components, and be able to define an unknown medical term based on the dissection and understanding of its components. Students will also be able to identify error-prone medical abbreviations and acronyms. Common direction, movement, and position terms are also presented in this chapter.

- 6.1 Explain the purpose of medical terminology.
- 6.2 Identify the four components that comprise a medical term.
- 6.3 Describe the following directional terms: anterior (ventral), posterior (dorsal), right, left, superior, inferior, proximal, distal, medial, lateral, superficial, and deep.
- 6.4 Describe the prone, supine, Fowler, and semi-Fowler positions of the body.
- 6.5 Break down the meaning of a medical term based on the components of the term.
- 6.6 Interpret selected medical abbreviations, acronyms, and symbols.
- 6.7 Identify error-prone medical abbreviations, acronyms, and symbols.

Course Standard 7

LPSCS-EMT-7

Applies fundamental knowledge of the emergency medical services (EMS) system, safety/well-being of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care. Applies fundamental knowledge of the anatomy and function of all human systems to the practice of EMS. Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management. The student will be able to describe and apply, in context, the body planes, topographic anatomy, and anatomic position. Students will be able to identify basic anatomic structures and related functions and describe each body system, discussing

the roles of the structures within these systems and the interaction of body systems in maintaining the life support chain. Students will be able to discuss possible consequences of illness and injury of these structures and systems on proper functioning of the body.

- 7.1 Identify the body's topographic anatomy, including the anatomic position and the planes of the body.
- 7.2 Identify the anatomy and physiology of the skeletal system.
- 7.3 Describe the anatomy and physiology of the musculoskeletal system.
- 7.4 Discuss the anatomy and physiology of the respiratory system.
- 7.5 Discuss the anatomy and physiology of the circulatory system.
- 7.6 Discuss the anatomy and physiology of the nervous system.
- 7.7 Describe the anatomy and physiology of the integumentary system.
- 7.8 Explain the anatomy and physiology of the digestive system.
- 7.9 Describe the anatomy and the physiology of the lymphatic system.
- 7.10 Discuss the anatomy and physiology of the endocrine system.
- 7.11 Describe the anatomy and physiology of the urinary system.
- 7.12 Discuss the anatomy and physiology of the genital system.
- 7.13 Describe the life support chain, aerobic metabolism, and anaerobic metabolism.
- 7.14 Define pathophysiology.

Course Standard 8

LPSCS-EMT-8

Applies fundamental knowledge of the emergency medical services (EMS) system, safety/well-being of the emergency medical technician (EMT), and medical/legal and ethical issues to the provision of emergency care. Applies fundamental knowledge of life span development to patient assessment and management. The student will have a fundamental understanding of the physiological and psychosocial differences of each phase of human development. The students will be able to discuss adaptations and strategies that they might apply to better assess and manage patients.

- 8.1 Know the terms used to designate the following stages of life: infants, toddlers, preschoolers, school-age children, adolescents (teenagers), early adults, middle adults, and older adults.
- 8.2 Describe the major physical and psychosocial characteristics of an infant's life.
- 8.3 Describe the major physical and psychosocial characteristics of a toddler's and preschooler's life.
- 8.4 Describe the major physical and psychosocial characteristics of a school-age child's life.
- 8.5 Describe the major physical and psychosocial characteristics of an adolescent's life.
- 8.6 Describe the major physical and psychosocial characteristics of an early adult's life.
- 8.7 Describe the major physical and psychosocial characteristics of a middle adult's life.
- 8.8 Describe the major physical and psychosocial characteristics of an older adult's life.

Course Standard 9

LPSCS-EMT-9

Knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety. The student will understand the body mechanics of patient movement, principles of safe reaching and pulling, urgent and non-urgent moves, how to move patients as a team, types of patient packaging and moving equipment, how to protect from injury when moving patients, and the use of medical restraints.

- 9.1 Explain the need and use of the most common patient-moving equipment, the stretcher and backboard.
- 9.2 Explain the technical skills and general considerations that are required of EMTs during patient packaging and patient handling.
- 9.3 Define the term *body mechanics*.
- 9.4 Discuss how following proper patient lifting and moving techniques can help prevent work-related injuries.
- 9.5 Identify how to avoid common mistakes when lifting and carrying a patient.

- 9.6 Explain the power grip and sheet or blanket methods for lifting a patient.
- 9.7 Explain the general considerations required of EMTs to safely move patients without causing the patient further harm and while protecting themselves from injury.
- 9.8 Explain how to carry patients safely on stairs, including the selection of appropriate equipment to aid in the process.
- 9.9 Describe specific situations in which an urgent move or rapid extrication may be necessary to move a patient; include how each one is performed.
- 9.10 Describe specific situations in which a non-urgent move may be necessary to move a patient; include how each one is performed.
- 9.11 Explain the special considerations and guidelines related to moving and transporting geriatric patients.
- 9.12 Define the term bariatrics.
- 9.13 Discuss the guidelines for lifting and moving bariatric patients.
- 9.14 Explain the need and use for additional patient-moving equipment (specialized); include examples.
- 9.15 Know the importance of decontaminating equipment in the prevention of disease transmission.
- 9.16 Describe proper positioning of the following conditions:
 - Unresponsive patients without suspected spine injury
 - Patients with chest pain, discomfort, or difficulty breathing
 - Patients with suspected spine injury
 - Pregnant patients with hypotension
 - Patients who are nauseated or vomiting
- 9.17 Discuss situations that may require the use of medical restraints on a patient.
- 9.18 Explain guidelines and safety considerations for the use of medical restraints.
- 9.19 Perform a power lift to lift a patient.
- 9.20 Demonstrate a power grip.
- 9.21 Demonstrate the body mechanics and principles required for safe reaching and pulling, including the technique used for performing log rolls.
- 9.22 Perform the diamond carry to move a patient.
- 9.23 Perform the one-handed carry to move a patient.
- 9.24 Perform a patient carry using a stair chair to move a patient down the stairs.
- 9.25 Perform a patient carry to move a patient down the stairs on a backboard.
- 9.26 Demonstrate how to load a stretcher into an ambulance.
- 9.27 Demonstrate how to perform an emergency or urgent move.
- 9.28 Perform the rapid extrication technique to move a patient from a vehicle.
- 9.29 Perform the direct ground lift to lift a patient.
- 9.30 Perform the extremity lift to move a patient.
- 9.31 Perform the direct carry to move a patient.
- 9.32 Demonstrate how to use the draw sheet method to transfer a patient onto a stretcher.
- 9.33 Use a scoop stretcher to move a patient.

Course Standard 10

LPSCS-EMT-10

Applies scene information and patient assessment findings (scene size-up, primary and secondary assessment, patient history, and reassessment) to guide emergency management. The student will understand the scope and sequence of patient assessment for medical and trauma patients and all the phases and components of patient assessment. Please note that this chapter is divided into five sections: scene size-up, primary assessment, history taking, secondary assessment, and reassessment. These divisions will help facilitate the instructor's approach for teaching this skill as a whole concept.

- 10.1 Identify the components of the patient assessment process.
- 10.2 Explain how the different causes and presentations of emergencies will affect how EMTs perform each step of the patient assessment process.

- 10.3 Discuss some of the possible environmental, chemical, and biologic hazards that may be present at an emergency scene, ways to recognize them, and precautions to protect personal safety.
- 10.4 Discuss the steps EMTs should take to survey a scene for signs of violence and to protect themselves and bystanders from real or potential danger.
- 10.5 Describe how to determine the mechanism of injury (MOI) or nature of illness (NOI) at an emergency and the importance of differentiating trauma patients from medical patients.
- 10.6 List the minimum standard precautions that should be followed and personal protective equipment (PPE) that should be worn at an emergency scene, including examples of when additional precautions would be appropriate.
- 10.7 Explain why it is important for EMTs to identify the total number of patients at an emergency scene and how this evaluation relates to determining the need for additional or specialized resources, implementation of the incident command system (ICS), and triage.
- 10.8 Describe the principal goals of the primary assessment process, including how to identify and treat life threats and determine if immediate transport is required.
- 10.9 Explain the process of forming a general impression of a patient as part of primary assessment and the reasons why this step is critical to patient management.
- 10.10 Explain the importance of assessing a patient's level of consciousness (LOC) to determine altered mental status, and include examples of different methods used to assess alertness, responsiveness, and orientation.
- 10.11 Describe the assessment of airway status in patients who are both responsive and unresponsive, including examples of possible signs and causes of airway obstruction in each case as well as the appropriate EMT response.
- 10.12 Describe the assessment of a patient's breathing status, including the key information EMTs must obtain during this process and the care required for patients who have both adequate and inadequate breathing.
- 10.13 List the signs of respiratory distress and respiratory failure.
- 10.14 Describe the assessment of a patient's circulatory status, including the different methods for obtaining a pulse and appropriate management depending on the patient's status.
- 10.15 Explain the variations required to obtain a pulse in infant and child patients compared with adult patients.
- 10.16 Describe the assessment of a patient's skin color, temperature, and condition, including examples of both normal and abnormal findings and the information this provides related to the patient's status.
- 10.17 Discuss the process of assessing for and methods for controlling external bleeding.
- 10.18 Discuss the steps used to identify and subsequently treat life-threatening conditions that endanger a patient during an emergency.
- 10.19 List the steps EMTs should follow during the primary assessment of a trauma patient, including examples of abnormal signs and appropriate related actions.
- 10.20 Explain the process for determining the priority of patient care and transport at an emergency scene and include examples of conditions that necessitate immediate transport.
- 10.21 Discuss the importance of protecting a trauma patient's spine and identifying fractured extremities during patient packaging for transport.
- 10.22 Discuss the process of taking a focused history, its key components, and its relationship to the primary assessment process.
- 10.23 Describe examples of different techniques EMTs may use to obtain information from patients during the history-taking process.
- 10.24 Discuss different challenges EMTs may face when taking a patient history on sensitive topics and strategies they may use to facilitate each situation.
- 10.25 Describe the purpose of a secondary assessment and a physical exam; include how to determine which aspects of the physical exam to use, and the steps.
- 10.26 Explain situations in which patients may receive a focused assessment, including examples by body system of what each focused assessment should include based on a patient's chief complaint.
- 10.27 List normal blood pressure ranges for adults, children, and infants.
- 10.28 Explain the importance of performing a reassessment of the patient and the steps in this process.
- 10.29 Demonstrate how to use the AVPU scale to test for patient responsiveness.

- 10.30 Demonstrate how to evaluate a patient's orientation and document his or her status correctly.
- 10.31 Demonstrate the techniques for assessing a patient's airway and correctly obtaining information related to respiratory rate, rhythm, quality/character of breathing, and depth of breathing.
- 10.32 Demonstrate how to assess a radial pulse in a responsive patient and an unresponsive patient.
- 10.33 Demonstrate how to assess a carotid pulse in an unresponsive patient.
- 10.34 Demonstrate how to palpate a brachial pulse in a child who is younger than 1 year (or a manikin).
- 10.35 Demonstrate how to obtain a pulse rate in a patient.
- 10.36 Demonstrate how to assess capillary refill in an adult or child older than 6 years.
- 10.37 Demonstrate how to assess capillary refill in an infant or child younger than 6 years; include variations that would be required when assessing a newborn.
- 10.38 Demonstrate how to perform a rapid exam during primary assessment of a patient.
- 10.39 Demonstrate how to perform a secondary assessment.
- 10.40 Demonstrate how to measure blood pressure by auscultation.
- 10.41 Demonstrate how to measure blood pressure by palpation.
- 10.42 Demonstrate how to test pupil reaction in response to light in a patient and how to document his or her status correctly.
- 10.43 Demonstrate the assessment of neurovascular status.
- 10.44 Demonstrate the use of a pulse oximetry device to evaluate the effectiveness of oxygenation in the patient.
- 10.45 Demonstrate the use of electronic devices to assist in determining the patient's blood pressure in the field.
- 10.46 Demonstrate how to assess a patient's blood glucose level.

Course Standard 11

LPSCS-EMT-11

Applies knowledge of general anatomy and physiology to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation, and respiration for patients of all ages. The students will understand the need for proper airway management, including recognizing and measuring adequate and inadequate breathing, maintaining an open airway, and providing artificial ventilation. Students will be able to demonstrate basic competency in applying these concepts to appropriate care through the use of airway adjuncts, suction equipment, oxygen equipment and delivery systems, pulse oximetry, continuous positive airway pressure (CPAP), and resuscitation devices.

- 11.1 Describe the major structures of the respiratory system.
- 11.2 Discuss the physiology of breathing.
- 11.3 Give the signs of adequate breathing.
- 11.4 Give the signs of inadequate breathing.
- 11.5 Describe the assessment and care of a patient with apnea.
- 11.6 Explain how to assess for adequate and inadequate respiration, including the use of pulse oximetry.
- 11.7 Explain how to assess for a patent airway.
- 11.8 Describe how to perform the head tilt—chin lift maneuver.
- 11.9 Describe how to perform the jaw-thrust maneuver.
- 11.10 Explain the importance and techniques of suctioning.
- 11.11 Explain how to measure and insert an oropharyngeal (oral) airway.
- 11.12 Describe how to measure and insert a nasopharyngeal (nasal) airway.
- 11.13 Explain the use of the recovery position to maintain a clear airway.
- 11.14 Describe the importance of giving supplemental oxygen to patients who are hypoxic.
- 11.15 Discuss the basics of how oxygen is stored and the various hazards associated with its use.
- 11.16 Explain the use of a non-rebreathing mask and the oxygen flow requirements for its use.
- 11.17 Describe the indications for using a nasal cannula rather than a non-rebreathing face mask.
- 11.18 Describe the indications for use of a humidifier during supplemental oxygen therapy.
- 11.19 Describe how to perform mouth-to-mouth or mouth-to-mask ventilation.

- 11.20 Describe the use of a one- or two-person bag-valve mask (BVM), and a manually triggered ventilation (MTV) device.
- 11.21 Describe the signs associated with adequate and inadequate artificial ventilation.
- 11.22 Describe the use of continuous positive airway pressure (CPAP).
- 11.23 Explain how to recognize and care for a foreign body airway obstruction.
- 11.24 Demonstrate use of pulse oximetry.
- 11.25 Demonstrate how to position the unconscious patient.
- 11.26 Demonstrate how to perform the head tilt-chin lift maneuver.
- 11.27 Demonstrate how to perform the jaw-thrust maneuver.
- 11.28 Demonstrate how to operate a suction unit.
- 11.29 Demonstrate how to suction a patient's airway.
- 11.30 Demonstrate the insertion of an oral airway.
- 11.31 Demonstrate the insertion of an oral airway with a 90-degree rotation.
- 11.32 Demonstrate the insertion of a nasal airway.
- 11.33 Demonstrate how to place a patient in the recovery position.
- 11.34 Demonstrate how to place an oxygen cylinder into service.
- 11.35 Demonstrate the use of a partial rebreathing mask in providing supplemental oxygen therapy to patients.
- 11.36 Demonstrate the use of a Venturi mask in providing supplemental oxygen therapy to patients.
- 11.37 Demonstrate the use of a humidifier in providing supplemental oxygen therapy to patients.
- 11.38 Demonstrate mouth-to-mask ventilation.
- 11.39 Demonstrate how to assist a patient with ventilations using the BVM.
- 11.40 Demonstrate the use of a manually triggered ventilation device to assist in delivering artificial ventilation to the patient.
- 11.41 Demonstrate the use of an automatic transport ventilator to assist in delivering artificial ventilation to the patient.
- 11.42 Demonstrate the use of CPAP.

Course Standard 12

LPSCS-EMT-12

Applies fundamental knowledge of the medications that the EMT may assist/administer to a patient during an emergency. The student will understand the significance and characteristics of general pharmacology and will be able to identify, describe, and demonstrate the steps for assisting/administering medications carried by the EMT.

- 12.1 Define the terms pharmacodynamics, intended effects, indications, side effects, unintended effects, and untoward effects.
- 12.2 Explain medication contraindications; include an example.
- 12.3 Explain the differences between a generic medication name and a trade medication name; provide an example of each.
- 12.4 Differentiate enteral and parenteral routes of medication administration.
- 12.5 Describe rectal, oral, intravenous, intraosseous, subcutaneous, intramuscular, inhalation, sublingual, and transcutaneous routes of medication administration; include the rates of absorption.
- 12.6 Explain the solid, liquid, and gas forms of medication and routes of administration; provide examples of each.
- 12.7 List the "six rights" of medication administration; include how each one relates to EMS.
- 12.8 Explain the difference between direct orders (online) and standing orders (off-line) and the role of medical control.
- 12.9 Discuss the medication administration circumstances involving peer-assisted medication, patient-assisted medication, and EMT-administered medication.
- 12.10 Know the generic and trade names, actions, indications, contraindications, routes of administration, side effects, interactions, and doses of 10 medications that may be administered by an EMT in an emergency as dictated by state protocols and local medical direction.
- 12.11 Describe the medication administration considerations related to special populations, including pediatric, geriatric, and pregnant patients.

- 12.12 State the steps to should follow when dispensing medications to a patient using an auto-injector.
- 12.13 Explain why determining what prescription and over-the-counter medications a patient is taking is a critical aspect of patient assessment during an emergency.
- 12.14 State the steps to take if a medication error occurs.
- 12.15 Apply the six rights of medication administration.
- 12.16 Demonstrate how to administer oral medication to a patient.
- 12.17 Demonstrate how to administer aspirin to a patient with chest pain.
- 12.18 Demonstrate how to administer oral glucose to a patient with hypoglycemia.
- 12.19 Demonstrate how to assist a patient with the sublingual administration of a medication.
- 12.20 Demonstrate how to administer a medication by auto-injector.
- 12.21 Demonstrate how to administer an intranasal medication.

Course Standard 13

LPSCS-EMT-13

Applies a fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post-resuscitation management. Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management. The student will have an understanding of the different types and causes of shock, the process of perfusion, the signs and symptoms associated with shock, application of the assessment process with the shock patient, and the general and specific emergency medical care provided to patients experiencing shock.

- 13.1 Describe the pathophysiology of shock (hypo perfusion).
- 13.2 Identify the causes of shock.
- 13.3 Differentiate among the various types of shock.
- 13.4 Describe the signs and symptoms of shock including compensated and decompensated.
- 13.5 Discuss key components of patient assessment for shock.
- 13.6 Describe the steps to follow in the emergency care of the patient with various types of shock.
- 13.7 Demonstrate how to control shock.
- 13.8 Demonstrate how to complete an EMS patient care report for a patient with shock.

Course Standard 14

LPSCS-EMT-14

Applies a fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post-resuscitation management. The student will have reviewed the basic life support (BLS) procedures for adults, infants, and children. Please note that BLS knowledge is a prerequisite for the course and that this chapter should serve as a review.

- 14.1 Explain the elements of basic life support (BLS), how it differs from advanced life support (ALS), and why BLS must be applied rapidly.
- 14.2 Explain the goals of cardiopulmonary resuscitation (CPR) and when it should be performed on a patient.
- 14.3 Explain the components of CPR, the five links in the American Heart Association (AHA) chain of survival, and how each one relates to maximizing the survival of a patient.
- 14.4 Discuss guidelines for circumstances that require the use of an automated external defibrillator (AED) on both adult and pediatric patients experiencing cardiac arrest.
- 14.5 Explain three special situations related to the use of an AED.
- 14.6 Describe the proper way to position an adult patient to receive BLS care.
- 14.7 Describe the purpose of external chest compressions.
- 14.8 Describe the two techniques EMTs may use to open an adult patient's airway and the circumstances that would determine when each technique would be used.
- 14.9 Describe the recovery position and circumstances that would warrant its use, as well as situations in which it would be contraindicated.
- 14.10 Describe the process of providing artificial ventilations to an adult patient, ways to avoid gastric distention, and modifications required for a patient with a stoma.
- 14.11 Explain the steps in providing single-rescuer adult CPR.

- 14.12 Explain the steps in providing two-rescuer adult CPR, including the method for switching positions during the process.
- 14.13 Describe the different mechanical devices that are available to assist emergency care providers in delivering improved circulatory efforts during CPR.
- 14.14 Describe the different possible causes of cardiopulmonary arrest in children.
- 14.15 Explain the four steps of pediatric BLS procedures and how they differ from BLS procedures used in an adult patient.
- 14.16 Describe the ethical issues related to patient resuscitation, including examples of when not to start CPR on a patient.
- 14.17 Explain the various factors involved in the decision to stop CPR once it has been started on a patient.
- 14.18 Explain common causes of foreign body airway obstruction in both children and adults and how to distinguish mild or partial airway obstruction from complete airway obstruction.
- 14.19 Describe the different methods for removing a foreign body airway obstruction in an infant, child, and adult, including the procedure for a patient with an obstruction who becomes unresponsive.
- 14.20 Discuss how to provide grief support for a patient's family members and loved ones after resuscitation has ended.
- 14.21 Discuss the importance of frequent CPR training for EMTs, as well as public education programs that teach compression-only CPR.
- 14.22 Demonstrate how to position an unresponsive adult for CPR.
- 14.23 Demonstrate how to check for a pulse at the carotid artery in an unresponsive child or adult.
- 14.24 Demonstrate how to perform external chest compressions on an adult.
- 14.25 Demonstrate how to perform a head tilt-chin lift maneuver on an adult.
- 14.26 Demonstrate how to perform a jaw-thrust maneuver on an adult.
- 14.27 Demonstrate how to place a patient in the recovery position.
- 14.28 Demonstrate how to perform rescue breathing in an adult.
- 14.29 Demonstrate how to perform one-rescuer adult CPR.
- 14.30 Demonstrate how to perform two-rescuer adult CPR.
- 14.31 Demonstrate the use of mechanical devices that assist emergency responders in delivering improved circulatory efforts during CPR.
- 14.32 Demonstrate how to check for a pulse at the brachial artery in an unresponsive infant.
- 14.33 Demonstrate how to perform external chest compressions on an infant.
- 14.34 Demonstrate how to perform CPR in a child who is between 1 year of age and the onset of puberty.
- 14.35 Demonstrate how to perform a head tilt—chin lift maneuver on a pediatric patient.
- 14.36 Demonstrate how to perform a jaw-thrust maneuver on a pediatric patient.
- 14.37 Demonstrate how to perform rescue breathing on a child.
- 14.38 Demonstrate how to perform rescue breathing on an infant.
- 14.39 Demonstrate how to remove a foreign body airway obstruction in a responsive adult patient using abdominal thrusts (Heimlich maneuver).
- 14.40. Demonstrate how to remove a foreign body airway obstruction in a responsive pregnant or obese patient using chest thrusts.
- 14.41 Demonstrate how to remove a foreign body airway obstruction in a responsive child older than 1 year using abdominal thrusts (Heimlich maneuver).
- 14.42 Demonstrate how to remove a foreign body airway obstruction in an unresponsive child.
- 14.43 Demonstrate how to remove a foreign body airway obstruction in an infant.

Course Standard 15

LPSCS-EMT-15

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. The student will understand the need for proper assessment techniques when called to patients with a chief complaint of a medical nature.

- 15.1 Differentiate between medical emergencies and trauma emergencies, remembering that some patients may have both.
- 15.2 Name the various categories of common medical emergencies and give examples.

- 15.3 Describe the evaluation of the nature of illness (NOI).
- 15.4 Discuss the assessment of a patient with a medical emergency.
- 15.5 Explain the importance of transport time and destination selection for a medical patient.
- 15.6 Define infectious disease and communicable disease.
- 15.7 Discuss diseases of special concern and their routes of transmission, including influenza, herpes simplex, HIV/AIDS, hepatitis, meningitis, tuberculosis, whooping cough, MRSA, MERS-CoV, and Ebola.

Course Standard 16

LPSCS-EMT-16

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. The student will understand the significance and characteristics of respiratory emergencies in infant, child, and adult populations. Students should be able to demonstrate a fundamental comprehension on the following topics: respiratory anatomy and physiology, pathophysiology, signs and symptoms of various respiratory etiologies (eg, asthma, COPD, pneumonia), and the assessment and management necessary to provide basic care in the prehospital setting.

- 16.1 List the structures and functions of the upper and lower airways, lungs, and accessory structures of the respiratory system.
- 16.2 Explain the physiology of respiration; include the signs of normal breathing.
- 16.3 Discuss the pathophysiology of respiration, including examples of the common signs and symptoms a patient with inadequate breathing may present with in an emergency situation.
- 16.4 Explain the special patient assessment and care considerations that are required for geriatric patients who are experiencing respiratory distress.
- 16.5 Describe different respiratory conditions that cause dyspnea, including their causes, assessment findings and symptoms, complications, and specific prehospital management and transport decisions.
- 16.6 List the characteristics of infectious diseases that are frequently associated with dyspnea.
- 16.7 Discuss some pandemic considerations related to the spread of influenza type A and strategies EMTs should employ to protect themselves from infection during a possible crisis situation.
- 16.8 Explain the special patient assessment and care considerations that are required for pediatric patients who are experiencing respiratory distress.
- 16.9 Describe the assessment of a patient who is in respiratory distress and the relationship of the assessment findings to patient management and transport decisions.
- 16.10 Describe the primary emergency medical care of a person who is in respiratory distress.
- 16.11 List five different types of adventitious breath sounds, their signs and symptoms, and the disease process associated with each one.
- 16.12 State the generic name, medication forms, dose, administration, indications, actions, and contraindications for medications that are administered via metered-dose inhalers (MDIs) and small-volume nebulizers.
- 16.13 Demonstrate the process of history taking to obtain more information related to a patient's chief complaint based on a case scenario.
- 16.14 Demonstrate how to use the OPQRST assessment to obtain more specific information about a patient's breathing problem.
- 16.15 Demonstrate how to use the PASTE assessment to obtain more specific information about a patient's breathing problem.
- 16.16 Demonstrate how to assist a patient with the administration of a metered-dose inhaler.
- 16.17 Demonstrate how to assist a patient with the administration of a small-volume nebulizer.

Course Standard 17

LPSCS-EMT-17

Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management. The student will understand the significance and characteristics of the anatomy and physiology of the cardiovascular system; cardiovascular emergencies; the pathophysiology of respiration and perfusion; signs and symptoms of the most common cardiac conditions; the indications, contraindications, and use of automated external defibrillators (AEDs); and the general care of a patient experiencing a cardiac emergency. The student should also be able to apply this fundamental knowledge to patient assessment and management during inclassroom scenarios.

- 17.1 Discuss the basic anatomy and physiology of the cardiovascular system.
- 17.2 Discuss the pathophysiology of the cardiovascular system.
- 17.3 Describe the anatomy, physiology, pathophysiology, assessment, and management of thromboembolism.
- 17.4 Describe the anatomy, physiology, pathophysiology, assessment, and management of angina pectoris.
- 17.5 Describe the anatomy, physiology, pathophysiology, assessment, and management of myocardial infarction.
- 17.6 Describe the anatomy, signs and symptoms, and management of hypertensive emergencies.
- 17.7 Describe the anatomy, physiology, pathophysiology, assessment, and management of aortic aneurysm/dissection.
- 17.8 Explain patient assessment procedures for cardiovascular problems.
- 17.9 Explain the relationship between airway management and the patient with cardiac compromise.
- 17.10 Give the indications and contraindications for the use of aspirin and nitroglycerin.
- 17.11 Recognize that many patients will have had cardiac surgery and may have implanted pacemakers or defibrillators.
- 17.12 Define cardiac arrest.
- 17.13 Compare the difference between the fully automated and the semi-automated defibrillator.
- 17.14 Describe the different types of AEDs.
- 17.15 Explain the use of remote adhesive defibrillator pads.
- 17.16 Recognize that not all patients in cardiac arrest require an electric shock.
- 17.17 List the indications and contraindications for use of an automated external defibrillator (AED).
- 17.18 Discuss the reasons for early defibrillation.
- 17.19 Explain the circumstances that may result in inappropriate shocks from an AED.
- 17.20 Explain the reason not to touch the patient, such as by delivering CPR, while the AED is analyzing the heart rhythm and delivering shocks.
- 17.21 Describe AED maintenance procedures.
- 17.22 Explain the relationship of age to energy delivery.
- 17.23 Explain the role played by medical direction in the use of AEDs.
- 17.24 Discuss the importance of practice and continuing education with the AED.
- 17.25 Explain the need for a case review of each incident in which an AED is used.
- 17.26 List quality improvement goals relating to AEDs.
- 17.27 Discuss the procedures to follow for standard operation of the various types of AEDs.
- 17.28 Describe the emergency medical care for the patient with cardiac arrest.
- 17.29 Describe the components of care following AED shocks.
- 17.30 Explain criteria for transport of the patient for advanced life support (ALS) following CPR and defibrillation.
- 17.31 Discuss the importance of coordinating with ALS personnel.
- 17.32 Demonstrate the steps to take in the assessment of a patient with chest pain or discomfort.
- 17.33 Demonstrate how to provide emergency medical care for a patient with chest pain or discomfort.
- 17.34 Demonstrate the administration of nitroglycerin.
- 17.35 Demonstrate how to attach a cardiac monitor to obtain an ECG.
- 17.36 Demonstrate how to perform maintenance of an AED.
- 17.37 Demonstrate how to perform CPR.
- 17.38 Demonstrate the use of an AED.

Course Standard 18

LPSCS-EMT-18

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. The student will understand the significance and characteristics of the following: anatomy and physiology of the nervous system, common disease processes (strokes, seizures, headaches, and altered mental status), assessment and basic care management involving patients with neurologic emergencies (including performing tests for speech, facial movement, and arm movement), and assistance of the ALS provider in managing these neurologic emergencies.

- 18.1 Describe the anatomy and physiology and functions of the brain and spinal cord.
- 18.2 Discuss the different types of headaches, the possible causes of each, and how to distinguish a harmless headache from a potentially life-threatening condition.
- 18.3 Explain the various ways blood flow to the brain may be interrupted and cause a cerebrovascular accident.
- 18.4 Discuss the causes, similarities, and differences of an ischemic stroke, hemorrhagic stroke, and transient ischemic attack.
- 18.5 List the general signs and symptoms of stroke and how those symptoms manifest if the left hemisphere of the brain is affected and if the right hemisphere of the brain is affected.
- 18.6 List three conditions with symptoms that mimic stroke and the assessment techniques EMTs may use to identify them.
- 18.7 Define a generalized seizure, partial seizure, and status epilepticus; include how they differ from each other and their effects on patients.
- 18.8 Describe how the different stages of a seizure are characterized.
- 18.9 Discuss the importance for EMTs to recognize when a seizure is occurring or whether one has already occurred in a patient.
- 18.10 Explain the postictal state and the specific patient care interventions that may be necessary.
- 18.11 Define altered mental status; include possible causes and the patient assessment considerations that apply to each.
- 18.12 Discuss scene safety considerations when responding to a patient with a neurologic emergency.
- 18.13 Explain the special considerations required for pediatric patients who exhibit altered mental status.
- 18.14 Explain the primary assessment of a patient who is experiencing a neurologic emergency and the necessary interventions that may be required to address all life threats.
- 18.15 Describe the process of history taking for a patient who is experiencing a neurologic emergency and how this process varies depending on the nature of the patient's illness.
- 18.16 Explain the secondary assessment of a patient who is experiencing a neurologic emergency.
- 18.17 Explain how to use stroke assessment tools to rapidly identify a stroke patient; include two commonly used tools.
- 18.18 Explain the concept of a stroke alert and the important timeframe for the most successful treatment outcome for a patient who is suspected of having a stroke.
- 18.19 List the key information EMTs must obtain and document for a stroke patient during assessment and reassessment.
- 18.20 Explain the care, treatment, and transport of patients who are experiencing headaches, stroke, seizure, and altered mental status.
- 18.21 Explain the special considerations required for geriatric patients who are experiencing a neurologic emergency.
- 18.22 Demonstrate how to use a stroke assessment tool such as the Cincinnati Prehospital Stroke Scale, 3-Item Stroke Severity Scale (LAG), or FAST mnemonic to test a patient for aphasia, facial weakness, and motor weakness.

Course Standard 19

LPSCS-EMT-19

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. The student will understand the anatomy and physiology

of the gastrointestinal, genitourinary, and renal systems. Students should be able to assess and manage various patient populations with numerous related gastrointestinal/ genitourinary complaints, which include, but are not limited, to direct or referred abdominal pain, hypoglycemia, hyperglycemia, shock related to acute (medical versus trauma) or chronic gastrointestinal disorders, hemorrhage, peritonitis, and complications related to the renal system (renal dialysis).

- 19.1 Describe the basic anatomy and physiology of the gastrointestinal, genital, and urinary systems.
- 19.2 Define the term acute abdomen.
- 19.3 Describe pathologic conditions of the gastrointestinal, genital, and urinary systems.
- 19.4 Explain the concept of referred pain.
- 19.5 Recognize that abdominal pain can arise from other body systems.
- 19.6 Identify the signs and symptoms, and common causes, of an acute abdomen.
- 19.7 Explain the procedures to follow in the assessment and management of acute and chronic gastrointestinal hemorrhage, peritonitis, and ulcerative diseases.
- 19.8 List the most common abdominal emergencies, with the most common locations of direct and referred pain.
- 19.9 Explain the procedures to follow for patient assessment of gastrointestinal and urologic emergencies.
- 19.10 Describe the procedures to follow in managing the patient with shock associated with abdominal emergencies.
- 19.11 Describe the emergency medical care of the patient with gastrointestinal or urologic emergencies.
- 19.12 Explain the principles of kidney dialysis.
- 19.13 Demonstrate the assessment of a patient's abdomen.

Course Standard 20

LPSCS-EMT-20

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. The student will understand the significance and characteristics of diabetes, sickle cell disease, clotting disorders, and the complications associated with each. Students should be able to demonstrate knowledge of the characteristics of type 1 and type 2 diabetes. They should be able to list the appropriate steps for assessment and prehospital treatment of diabetic emergencies. Students should also be able to discuss hematologic emergencies, and describe sickle cell disease, hemophilia, thrombophilia, and deep vein thrombosis.

- 20.1 Describe the anatomy and physiology of the endocrine system and its main function in the body.
- 20.2 Discuss the role of glucose as a major source of energy for the body and its relationship to insulin.
- 20.3 Define the terms diabetes mellitus, hyperglycemia, and hypoglycemia.
- 20.4 Describe the differences and similarities between hyperglycemic and hypoglycemic diabetic emergencies, including their onset, signs and symptoms, and management considerations.
- 20.5 Distinguish between the individual types of diabetes and how their onset and presentation are different.
- 20.6 Describe the interventions for providing emergency medical care to both a conscious and unconscious patient with an altered mental status and a history of diabetes who is having symptomatic hyperglycemia.
- 20.7 Describe the interventions for providing emergency medical care to both a conscious and unconscious patient with an altered mental status and a history of diabetes who is having symptomatic hypoglycemia.
- 20.8 Explain the process for assessing and managing the airway of a patient with an altered mental status, including ways to differentiate a hyperglycemic patient from a hypoglycemic patient.
- 20.9 Explain some age-related considerations when managing a pediatric patient who is experiencing symptomatic hypoglycemia.
- 20.10 Discuss the steps the EMT should follow when conducting a primary and secondary assessment of a patient with an altered mental status who is a suspected of having diabetes.
- 20.11 Explain when it is appropriate to obtain medical direction when providing emergency medical care to a patient with diabetes.

- 20.12 Explain some age-related considerations when managing an older patient who has undiagnosed diabetes.
- 20.13 Provide the forms, dose, administration, indications, and contraindications for giving oral glucose to a patient with a decreased level of consciousness who has a history of diabetes.
- 20.14 Discuss the composition and functions of blood.
- 20.15 Describe the pathophysiology of sickle cell disease, complications, and management of sickle cell disease.
- 20.16 Describe two types of blood clotting disorders, and the risk factors, characteristics, and management of each.
- 20.17 Demonstrate the assessment and care of a patient with hypoglycemia and a decreased level of consciousness.
- 20.18 Demonstrate how to administer oral glucose paste to a patient who is experiencing a low glucose level.

Course Standard 21

LPSCS-EMT-21

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. Recognition and management of shock and difficulty breathing related to anaphylactic reactions. The student will understand the anatomy, physiology, and pathophysiology of hypersensitivity disorders and anaphylactic reactions. Additionally, students will have the knowledge and skills to recognize and manage hypersensitivity disorders and anaphylactic reactions.

- 21.1 Define the terms allergic reaction and anaphylaxis.
- 21.2 Explain the difference between a local and a systemic response to allergens.
- 21.3 List the five categories of stimuli that could cause an allergic reaction or an extreme allergic reaction.
- 21.4 Differentiate the primary assessment for a patient with a systemic allergic or anaphylactic reaction and a local reaction.
- 21.5 Explain the importance of managing the ABCs of a patient who is having an allergic reaction.
- 21.6 Discuss the steps in the primary assessment that are specific to a patient who is having an allergic reaction.
- 21.7 Explain the factors involved when making a transport decision for a patient having an allergic reaction.
- 21.8 Review the process for providing emergency medical care to a patient who is experiencing an allergic reaction.
- 21.9 Explain the rationale, including communication and documentation considerations, when determining whether to administer epinephrine to a patient who is having an allergic reaction.
- 21.10 Describe some age-related contraindications to using epinephrine to treat an allergic reaction in a geriatric patient.
- 21.11 Demonstrate how to remove the stinger from a honeybee sting and proper patient management following its removal.
- 21.12 Demonstrate how to use an EpiPen auto-injector.

Course Standard 22

LPSCS-EMT-22

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. The student will be familiar with the classes of compounds involved in substance abuse and poisonings; the routes by which poisons enter the body; and the signs, symptoms, assessment, and treatment for various poisoning emergencies.

- 22.1 Define toxicology, poison, toxin, and overdose.
- 22.2 Identify the common signs and symptoms of poisoning or toxic exposure.
- 22.3 Describe how poisons and toxins can enter the body.
- 22.4 Describe the assessment and treatment of a patient with a suspected poisoning or toxic exposure.
- 22.5 Describe the assessment and treatment of the patient with a suspected overdose.

- 22.6 Discuss scene safety considerations for working at a scene with a potentially hazardous material or violent patient.
- 22.7 Understand the role of airway management in the patient suffering from poisoning or overdose.
- 22.8 Explain the use of activated charcoal, including indications, contraindications, and the need to obtain approval from medical control before administration.
- 22.9 Identify the main types of toxins and poisons and their effects, including alcohol, opiates and opioids, sedative-hypnotic drugs, inhalants, hydrogen sulfide, sympathomimetics, synthetic cathinones, marijuana, hallucinogens, anticholinergic agents, and cholinergic agents.
- 22.10 Discuss how to manage a patient who has overdosed on an opioid or opiate and who has gone into cardiac or respiratory arrest.
- 22.11 Describe the assessment and treatment for the patient with suspected food poisoning.
- 22.12 Describe the assessment and treatment for the patient with suspected plant poisoning.
- 22.13 Demonstrate how to assess and treat a patient with a suspected poisoning.
- 22.14 Demonstrate how to assess and treat a patient with a suspected overdose.
- 22.15 Demonstrate how to administer activated charcoal.

Course Standard 23

LPSCS-EMT-23

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. The student will be able to recognize behaviors that pose a risk to the EMT, patient, or others and the basic principles of the mental health system. Additionally, students will have the knowledge and skills to successfully assess and manage patients suffering from a psychiatric emergency within the legal parameters of their scope of practice.

- 23.1 Discuss the myths and realities concerning psychiatric emergencies.
- 23.2 Discuss general factors that can cause alteration in a patient's behavior.
- 23.3 Define a behavioral crisis.
- 23.4 Recognize the magnitude of mental health problems in society.
- 23.5 Know the main principles of how the mental health care system functions.
- 23.6 Know the two basic categories of diagnosis that a mental health professional will use.
- 23.7 Explain special considerations for assessing and managing a behavioral crisis or psychiatric emergency.
- 23.8 Define acute psychosis.
- 23.9 Define schizophrenia.
- 23.10 Explain the care for a psychotic patient.
- 23.11 Define excited delirium and agitated delirium.
- 23.12 Explain the care for a patient with excited delirium.
- 23.13 Describe methods used to restrain patients.
- 23.14 Know the main principles of care for the agitated, violent, or uncooperative patient.
- 23.15 Explain how to recognize the behavior of a patient at risk of suicide, including the management of such a patient.
- 23.16 Recognize issues specific to posttraumatic stress disorder (PTSD) and the returning combat veteran.
- 23.17 Discuss the medical and legal aspects of managing a psychiatric emergency.
- 23.18 Demonstrate the techniques used to mechanically restrain a patient.

Course Standard 24

LPSCS-EMT-24

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. The student will understand the anatomy and physiology, including the developmental changes during puberty and menopause, of the female reproductive system and identify and describe assessment and treatment for gynecologic emergencies. Special considerations and precautions that an EMT must observe when arriving at the scene of a suspected case of sexual assault or rape are also discussed.

24.1 Describe the anatomy and physiology of the female reproductive system; include the developmental changes that occur during puberty and menopause.

- 24.2 Discuss the special, age-related patient management considerations EMTs should provide for both younger and older female patients who are experiencing gynecologic emergencies.
- 24.3 List three common examples of gynecologic emergencies; include the causes, risk factors, assessment findings, and patient management considerations.
- 24.4 Explain how an EMT would recognize conditions associated with hemorrhage during pregnancy.
- 24.5 Discuss the assessment and management of a patient who is experiencing a gynecologic emergency; include a discussion of specific assessment findings.
- 24.6 Explain the general management of a gynecologic emergency in relation to patient privacy and communication.
- 24.7 Give examples of the personal protective equipment EMTs should use when treating patients with gynecologic emergencies.
- 24.8 Discuss the special considerations and precautions EMTs must observe when arriving at the scene of a suspected case of sexual assault or rape.
- 24.9 Discuss the assessment and management of a patient who has been sexually assaulted or raped; include the additional steps EMTs must take on behalf of the patient.

Course Standard 25

LPSCS-EMT-25

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient. The student will have an understanding of the basic concepts of energy and its effect on the human body; the general injury patterns associated with different types of impacts, falls, and penetrating trauma; and the basic application of laws of physics on the assessment of trauma patients. Students will begin to demonstrate critical thinking in making predictions of injuries and adjusting index of suspicion based on the analysis of evidence gathered in scene size-up simulations. Students will also understand some common injury patterns to major body systems.

- 25.1 Define the terms mechanism of injury (MOI), blunt trauma, and penetrating trauma.
- 25.2 Explain the relationship of the MOI to potential energy, kinetic energy, and work.
- 25.3 Provide examples of the MOI that would cause blunt and penetrating trauma to occur.
- 25.4 Describe the five types of motor vehicle crashes, the injury patterns associated with each one, and how each relates to the index of suspicion of life-threatening injuries.
- 25.5 Discuss the three specific factors to consider during assessment of a patient who has been injured in a fall, plus additional considerations for pediatric and geriatric patients.
- 25.6 Discuss the effects of high-, medium-, and low-velocity penetrating trauma on the body and how an understanding of each type helps EMTs form an index of suspicion about unseen life-threatening injuries.
- 25.7 Discuss primary, secondary, tertiary, and miscellaneous blast injuries and the anticipated damage each one will cause to the body.
- 25.8 Describe multisystem trauma and the special considerations that are required for patients who fit this category.
- 25.9 Explain the major components of trauma patient assessment; include considerations related to whether the method of injury was significant or nonsignificant.
- 25.10 Discuss the special assessment considerations related to a trauma patient who has injuries in each of the following areas: head, neck and throat, chest, and abdomen.
- 25.11 Explain a general overview of multisystem trauma patient management.
- 25.12 Explain trauma patient management in relation to scene time and transport selection.
- 25.13 List the Association of Air Medical Services criteria for the appropriate use of emergency air medical services.
- 25.14 List the American College of Surgeons' Committee on Trauma classification of trauma centers.
- 25.15 Explain the American College of Surgeon's Committee on Trauma and the Centers for Disease Control and Prevention field triage decision scheme as it relates to making an appropriate destination selection for a trauma patient.

Course Standard 26

LPSCS-EMT-26

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient. The student will understand the structure and function of the circulatory system, the significance and characteristics of bleeding, the importance of personal protective equipment when treating a bleeding patient, the characteristics of external and internal bleeding, how to conduct a patient assessment, and methodologies for controlling bleeding.

- 26.1 Describe the general structure of the circulatory system and the function of its different parts, including the heart, arteries, veins, and capillaries.
- 26.2 Explain the significance of bleeding caused by blunt force trauma, including the importance of perfusion.
- 26.3 Discuss hypovolemic shock as a result of bleeding, including the signs of shock.
- 26.4 Explain the importance of following standard precautions when treating a patient with external bleeding.
- 26.5 Describe the characteristics of external bleeding, including the identification of the following types of bleeding: arterial, venous, and capillary.
- 26.6 Explain how to determine the nature of the illness (NOI) for internal bleeding, including identifying possible traumatic and non-traumatic sources.
- 26.7 Identify the signs and symptoms of internal bleeding.
- 26.8 Discuss internal bleeding in terms of the different mechanisms of injury (MOI) and their associated internal bleeding sources.
- 26.9 Explain how to conduct a primary assessment, including identification of life threats beyond bleeding, ensuring a patent airway, and making a transport decision.
- 26.10 Explain how to assess a patient with external or internal bleeding, including physical examination, vital signs, and use of monitoring devices.
- 26.11 Explain the emergency medical care of the patient with external bleeding.
- 26.12 Explain the emergency medical care of the patient with internal bleeding.
- 26.13 Demonstrate the emergency medical care of the patient with external bleeding using direct pressure.
- 26.14 Demonstrate the emergency medical care of the patient with external bleeding using a commercial tourniquet.
- 26.15 Demonstrate the emergency medical care of the patient with epistaxis, or nosebleed.
- 26.16 Demonstrate the emergency medical care of the patient who shows signs and symptoms of internal bleeding.

Course Standard 27

LPSCS-EMT-27

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient. The student will have an understanding of types of open and closed soft-tissue injuries; how to care for soft-tissue injuries, including the use of dressings and bandages; and the assessment and care of different types of burns, including thermal, chemical, and electrical burns.

- 27.1 Describe the anatomy of the skin; include the layers of the skin.
- 27.2 Know the functions of the skin.
- 27.3 Name the three types of soft-tissue injuries.
- 27.4 Describe the types of closed soft-tissue injuries.
- 27.5 Describe the types of open soft-tissue injuries.
- 27.6 Explain patient assessment of closed and open injuries.
- 27.7 Explain patient assessment of closed and open injuries in relation to airway management.
- 27.8 Explain the emergency medical care for closed and open injuries.
- 27.9 Explain the emergency medical care for a patient with an open wound to the abdomen.
- 27.10 Explain the emergency medical care for an impaled object.
- 27.11 Explain the emergency medical care for neck injuries.
- 27.12 Describe the steps of the emergency treatment of small animal bites, human bites, and rabies.
- 27.13 Explain how the seriousness of a burn is related to its depth and extent.

- 27.14 Define superficial, partial-thickness, and full-thickness burns; include the characteristics of each burn.
- 27.15 Explain the primary assessment of a burn patient.
- 27.16 Explain the emergency medical care for burn injuries.
- 27.17 Describe the emergency management of chemical, electrical, thermal, inhalation, and radiation burns.
- 27.18 Know the functions of sterile dressings and bandages.
- 27.19 Demonstrate the emergency medical care of closed soft-tissue injuries.
- 27.20 Demonstrate the emergency medical care of a patient with an open chest wound.
- 27.21 Demonstrate how to control bleeding from an open soft-tissue injury.
- 27.22 Demonstrate the emergency medical care of a patient with an open abdominal wound.
- 27.23 Demonstrate how to stabilize an impaled object.
- 27.24 Demonstrate how to care for a burn.
- 27.25 Demonstrate the emergency medical care of a patient with a chemical, electrical, thermal, inhalation, or radiation burn.

Course Standard 28

LPSCS-EMT-28

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. The student will understand how to manage traumarelated issues with the face and neck. The student will learn how to recognize life threats associated with these injuries and the correlation with head and spinal trauma. The curriculum includes detailed anatomy and physiology of the head, neck, and eye, and discusses injuries including trauma to the mouth, penetrating neck trauma, laryngotracheal injuries, and facial fractures. The chapter also includes information on dental injuries and blast injuries to the eye. Management of common eye injuries such as foreign objects, puncture wounds, lacerated eyelids, burns, impaled objects, and complications from blunt trauma are included.

- 28.1 Describe the anatomy and physiology of the head, face, and neck; include major structures and specific important landmarks of which EMTs must be aware.
- 28.2 Describe the factors that may cause obstruction of the upper airway following a facial injury.
- 28.3 Discuss the different types of facial injuries and patient care considerations related to each one.
- 28.4 Explain the emergency care of a patient who has sustained face and neck injuries; include assessment of the patient, review of signs and symptoms, and management of care.
- 28.5 Explain the emergency care of a patient with soft-tissue wounds of the face and neck.
- 28.6 Explain the emergency care of a patient with an eye injury based on the following scenarios: foreign object, impaled object, burns, lacerations, blunt trauma, closed head injuries, and blast injuries.
- 28.7 Describe the three different causes of a burn injury to the eye and patient management considerations related to each one.
- 28.8 Explain the emergency care of a patient with injuries of the nose.
- 28.9 Explain the emergency care of a patient with injuries of the ear; include lacerations and foreign body insertions.
- 28.10 Explain the physical findings and emergency care of a patient with a facial fracture.
- 28.11 Explain the emergency care of a patient with dental and cheek injuries; include how to deal with an avulsed tooth.
- 28.12 Explain the emergency care of a patient with an upper airway injury caused by blunt trauma.
- 28.13 Explain the emergency care of a patient with a penetrating injury to the neck; include how to control regular and life-threatening bleeding.
- 28.14 Demonstrate the removal of a foreign object from under a patient's upper eyelid.
- 28.15 Demonstrate the stabilization of a foreign object that has been impaled in a patient's eye.
- 28.16 Demonstrate irrigation of a patient's eye using a nasal cannula, bottle, or basin.
- 28.17 Demonstrate the care of a patient who has a penetrating eye injury.
- 28.18 Demonstrate how to control bleeding from a neck injury.

Course Standard 29

LPSCS-EMT-29

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient. The student will learn how to recognize life threats associated with these injuries as well as the need for immediate spinal stabilization and, potentially, airway and breathing support. The curriculum includes detailed anatomy and physiology of the nervous system and the pathophysiology, assessment, and management of traumatic brain and spinal cord injuries. This chapter provides detail about traumatic brain injury (TBI), including initial mechanism of injury, and primary (direct) versus secondary (indirect) injury. Transport considerations are discussed with a focus on potential deterioration. This chapter is skills intensive with detail on bandaging; traumatic airway control; manual in-line stabilization; placement of a cervical collar; immobilization of the patient lying, sitting, or standing; and helmet removal.

- 29.1 Describe the anatomy and physiology of the nervous system, including its divisions into the central nervous system (CNS) and peripheral nervous system (PNS), and the structures and functions of each.
- 29.2 Explain the functions of both the somatic and autonomic nervous systems.
- 29.3 List the major bones of the skull and spinal column and their related structures; include their functions as they relate to the nervous system.
- 29.4 Explain the different types of head injuries, their potential mechanism of injury (MOI), and general signs and symptoms of a head injury that the EMT should consider when performing a patient assessment.
- 29.5 Define traumatic brain injury (TBI).
- 29.6 Explain the difference between a primary (direct) injury and a secondary (indirect) injury; include examples of possible MOIs that may cause each one.
- 29.7 Describe the different types of brain injuries and their corresponding signs and symptoms, including increased intracranial pressure (ICP), concussion, contusion, and injuries caused by medical conditions.
- 29.8 Describe the different types of injuries that may damage the cervical, thoracic, or lumbar spine; include examples of possible MOIs that may cause each one.
- 29.9 Explain the steps in the patient assessment process for a person who has a suspected head or spine injury, including specific variations that may be required as related to the type of injury.
- 29.10 List the mechanisms of injury that cause a high index of suspicion for the possibility of a head or spinal injury.
- 29.11 Explain emergency medical care of a patient with a head injury; include the three general principles designed to protect and maintain the critical functions of the CNS and ways to determine if the patient has a traumatic brain injury.
- 29.12 Explain emergency medical care of a patient with a spinal injury; include the implications of not properly caring for patients with injuries of this nature, the steps for performing manual in-line stabilization, implications for sizing and using a cervical spine immobilization device, and key symptoms that contraindicate in-line stabilization.
- 29.13 Explain the process of preparing patients who have suspected head or spinal injuries for transport; include the use and functions of a long backboard, short backboard, and other short spinal extrication devices to immobilize the patient's cervical and thoracic spine.
- 29.14 Explain the different circumstances in which a helmet should be left on or taken off a patient with a possible head or spinal injury.
- 29.15 List the steps EMTs must follow to remove a helmet, including the alternate method for removing a football helmet.
- 29.16 Discuss age-related variations that are required when providing emergency care to a pediatric patient who has a suspected head or spine injury.
- 29.17 Demonstrate how to perform a jaw-thrust maneuver on a patient with a suspected spinal injury.
- 29.18 Demonstrate how to perform manual in-line stabilization on a patient with a suspected spinal injury.
- 29.19 Demonstrate how to apply a cervical collar to a patient with a suspected spinal injury.
- 29.20 Demonstrate how to secure a patient with a suspected spinal injury to a long backboard.
- 29.21 Demonstrate how to secure a patient with a suspected spinal injury using a vacuum mattress.

- 29.22 Demonstrate how to secure a patient with a suspected spinal injury who was found in a sitting position.
- 29.23 Demonstrate how to remove a helmet from a patient with a suspected head or spinal injury.
- 29.24 Demonstrate the alternate method for removal of a football helmet from a patient with a suspected head or spinal injury.

Course Standard 30

LPSCS-EMT-30

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient. The student will understand how to manage a patient with chest trauma. Students will learn how to recognize life threats associated with these injuries and how to provide immediate intervention. The curriculum includes a detailed description of the anatomy and physiology of the chest and underlying organs as well as the pathophysiology, complications, assessment, and management of chest injury. Age-related issues are discussed specific to pediatric and geriatric chest trauma. This chapter also provides information on incidence (morbidity and mortality) and a detailed discussion of blunt versus penetrating or open trauma. Specific injuries discussed include sucking chest wound, pneumothorax, tension pneumothorax, hemothorax, flail chest, and pericardial tamponade.

- 30.1 Explain the mechanics of ventilation in relation to chest injuries.
- 30.2 Describe the differences between an open and closed chest injury.
- 30.3 Recognize the signs of chest injury.
- 30.4 Describe the management of a patient with a suspected chest injury, including pneumothorax, hemothorax, cardiac tamponade, rib fractures, and flail chest, pulmonary contusion, traumatic asphyxia, blunt myocardial injury, commotio cordis, and laceration of the great vessels.
- 30.5 Recognize the complications that can accompany chest injuries.
- 30.6 Explain the complications of a patient with an open pneumothorax (sucking chest wound).
- 30.7 Differentiate between a pneumothorax (open, simple, and tension) and hemothorax.
- 30.8 Describe the complications of cardiac tamponade.
- 30.9 Describe the complications of rib fractures.
- 30.10 Describe the complications of a patient with a flail chest.
- 30.11 Describe the steps to take in the assessment of a patient with a suspected chest injury.
- 30.12 Demonstrate the management of a patient with a sucking chest wound.

Course Standard 31

LPSCS-EMT-31

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient. The student will learn how to recognize life threats associated with these injuries and the need for immediate intervention. The curriculum includes detailed anatomy and physiology of the abdominal and genitourinary systems as well as the pathophysiology, complications, assessment, and management of abdominal and genitourinary injuries. The assessment section is very comprehensive and follows the primary and secondary model. Specific injuries discussed include blunt versus penetrating mechanisms, evisceration, impaled object, injuries to external genitalia, vaginal bleeding secondary to trauma, and sexual assault. Emergency care skills include management of blunt abdominal injury, penetrating abdominal injury, and abdominal evisceration.

- 31.1 Describe the anatomy and physiology of the abdomen; include an explanation of abdominal guadrants and boundaries and the difference between hollow and solid organs.
- 31.2 Describe some special considerations related to the care of pediatric patients and geriatric patients who have experienced abdominal trauma.
- 31.3 Define closed abdominal injuries; provide examples of the mechanisms of injury (MOI) likely to cause this type of trauma, and common signs and symptoms exhibited by patients who have experienced this type of injury.

- 31.4 Define open abdominal injuries; include the three common velocity levels that distinguish these injuries, provide examples of the MOI that would cause each, and common signs and symptoms exhibited by patients who have experienced this type of injury.
- 31.5 Describe the different ways hollow and solid organs of the abdomen can be injured, and include the common signs and symptoms exhibited by patients depending on the organ(s) involved.
- 31.6 Explain assessment of a patient who has experienced an abdominal injury; include common indicators that help determine the MOI and whether it is a significant or insignificant MOI.
- 31.7 Explain the emergency medical care of a patient who has sustained a closed abdominal injury, including blunt trauma caused by a seatbelt or air bag.
- 31.8 Explain the emergency medical care of a patient who has sustained an open abdominal injury, including penetrating injuries and abdominal evisceration.
- 31.9 Describe the anatomy and physiology of the female and male genitourinary systems; include the differences between hollow and solid organs.
- 31.10 Discuss the types of traumatic injuries sustained by the male and female genitourinary system, including the kidneys, urinary bladder, and internal and external genitalia.
- 31.11 Explain assessment of a patient who has experienced a genitourinary injury; include special considerations related to patient privacy and determining the MOI.
- 31.12 Explain the emergency medical care of a patient who has sustained a genitourinary injury to the kidneys, bladder, external male genitalia, female genitalia, and rectum.
- 31.13 Explain special considerations related to a patient who has experienced a genitourinary injury caused by a sexual assault, including patient treatment, criminal implications, and evidence management.
- 31.14 Demonstrate proper emergency medical care of a patient who has experienced a blunt abdominal injury.
- 31.15 Demonstrate proper emergency medical care of a patient who has a penetrating abdominal injury with an impaled object.
- 31.16 Demonstrate how to apply a dressing to an abdominal evisceration wound.

Course Standard 32

LPSCS-EMT-32

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient. The student will understand the anatomy and physiology of the musculoskeletal system. They will have learned the proper assessment for a suspected and obvious injury. They will have learned general and specific types of musculoskeletal injuries including fractures, sprains, and dislocations, with associated signs, symptoms, and emergency treatment including the use of splints, PASG, and traction splints.

- 32.1 Describe the anatomy and physiology of the musculoskeletal system.
- 32.2 Name the four mechanisms of injury.
- 32.3 Describe the different types of musculoskeletal injuries, including fractures, dislocations, amputations, sprains, and strains.
- 32.4 Recognize the characteristics of specific types of musculoskeletal injuries.
- 32.5 Differentiate between open and closed fractures.
- 32.6 Explain how to assess the severity of an injury.
- 32.7 Describe the emergency medical care of the patient with an orthopedic injury.
- 32.8 Describe the emergency medical care of the patient with a swollen, painful, deformed extremity (fracture).
- 32.9 Discuss the need for, general rules of, and possible complications of splinting.
- 32.10 Explain the reasons for splinting fractures, dislocations, and sprains at the scene versus transporting the patient immediately.
- 32.11 Describe the emergency medical care of the patient with an amputation.
- 32.12 Demonstrate the care of musculoskeletal injuries.
- 32.13 Demonstrate how to apply a rigid splint.
- 32.14 Demonstrate how to apply a zippered air splint.
- 32.15 Demonstrate how to apply an unzippered air splint.
- 32.16 Demonstrate how to apply a vacuum splint.
- 32.17 Demonstrate how to apply a Hare traction splint.

- 32.18 Demonstrate how to apply a Sager traction splint.
- 32.19 Demonstrate how to splint the clavicle, the scapula, the shoulder, the humerus, the elbow, and the forearm.
- 32.20 Demonstrate how to splint the hand and wrist.
- 32.21 Demonstrate how to care for a patient with an amputation.

Course Standard 33

LPSCS-EMT-33

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient. The student will understand the physiology of environmental injuries. They will have learned the proper assessment and management of general and specific types of environmental emergencies including hypothermia, local cold injuries such as frostbite, and heat exposure illnesses such as heat stroke. They will learn the associated signs and symptoms and emergency treatment of drowning; diving emergencies; high-altitude sickness; lightning strikes; and bites and envenomations from spiders, hymenoptera (e.g., bees, yellow jackets, wasps, and ants), snakes, scorpions, ticks, and marine life.

- 33.1 Identify the four factors that affect how a person deals with exposure to a cold or hot environment.
- 33.2 Describe the five ways heat loss occurs in the body, and how the rate and amount of heat loss or gain can be modified in an emergency situation.
- 33.3 Describe the four general stages of hypothermia.
- 33.4 Describe local cold injuries and their underlying causes.
- 33.5 Describe the process of providing emergency care to a patient who has sustained a cold injury, including assessment of the patient, review of signs and symptoms, and management of care.
- 33.6 Explain the importance of following local protocols when rewarming a patient who is experiencing moderate or severe hypothermia.
- 33.7 Describe the three emergencies that are caused by heat exposure, including the risk factors, signs, and symptoms.
- 33.8 Describe the process of providing emergency care to a patient who is experiencing a heat emergency, including assessment of the patient, review of signs and symptoms, and management of care.
- 33.9 Define drowning, including its incidence, risk factors, and prevention.
- 33.10 List the basic rules of performing a water and ice rescue.
- 33.11 Explain why EMTs should have a prearranged rescue plan based on the environment in which they work.
- 33.12 List five conditions that may result in a spinal injury following a submersion incident and the steps for stabilizing a patient with a suspected spinal injury in the water.
- 33.13 Discuss recovery techniques and resuscitation efforts EMTs may need to follow when managing a patient who has been involved in a submersion incident.
- 33.14 Describe the three types of diving emergencies, how they may occur, and their signs and symptoms.
- 33.15 Describe the process of providing emergency care to a patient who has been involved in a drowning or diving emergency, including assessment of the patient, review of signs and symptoms, and management of care.
- 33.16 Discuss the types of dysbarism injuries, including their incidence, risk factors, signs and symptoms, and emergency medical treatment.
- 33.17 Discuss lightning injuries, including their incidence, risk factors, signs and symptoms, and emergency medical treatment.
- 33.18 Describe the process of providing emergency care to patients who have been bitten by each of the following venomous spiders:
 - Black widow spider
 - Brown recluse spider

- 33.19 Describe the process of providing emergency care to a patient who has sustained a bite or sting from each of the following insects and arachnids, including steps the EMT should follow if a patient develops a severe reaction to the sting or bite:
 - Hymenoptera (bees, wasps, yellow jackets, and ants)
 - Scorpions
 - Ticks
- 33.20 Describe the process of providing emergency care to a patient who has been bitten by each of the following types of snake and is showing signs of envenomation.
 - Pit viper
 - Coral snake
- 33.21 Describe the process of providing emergency care to a patient who has been stung by a coelenterate or other marine animal.
- 33.22 Demonstrate the emergency medical treatment of local cold injuries in the field.
- 33.23 Demonstrate using a warm-water bath to rewarm the limb of a patient who has sustained a local cold injury.
- 33.24 Demonstrate how to treat a patient with heat cramps.
- 33.25 Demonstrate how to treat a patient with heat exhaustion.
- 33.26 Demonstrate how to treat a patient with heat stroke.
- 33.27 Demonstrate how to stabilize a patient with a suspected spinal injury in the water.
- 33.28 Demonstrate how to care for a patient who is suspected of having an air embolism or decompression sickness following a drowning or diving emergency.
- 33.29 Demonstrate how to care for a patient who has been bitten by a pit viper and is showing signs of envenomation.
- 33.30 Demonstrate how to care for a patient who has been bitten by a coral snake and is showing signs of envenomation.
- 33.31 Demonstrate how to care for a patient who has sustained a coelenterate envenomation.

Course Standard 34

LPSCS-EMT-34

Applies a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. The student will understand the anatomy and physiology of the female reproductive system as it relates to pregnancy. They will learn the assessment and emergency treatment for childbirth including stages of labor, normal delivery, complications of pregnancy, and neonatal evaluations and resuscitation.

- 34.1 Identify the anatomy and physiology of the female reproductive system.
- 34.2 Explain the normal changes that occur in the body during pregnancy.
- 34.3 Recognize complications of pregnancy including abuse, substance abuse, hypertensive disorders, bleeding, spontaneous abortion (miscarriage), and gestational diabetes.
- 34.4 Discuss the need to consider two patients—the woman and the unborn fetus—when treating a pregnant trauma patient.
- 34.5 Discuss special considerations involving pregnancy in different cultures and with teenage patients.
- 34.6 Explain assessment of the pregnant patient.
- 34.7 Explain the significance of meconium in the amniotic fluid.
- 34.8 Differentiate among the three stages of labor.
- 34.9 Describe the indications of an imminent delivery.
- 34.10 Explain the steps involved in normal delivery management.
- 34.11 List the contents of an obstetrics kit.
- 34.12 Explain the necessary care of the fetus as the head appears.
- 34.13 Describe the procedure followed to clamp and cut the umbilical cord.
- 34.14 Describe delivery of the placenta.
- 34.15 Understand the steps to take in neonatal assessment and resuscitation.

- 34.16 Recognize complicated delivery emergencies including breech presentations, limb presentations, umbilical cord prolapse, spina bifida, multiple gestation, premature newborns, post term pregnancy, fetal demise, and delivery without sterile supplies.
- 34.17 Describe postpartum complications and how to treat them.
- 34.18 Demonstrate the procedure to assist in a normal cephalic delivery.
- 34.19 Demonstrate care procedures of the fetus as the head appears.
- 34.20 Demonstrate the steps to follow in post-delivery care of the newborn.
- 34.21 Demonstrate how to clamp and cut the umbilical cord.
- 34.22 Demonstrate how to assist in delivery of the placenta.
- 34.23 Demonstrate the post-delivery care of the woman.
- 34.24 Demonstrate procedures to follow for complicated delivery emergencies including vaginal bleeding, breech presentation, limb presentation, and prolapsed umbilical cord.

Course Standard 35

LPSCS-EMT-35

Applies a fundamental knowledge of the growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. The student will understand the anatomy and physiology of the child as compared to the adult. They will learn the appropriate assessment and care for the types of illness and injury affecting children of all ages, injury patterns based on size, and special body system injuries. They will also learn the indicators of abuse and neglect, and the medical and legal responsibilities of an EMT.

- 35.1 Explain some of the challenges inherent in providing emergency care to pediatric patients and why effective communication with both the patient and his or her family members is critical to a successful outcome.
- 35.2 Discuss the physical and cognitive developmental stages of an infant, including health risks, signs that may indicate illness, and patient assessment.
- 35.3 Discuss the physical and cognitive developmental stages of a toddler, including health risks, signs that may indicate illness, and patient assessment.
- 35.4 Discuss the physical and cognitive developmental stages of a preschool-age child, including health risks, signs that may indicate illness, and patient assessment.
- 35.5 Discuss the physical and cognitive developmental stages of a school-age child, including health risks, signs that may indicate illness, and patient assessment.
- 35.6 Discuss the physical and cognitive developmental stages of an adolescent, including health risks, signs that may indicate illness, and privacy issues.
- 35.7 Describe differences in the anatomy and physiology of the pediatric patient compared to the adult patient and their implications for EMTs, with a focus on the following body systems: respiratory, circulatory, nervous, gastrointestinal, musculoskeletal, and integumentary.
- 35.8 Describe the differences in the pathophysiology of the pediatric patient compared to the adult patient and their implications for EMTs, with a focus on the following body systems: respiratory, circulatory, nervous, gastrointestinal, musculoskeletal, and integumentary.
- 35.9 Explain the steps in the primary assessment of a pediatric patient, including the elements of the pediatric assessment triangle (PAT), hands-on ABCs, transport decision considerations, and privacy issues.
- 35.10 Explain the steps in the secondary assessment of a pediatric patient, including what EMTs should look for related to different body areas and the method of injury.
- 35.11 Describe the emergency care of a pediatric patient in respiratory distress, including the different causes of pediatric respiratory emergencies, the signs and symptoms of increased work of breathing, and the difference between respiratory distress and respiratory failure.
- 35.12 List the possible causes of an upper and a lower airway obstruction in a pediatric patient and the steps in the management of foreign body airway obstruction.
- 35.13 Describe asthma; its possible causes, signs and symptoms; and steps in the management of a pediatric patient who is experiencing an asthma attack.

- 35.14 Explain how to determine the correct size of an airway adjunct intended for a pediatric patient during an emergency.
- 35.15 List the different oxygen delivery devices that are available for providing oxygen to a pediatric patient, including the indications for the use of each and precautions EMTs must take to ensure the patient's safety.
- 35.16 Describe the emergency care of a pediatric patient who is in shock (hypoperfusion), including common causes, signs, and symptoms.
- 35.17 Describe the emergency care of a pediatric patient with an altered mental status, including common causes, signs, and symptoms.
- 35.18 Describe the emergency care of a pediatric patient who has experienced a seizure, including the different types of seizures, common causes, signs, and symptoms.
- 35.19 Describe the emergency care of a pediatric patient with meningitis, including common causes, signs, symptoms, and special precautions.
- 35.20 Describe the emergency care of a pediatric patient who is experiencing a gastrointestinal emergency, including common causes, signs, and symptoms.
- 35.21 Describe the emergency care of a pediatric patient who has been poisoned, including common sources of poison, signs and symptoms.
- 35.22 Describe the emergency care of a pediatric patient who is dehydrated, including how to gauge the severity of dehydration based on key signs and symptoms.
- 35.23 Describe the emergency care of a pediatric patient who is experiencing a fever emergency, including common causes.
- 35.24 Describe the emergency care of a pediatric patient who has experienced a drowning emergency, including common causes, signs, and symptoms.
- 35.25 Discuss the common causes of pediatric trauma emergencies; include how to differentiate between injury patterns in adults, infants, and children.
- 35.26 Discuss the significance of burns in pediatric patients, their most common causes, and general guidelines EMTs should follow when assessing patients who have sustained burns.
- 35.27 Explain the four triage categories used in the JumpSTART system for pediatric patients during disaster management.
- 35.28 Describe child abuse and neglect and its possible indicators, including the medical and legal responsibilities of EMTs when caring for a pediatric patient who is a possible victim of child abuse.
- 35.29 Discuss sudden infant death syndrome (SIDS), including its risk factors, patient assessment, and special management considerations related to the death of an infant patient.
- 35.30 Discuss the responsibilities of EMTs when communicating with a family or loved ones following the death of a child.
- 35.31 Discuss some positive ways EMTs may cope with the death of a pediatric patient and why managing posttraumatic stress is important for all health care professionals.
- 35.32 Demonstrate how to position the airway in a pediatric patient.
- 35.33 Demonstrate how to palpate the pulse and estimate the capillary refill time in a pediatric patient.
- 35.34 Demonstrate how to use a length-based resuscitation tape to size equipment appropriately for a pediatric patient.
- 35.35 Demonstrate how to insert an oropharyngeal airway in a pediatric patient.
- 35.36 Demonstrate how to insert a nasopharyngeal airway in a pediatric patient.
- 35.37 Demonstrate how to administer blow-by oxygen to a pediatric patient.
- 35.38 Demonstrate how to apply a nasal cannula to a pediatric patient.
- 35.39 Demonstrate how to apply a non-rebreathing mask to a pediatric patient.
- 35.40 Demonstrate how to assist ventilation of an infant or child using a bag-valve mask (BVM).
- 35.41 Demonstrate how to perform one-person BVM ventilation on a pediatric patient.
- 35.42 Demonstrate how to perform two-person BVM ventilation on a pediatric patient.
- 35.43 Demonstrate how to immobilize a pediatric patient who has been involved in a trauma emergency.
- 35.44 Demonstrate how to immobilize a pediatric patient in a car seat who has been involved in a trauma emergency.

Course Standard 36

LPSCS-EMT-36

Applies a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. The student will understand the physiologic and psychological changes that occur with the aging process. The student will also learn and understand the types of illness and injuries common to the geriatric population. They will understand the GEMS triangle, use of advance directives, and signs and symptoms of elder abuse.

- 36.1 Define the term "geriatrics."
- 36.2 Recognize some of the special aspects of the lives of older people.
- 36.3 Discuss generational considerations when communicating with a geriatric patient.
- 36.4 Describe the common complaints and the leading causes of death in older people.
- 36.5 Discuss the physiologic changes associated with the aging process and the age-related assessment and treatment modifications that result.
- 36.6 Explain the GEMS diamond and its role in the assessment and care of the geriatric patient.
- 36.7 Explain special considerations when performing the patient assessment process on a geriatric patient with a medical condition.
- 36.8 Define polypharmacy and the toxicity issues that can result.
- 36.9 Discuss the effect of aging on psychiatric emergencies.
- 36.10 Explain special considerations when performing the patient assessment process on a geriatric patient with a traumatic injury.
- 36.11 Discuss the effects of aging on environmental emergencies.
- 36.12 Explain special considerations when responding to calls to nursing and skilled care facilities.
- 36.13 Define an advance directive and explain its use with older patients.
- 36.14 Describe the prevalence of elder abuse and neglect; include why the extent of elder abuse is not well known.
- 36.15 Explain the assessment and care of a geriatric patient who has potentially been abused or neglected.
- 36.16 Recognize acts of commission or omission by a caregiver that result in harm, potential harm, or threat of harm to a geriatric patient.

Course Standard 37

LPSCS-EMT-37

Applies a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. The students will understand the special needs of patients with developmental, sensory, and physical disabilities. They will understand the unique anatomy and physiology of and assessment and treatment needed for these patients. The special care considerations for patients who rely on medical technological assistance are discussed as are considerations for the management of obese patients.

- 37.1 Give examples of patients with special challenges EMTs may encounter during a medical emergency.
- 37.2 Explain the special patient care considerations required when providing emergency medical care to patients with intellectual disabilities, including patients with autism spectrum disorder (ASD), Down syndrome, or prior brain injuries.
- 37.3 Describe the different types of visual impairments and the special patient care considerations required when providing emergency medical care for visually impaired patients, depending on the level of their disability.
- 37.4 Describe the various types of hearing impairments and the special patient care considerations required when providing emergency medical care for hard-of-hearing patients, including tips on effective communication.
- 37.5 Describe the various types of hearing aids worn by patients; include strategies to troubleshoot a hearing aid that is not working.

- 37.6 Explain the special patient care considerations required when providing emergency medical care to patients who have cerebral palsy, spina bifida, or paralysis.
- 37.7 Define obesity.
- 37.8 Explain the special patient care considerations required when providing emergency medical care to bariatric patients; include the best way to move bariatric patients.
- 37.9 Explain the special patient care considerations required when providing emergency medical care to patients who rely on a form of medical technological assistance, including the following:
 - Tracheostomy tube
 - Mechanical ventilator
 - Apnea monitor
 - Internal cardiac pacemaker
 - Left ventricular assist device (LVAD)
 - External defibrillator vest
 - Central venous catheter
 - Gastrostomy tube
 - Ventricular peritoneal shunt
 - Vagus nerve stimulator
 - Colostomy bag, ileostomy bag, or urostomy bag
- 37.10 Describe home care, the types of patients it serves, and the services it encompasses.
- 37.11 Contrast hospice and palliative care with curative care.
- 37.12 Explain the responsibilities of EMTs when responding to calls for terminally ill patients who have DNR orders.
- 37.13 Discuss the issues of poverty and homelessness in the United States, their negative effects on a person's health, and the role of the EMTs as patient advocates.
- 37.14 Demonstrate different strategies to communicate effectively with a patient who has a hearing impairment.

Course Standard 38

LPSCS-EMT-38

Knowledge of operational roles and responsibilities to ensure patient, public, and personnel safety. The student will be able to describe and apply effective preparation for transport, safe emergency vehicle operations, appropriate transport decisions, safe patient transfer techniques, and a responsible approach to patient care during transport. Students will be able to identify the nine phases of a call and describe the EMT's role in each phase. They will be able to discuss the differences between ground and air medical transport. Furthermore, students will understand the steps necessary to properly clean and disinfect the emergency vehicle and equipment following a call.

- 38.1 List the nine phases of an ambulance call; include examples of key tasks EMTs perform during each phase.
- 38.2 Name the medical equipment carried on an ambulance; include examples of supplies that are included in each main category of the ambulance equipment checklist.
- 38.3 Name the safety and operations equipment carried on an ambulance; include examples of how each item might be used by EMTs in an emergency.
- 38.4 Discuss the importance of performing regular vehicle inspections; include the specific parts of an ambulance that should be inspected daily.
- 38.5 List the minimum dispatch information required by EMS to respond to an emergency call.
- 38.6 Describe some high-risk situations and hazards during both pretransport and transport that may affect the safety of the ambulance and its passengers.
- 38.7 Discuss the specific considerations that are required to ensure scene safety; include personal safety, patient safety, and traffic control.
- 38.8 Describe the key elements that must be included in the written patient report upon patient delivery to the hospital.
- 38.9 Summarize the tasks EMTs must complete in the postrun phase.
- 38.10 Define the terms cleaning, disinfection, high-level disinfection, and sterilization.

- 38.11 Discuss the guidelines for safely and defensively driving an ambulance.
- 38.12 Identify key steps EMTs should take to improve safety while en route to the scene, the hospital, and the station.
- 38.13 List the three factors that dictate the use of lights and siren to the scene and to the hospital; include the risk-versus-benefit analysis regarding their use.
- 38.14 Describe the specific, limited privileges that are provided to emergency vehicle drivers by most state laws and regulations.
- 38.15 Explain the additional risks and special considerations posed by the use of police escorts, and the hazards and special considerations posed by crossing intersections.
- 38.16 Describe the capabilities, protocols, and methods for accessing air ambulances.
- 38.17 Describe key scene safety considerations when preparing for a helicopter medivac, including establishing a landing zone, securing loose objects, mitigating onsite hazards, and approaching the aircraft
- 38.18 Demonstrate how to perform a daily inspection of an ambulance.
- 38.19 Demonstrate how to present a verbal report that would be given to receiving personnel at the hospital upon patient transfer.
- 38.20 Demonstrate how to write a written report that includes all pertinent patient information following patient transfer to the hospital.
- 38.21 Demonstrate how to clean and disinfect the ambulance and equipment during the postrun phase.

Course Standard 39

LPSCS-EMT-39

Knowledge of operational roles and responsibilities to ensure patient, public, and personnel safety. The student will be able to describe and apply, in context, EMS rescue operations to include vehicle extrication and its 10 phases. Additionally, they will be able to describe various specialized components of EMS operations to include tactical EMS, trench rescue, high-angle rescue, and the EMT's role in these operations. The safety aspects of these operations and are also discussed.

- 39.1 Explain the responsibilities of an EMT in patient rescue and vehicle extrication.
- 39.2 Discuss how to ensure safety at the scene of a rescue incident, including scene size-up and the selection of the proper personal protective equipment and additional necessary gear.
- 39.3 Describe examples of vehicle safety components that may be hazardous to both EMTs and patients following a collision and how to mitigate their dangers.
- 39.4 Define the terms extrication and entrapment.
- 39.5 Describe the ten phases of vehicle extrication and the role of the EMT during each one.
- 39.6 Discuss the various factors related to ensuring situational safety at the site of a vehicle extrication, including controlling traffic flow, performing a 360-degree assessment, stabilizing the vehicle, dealing with unique hazards, and evaluating the need for additional resources.
- 39.7 Describe the special precautions the EMT should follow to protect the patient during a vehicle extrication.
- 39.8 Explain the different factors that must be considered before attempting to gain access to the patient during an incident that requires extrication.
- 39.9 Discuss patient care considerations related to assisting with rapid extrication, providing emergency care to a trapped patient, and removing and transferring a patient.
- 39.10 Explain the difference between simple access and complex access in vehicle extrication.
- 39.11 Describe examples of situations that would require special technical rescue teams and the EMT's role in these situations.

Course Standard 40

LPSCS-EMT-40

Knowledge of operational roles and responsibilities to ensure patient, public, and personnel safety. The student will be able to describe and apply, in context, the National Incident Management System (NIMS) to include describing command and general staff roles. Additionally, they will be able to describe various specialized components of establishing incident command and its

inherent responsibilities. This chapter also describes the importance of using the incident command system (ICS) in HazMat incidents and setting up EMS branch operations. Control zones, personal protective equipment, and triage methods are also discussed.

- 40.1 Describe the purpose of the National Incident Management System (NIMS) and its major components.
- 40.2 Describe the purpose of the incident command system (ICS) and its organizational structure.
- 40.3 Explain the role of EMS response within the ICS.
- 40.4 Describe how the ICS assists EMS in ensuring both personal safety and the safety of bystanders, health care professionals, and patients during an emergency.
- 40.5 Describe the role of the EMT in establishing command under the ICS.
- 40.6 Describe the purpose of the medical branch of the ICS and its organizational structure.
- 40.7 Describe the specific conditions that would define a situation as a mass-casualty incident (MCI); include examples.
- 40.8 Describe what occurs during primary and secondary triage, how the four triage categories are assigned to patients on the scene, and how destination decisions regarding triaged patients are made.
- 40.9 Explain how to perform the START and JumpSTART triage methods.
- 40.10 Contrast a disaster with a mass-casualty incident.
- 40.11 Describe the role of EMTs during a disaster operation.
- 40.12 Recognize the entry-level training or experience requirements identified by the HAZWOPER regulation for EMTs to respond to a HazMat incident.
- 40.13 Define hazardous material; include the classification system used by the NFPA.
- 40.14 Discuss the specific reference materials that EMTs use to recognize a HazMat incident.
- 40.15 Explain the role of EMTs during a HazMat incident both before and after the HazMat team arrives; include the precautions required to ensure the safety of civilians and responders.
- 40.16 Describe how the three control zones are established at a HazMat incident and discuss the characteristics of each zone, and the responders who work within each one.
- 40.17 Describe the four levels of personal protective equipment (PPE) required at a HazMat incident to protect responders from injury by or contamination from a particular substance.
- 40.18 Explain patient care at a HazMat incident; include the special requirements that are necessary for those patients who require immediate treatment and transport prior to full decontamination.
- 40.19 Demonstrate how to perform triage based on a fictional scenario that involves a mass-casualty incident.
- 40.20 Using a reference, correctly identify DOT labels, placards, and markings that are used to designate hazardous materials.
- 40.21 Demonstrate the ability to use a variety of reference materials to identify a hazardous material.

Course Standard 41

LPSCS-EMT-41

Knowledge of operational roles and responsibilities to ensure patient, public, and personnel safety. The student will be able to describe what constitutes terrorism and the EMT's response to terrorism, and they will be able to apply this knowledge. Additionally, the student will demonstrate an understanding of weapons of mass destruction (WMD) agents and countermeasures, as well as a fundamental knowledge of disaster management safety.

- 41.1 Define international terrorism and domestic terrorism; include examples of incidents that have been caused by each one.
- 41.2 Name four different types of goals that commonly motivate terrorist groups to carry out terrorist attacks
- 41.3 Define weapon of mass destruction (WMD) and weapon of mass casualty (WMC); include examples of weapons considered WMDs.
- 41.4 Explain how the Department of Homeland Security (DHS) National Terrorism Advisory System (NTAS) relates to the actions and precautions EMTs must take while performing their daily activities.

- 41.5 Name the key observations EMTs must make on every call to determine the potential of a terrorist attack.
- 41.6 Explain the critical response actions related to establishing and reassessing scene safety, personnel protection, notification procedures, and establishing command EMTs must perform at a suspected terrorist event.
- 41.7 Discuss the history of chemical agents, their four main classifications, routes of exposure, effects on the patient, and patient care.
- 41.8 List three categories of biologic agents, their routes of exposure, effects on the patient, and patient care.
- 41.9 Explain the role of EMS in relation to syndromic surveillance and points of distribution (PODS) during a biologic event.
- 41.10 Discuss the history of nuclear/radiologic devices, sources of radiologic materials and dispersal devices, medical management of patients, and protective measures EMTs must take during a nuclear/radiologic incident.
- 41.11 Describe the mechanisms of injury caused by incendiary and explosive devices; include the types and severity of wounds.
- 41.12 Demonstrate the steps EMTs can take to establish and reassess scene safety based on a scenario of a terrorist event.
- 41.13 Demonstrate the steps EMTs can take for the management of a patient exposed to a chemical agent.
- 41.14 Demonstrate the use of the Duo Dote Auto-Injector and/or the Antidote Treatment Nerve Agent Auto-Injector.

Course Standard 42

LPSCS-EMT-42

The student will understand the significance and characteristics of a team approach to health care and the impact of this approach on positive patient outcomes. Students will also be able to list and describe the steps an EMT should follow to assist with ALS skills, including placement of advanced airways and vascular access.

- 42.1 Define continuum of care.
- 42.2 List the five essential elements of a group.
- 42.3 Explain the advantages of a team over a group; include the advantages of regularly training and practicing together.
- 42.4 List the five essential elements of a team.
- 42.5 Explain how crew resource management (CRM) can be useful in the prehospital environment.
- 42.6 List the five critical elements necessary to ensure effective transfer of patient care from one provider to another.
- 42.7 List the five steps a receiving health care provider should perform when taking a patient care report (PCR).
- 42.8 Describe the four-step process of assisting with advanced life support (ALS) skills.
- 42.9 Discuss the importance of preoxygenation when performing endotracheal (ET) intubation.
- 42.10 Describe the six steps of the BE MAGIC intubation procedure.
- 42.11 Describe the signs that indicate a complication with an intubated patient.
- 42.12 Explain the importance of ensuring patient comfort during a vascular access procedure.
- 42.13 Describe the steps EMTs can take to troubleshoot interpersonal conflicts.

Course Standard 43

LPSCS-EMT-43

Prepare for the NREMT Evaluation.

This section is to give an overview of the entire course and allow the students to apply the knowledge of patient assessment and management in various scenarios. In preparation of the NREMT Evaluation, Practical and Written.

- 43.1 Display appropriate sensitivity for patients during assessment and management in various scenarios.
- 43.2 Demonstrate the knowledge of patient assessment and management in various scenarios.
- 43.3 Demonstrate performing an assessment to identify life threats, identify injuries requiring immobilization and conditions requiring treatment within the scope of practice of the EMT; including foreign substance in the eyes and nerve agent poisoning.
- 43.4 Demonstrate the communication necessary to obtain and clearly transmit information with an awareness of cultural differences.
- 43.5 Demonstrate performing safely and effectively all airway and breathing psychomotor skills within the National EMS Scope of Practice model and state scope of practice at the EMT level including basic airway maneuvers (including head-tilt, chin-lift; jaw thrust; modified chin lift; foreign body airway obstruction (FBAO) relief manual); oropharyngeal airway; Sellick's maneuver; positive pressure ventilation devices, such as bag valve mask (BVM); suction of the upper airway; and supplemental oxygen therapy (including nasal cannula and non-rebreather mask).
- 43.6 Demonstrate performing safely and effectively all assessment psychomotor skills within the National EMS Scope of Practice model and state scope of practice at the EMT level, including manually taking blood pressure checks.
- 43.7 Demonstrate performing safely and effectively all pharmacologic interventions psychomotor skills within the National EMS Scope of Practice model and state scope of practice at the EMT level including the following: unit-dose auto-injectors (lifesaving medications intended for self or peer rescue in hazardous materials situation and nerve agent antidote kit).
- 43.8 Demonstrate performing safely and effectively all medical/cardiac care psychomotor skills within the National EMS Scope of Practice Model and state scope of practice at the EMT level including the following: manual CPR; AED; and the assisted normal delivery of a newborn.
- 43.9 Demonstrate performing safely and effectively all trauma care psychomotor skills within the National EMS scope of practice model and state scope of Practice at the EMT level including the following: manual stabilization (c-spine injuries and extremity fractures); bleeding control; emergency moves; and eye irrigation.
- 43.10 Demonstrate professional behavior including, but not limited to integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time management, teamwork/diplomacy, respect, patient advocacy, and careful delivery of service.
- 43.11 Demonstrate the initiation of simple interventions based on assessment findings intended to mitigate the emergency and provide limited symptom relief while providing access to definitive care
- 43.12 Demonstrate recording assessment findings and interventions.
- 43.13 Demonstrate performing a patient assessment and providing pre-hospital emergency care for the following patient complaints: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, apnea, back pain, behavioral emergency, bleeding, cardiac arrest chest pain, cyanosis, dyspnea, eye pain, GI bleeding, hypotension, multiple trauma, pain, paralysis, poisoning, shock, and stridor/drooling.
- 43.14 Demonstrate management of the scene until care is transferred to an EMS team member licensed at a higher level.
- 43.15 Demonstrate how to ensure the safety of the rescuer and others during an emergency.

Course Standard 44

LPSCS-EMT-44

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 6.1 Research the history of the state supported healthcare science CTSO (Career Technical Student Organization).
- 6.2 Discuss the mission, purpose, motto, colors, official dress and other distinguishing characteristic of the state supported healthcare science CTSO.
- 6.3 Explain how participation in the state supported healthcare science CTSO can promote lifelong responsibility for community service and professional growth and development.
- 6.4 Create a personal leadership plan to participate in programs, conferences, community service and competitive events on the local, region, state, and national level that align with the competencies, skills and knowledge of this course.