

EMT

PARAMEDIC

New Educational Standards Modules Numbering System and Minimum Objectives

Module I Preparatory - Applies fundamental knowledge of the EMS system, safety/well-being of the RESCUER, and medical/legal and ethical issues to the provisions of emergency care. Includes EMT materials plus the following:

Lesson 1-1 EMS Systems: At the completion of this lesson student will have a simple depth, foundational breadth of EMS systems, history of EMS, roles / responsibilities / professionalism of EMS personnel, quality improvement and patient safety.

Cognitive Learning Objectives

The students will be able to:

- 1-1.1 Define Emergency Medical Services (EMS) systems.
- 1-1.2 Discuss the historical background of the development of the EMS system.
- 1-1.3 Identify the four levels of national EMS providers (EMR, EMT, AEMT and Paramedic) as well as the three levels in the State of Florida.
- 1-1.4 State the specific statutes and regulations regarding the EMS system in Florida.
- 1-1.5 Discuss the roles and responsibilities of the RESCUER related to:
 - a. personal safety of the crew, patients and bystanders.
 - b. operate emergency vehicles, provide scene leadership and perform patient assessment and administer emergency care.
 - c. vehicle & equipment readiness
 - d. maintenance of certification & licensure for the EMT or Paramedic in the State of Florida and National Registry.
- 1-1.6 Define quality improvement and discuss the RESCUER's role in the process.

New Educational Standards Modules Numbering System and Minimum Objectives

Module I Preparatory- Integrates comprehensive knowledge of EMS Systems, the safety and well-being of the rescuer, and medical legal and ethical issues, which is intended to improve the health of EMS personnel, patients, and the community. Includes AEMT material plus the following:

Lesson 1-1 EMS Systems: At the completion of this lesson the student will have a fundamental depth and foundational breadth of the History of EMS and a complex depth and comprehensive breadth of EMS Systems, roles / responsibilities, / professionalism of EMS personnel, Quality improvement and patient safety.

Cognitive Learning Objectives

The student will be able to:

- 1-1.1 Define Emergency Medical Services (EMS) systems.
- 1-1.2 Discuss the historical background of the development of the EMS system.
- 1-1.3 Identify the four levels of national EMS providers (EMR, EMT, AEMT, and Paramedic) as well as the three levels in the State of Florida.
- 1-1.4 State the specific statutes and regulations regarding the EMS system in Florida.
- 1-1.5 Discuss the roles and responsibilities of the RESCUER related to:
 - a. personal safety of the crew, patients and bystanders.
 - b. operate emergency vehicles, provide scene leadership and perform patient assessment and administer emergency care.
 - c. vehicle & equipment readiness
 - d. maintenance of certification & licensure for the EMT or Paramedic in the State of Florida and National Registry
- 1-1.6 Define quality improvement and discuss the rescuer's role in the process.

<p>1-1.7 Discuss Chapter 401, Florida Statutes, and Chapter 64-J (or most current), Florida Administrative Code</p>	<p>1-1.7 Discuss Chapter 401, Florida Statutes, and Chapter 64-J (or most current), Florida Administrative Code</p> <p>1-1.8 Define terms, including but not limited to: EMS systems, licensure, registration, profession, professionalism, health care professional, ethics, peer review, medical direction and protocols.</p> <p>1-1.9 List the key developments in the history of EMS</p> <p>1-1.10 Discuss the diverse types of EMS services and how they affect the delivery of advanced pre-hospital care</p> <p>1-1.11 Describe the attributes of a rescuer as a health care professional.</p> <p>1-1.12 Explain rescuer licensure/ certification, recertification, and reciprocity requirements in his or her state.</p> <p>1-1.13 Evaluate the importance of maintaining one's rescuer license/ certification.</p> <p>1-1.14 Describe the benefits of rescuer continuing education.</p> <p>1-1.15 Discuss the role of national associations and of a national registry agency.</p> <p>1-1.16 Discuss the roles of various EMS standard setting agencies.</p> <p>1-1.17 Identify the required components and system elements of an EMS system.</p> <p>1-1.18 Describe examples of professional behaviors in the following areas: integrity, empathy, self-motivation, appearance and personal hygiene, self-confidence, communications, time management, teamwork and diplomacy, respect, patient advocacy, and careful delivery of service.</p> <p>1-1.19 Describe the importance of quality EMS research to the future of EMS.</p> <p>1-1.20 List the primary and additional responsibilities of rescuers.</p> <p>1-1.21 Describe the role of the Medical Director in providing medical direction.</p> <p>1-1.22 Describe the benefits of medical direction, both on-line and off-line, to include examples.</p>
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Affective Objectives

The student will be able to:

- 1-1.8 Serve as a role model for others relative to professionalism in EMS.
- 1-1.9 Value the need to serve as the patient advocate inclusive of those with special needs, alternate life styles and cultural diversity.
- 1-1.10 Defend the importance of continuing medical education and skills retention.
- 1-1.11 Assess personal attitudes and demeanor that may distract from professionalism.
- 1-1.12 Exhibit professional behaviors in the following areas: integrity, empathy, self-motivation, appearance and personal hygiene, self confidence, communications, time management, teamwork and diplomacy, respect, patient advocacy, and careful delivery of service.

- 1-1.23 Discuss pre-hospital and out-of-hospital care as an extension of the physician.
- 1-1.24 Describe the relationship between a physician on the scene, the rescuer on the scene, and the EMS physician providing on-line medical direction.
- 1-1.25 Define the role of the rescuer relative to the safety of the crew, the patient, and bystanders.
- 1-1.26 Advocate the need for injury prevention, including abusive situations.
- 1-1.27 Exhibit professional behaviors in the following areas: integrity, empathy, self-motivation, appearance and personal hygiene, self-confidence, communications, time management, teamwork and diplomacy, respect, patient advocacy, and careful delivery of service.
- 1-1.28 Discuss the purpose of the EMS continuous quality improvement (CQI) process.
- 1-1.29 Discuss examples of how medical errors can be prevented when providing EMS care.

Affective Objectives:

The student will be able to:

- 1-1.30 Serve as a role model for others relative to professionalism in EMS.
- 1-1.31 Value the need to serve as the patient advocate inclusive of those with special needs, alternate life styles and cultural diversity.
- 1-1.32 Defend the importance of continuing medical education and skills retention.
- 1-1.33 Assess personal attitudes and demeanor that may distract from professionalism.
- 1-1.34 Exhibit professional behaviors in the following areas: integrity, empathy, self-motivation, appearance and personal hygiene, self confidence, communications, time management, teamwork and diplomacy, respect, patient advocacy, and careful delivery of service.

Psychomotor Objectives

None

Lesson 1-2 Research : At the completion of this lesson the student will have simple depth, simple breadth of evidence-based decision making.

Cognitive Objectives

The student will be able to:

- 1-2.1 Discuss EMS research & evidence based decision making
 - a. Conduct scientific literature searches
 - b. Read, interpret and extract information from journal articles relevant to a project
 - c. Interpret results, reach conclusions, and generate new ideas based on results

Affective Objectives

The student will be able to:

- 1-2.2 Value the importance to assess and treat patients based on evidence based decision making.

Psychomotor Objectives:

None

Lesson 1-2 Research: at the completion of this lesson the rescuer student will have a fundamental depth, foundational breath of research principles to interpret literature and advocate evidence-based practice.

Cognitive Objectives

The student will be able to:

- 1-2.1 Discuss EMS research & evidence based decision making
 - a. Conduct scientific literature searches
 - b. Read, interpret and extract information from journal articles relevant to a project
 - c. Interpret results, reach conclusions, and generate new ideas based on results
- 1-2.2 Discuss the importance of medical research and its role in refining EMS practices.
- 1-2.3 Define peer-reviewed literature and describe how this relates to a practicing rescuer.
- 1-2.4 List and define types of research and subtypes within each category.
- 1-2.5 Discuss ethical considerations relating to conducting medical Research
- 1-2.6 Discuss evidenced based medicine and how to incorporate this concept into everyday rescuer practice.

Affective Objectives

The student will be able to:

- 1-2.7 Value the importance to assess and treat patients based on evidence based decision making.
- 1-2.8 Advocate the need for supporting and participating in research

efforts aimed at improving EMS systems.

Psychomotor Objectives

None

Lesson 1-3 Workforce Safety and Wellness At the completion of this lesson the student will have a fundamental depth, foundational breadth of standards safety precautions, personal protective equipment, stress management, prevention of work related injuries, lifting and moving patients, disease transmission and wellness principles.

Cognitive Objectives

The student will be able to:

- 1.3.1 Explain the need to determine scene safety
- 1-3.2 Discuss the importance of “Standard Precautions” (BSI)
- 1.3.3 Describe the steps the RESCUER should take for personal protection from airborne and blood borne pathogens as well as communicable diseases
- 1-3.4 List the personal protective equipment necessary to protect oneself in common emergency situations
- 1-3.5 List the possible emotional reactions that an individual (rescuer and rescuer’s family, patient and patient family) may experience when faced with trauma, illness, death and dying
- 1-3.6 State the steps the RESCUER should take when approaching a family confronted with death and dying
- 1-3.7 Recognize the warning signs of personal stress and discuss the strategies rescuers can apply to manage it.
- 1-3.8 Identify good body mechanics while using a stretcher and other patient moving devices.
- 1-3.9 Discuss the guidelines and safety precautions that need to be followed when lifting a patient.

Psychomotor Objectives

None

Lesson 1-3 Workforce Safety and Wellness: At the completion of this lesson the student will have a complex depth, comprehensive breadth of provider safety and wellbeing, standard safety precautions, personal protective equipment, stress management, prevention of work related injuries, lifting and moving patients, disease transmission and wellness principles.

Cognitive Objectives

The student will be able to:

- 1.3.1 Explain the need to determine scene safety
- 1-3.2 Discuss the importance of “Standard Precautions” (BSI)
- 1.3.3 Describe the steps the RESCUER should take for personal protection from airborne and blood borne pathogens as well as communicable diseases
- 1-3.4 List the personal protective equipment necessary to protect oneself in common emergency situations
- 1-3.5 List the possible emotional reactions that an individual rescuer and rescuer’s family, patient and patient family) may experience when faced with trauma, illness, death and dying
- 1-3.6 State the steps the RESCUER should take when approaching a family confronted with death and dying
- 1-3.7 Recognize the warning signs of personal stress and discuss the strategies rescuers can apply to manage it.
- 1-3.8 Identify good body mechanics while using a stretcher and other patient moving devices.
- 1-3.9 Discuss the guidelines and safety precautions that need to be followed when lifting a patient.

1-3.10 Describe the guidelines and safety precautions for carrying patients and/or equipment	1-3.10 Describe the guidelines and safety precautions for carrying patients and/or equipment
1-3.11 State the guidelines for reaching and their application	1-3.11 State the guidelines for reaching and their application
1-3.12 State the guidelines for pushing and pulling	1-3.12 State the guidelines for pushing and pulling
1-3.12 Discuss patient positioning in common emergency situations	1-3.12 Discuss patient positioning in common emergency situations
1-3.13 Discuss situations that may require the use of medical restraints on the patient & explain guidelines and safety considerations for their use.	1-3.13 Discuss situations that may require the use of medical restraints on the patient & explain guidelines and safety considerations for their use.
1-3.14 Define “infectious disease” and “communicable disease”	1-3.14 Define “infectious disease” and “communicable disease”
1-3.15 Describe the routes of transmission for infectious disease	1-3.15 Describe the routes of transmission for infectious disease
1-3.16 Explain the mode of transmission and the steps to prevent/deal with an exposure of hepatitis, meningitis, tuberculosis & HIV	1-3.16 Explain the mode of transmission and the steps to prevent/deal with an exposure of hepatitis, meningitis, tuberculosis & HIV
1-3.17 Explain how immunity to infectious disease is acquired	1-3.17 Explain how immunity to infectious disease is acquired
1-3.18 Explain post exposure management of exposure to patient blood or body fluids, including completing a post exposure report.	1-3.18 Explain post exposure management of exposure to patient blood or body fluids, including completing a post exposure report.
1-3.19 Describe the components of physical fitness & mental wellbeing	1-3.19 Describe the components of physical fitness & mental wellbeing
	1-3.20 Discuss the concept of wellness and its benefits.
	1-3.21 Discuss how cardiovascular endurance, muscle strength, and flexibility contribute to physical fitness.
	1-3.22 Discuss the impact of shift work on circadian rhythms.
	1-3.23 Differentiate proper from improper body mechanics for lifting and moving patients in emergency and non-emergency situations.
	1-3.24 Describe the problems that a rescuer might encounter in a hostile situation and the techniques used to manage the situation.
	1-3.25 Describe the equipment available for self-protection when confronted with a variety of adverse situations.
	1-3.26 Recognize the physiological, physical, and psychological responses to stress and discuss the strategies rescuers can apply to manage it.

- 1-3.27 Describe the components of critical incident stress management (CISM).
- 1-3.28 List the possible emotional reactions that individuals of all age groups (rescuer, patient, and patient's family) may experience when faced with trauma, illness, death, and dying.
- 1-3.29 Discuss the importance of standard precautions and body substance isolation practices.
- 1-3.30 Advocate and practice the use of personal safety precautions in all scene situations

Affective Objectives

The student will be able to:

- 1-3.31 Explain the rationale for serving as an advocate for the use of appropriate protective equipment.

Psychomotor Objectives

The student will be able to:

- 1-3.32 Demonstrate good body mechanics while using a stretcher and other patient moving devices.
- 1-3.33 Given a scenario with potential infectious exposure, use appropriate personal protective equipment and properly remove and discard the protective garments and then complete disinfection/cleaning and complete reporting/documentation.

Affective Objectives

The student will be able to:

- 1-3.20 Explain the rationale for serving as an advocate for the use of appropriate protective equipment.

Psychomotor Objectives

The student will be able to:

- 1-3.21 Demonstrate good body mechanics while using a stretcher and other patient moving devices.
- 1-3.22 Given a scenario with potential infectious exposure, use appropriate personal protective equipment and properly remove and discard the protective garments and then complete disinfection/cleaning and complete reporting/documentation

Lesson 1-4 Documentation : At the completion of this lesson the student will have a fundamental depth, foundational breadth of the principles of medical documentation and report writing.

Cognitive Objectives

The student will be able to:

- 1-4.1 Describe the use of written communication and documentation.
- 1-4.2 Explain the legal/medical implication of the patient care report.
- 1-4.3 Identify the minimum dataset reference patient information and administrative information on the patient care report.
- 1-4.4 Understand how to document refusal of care, including legal implications.
- 1-4.5 Discuss the implications of the Health Insurance Portability and Accountability Act of 1996.

Affective Objectives

The student will be able to:

- 1-4.6 Explain the rationale for patient care documentation.
- 1-4.7 Explain the rationale for the EMS system gathering data.
- 1-4.8 Explain the rationale for using medical terminology correctly.
- 1-4.9 Explain the rationale for using an accurate and synchronous clock so that information can be used in trending.
- 1-4.10 Describe the special considerations concerning mass casualty incident documentation.
- 1-4.11 Advocate among peers the relevance and importance of properly completed documentation

Lesson 1-4 Documentation : At the completion of this lesson the student will have a complex depth, comprehensive breadth of the principles of medical documentation and report writing.

Cognitive Objectives

The student will be able to:

- 1-4.1 Describe the appropriate methods of medical documentation.
- 1-4.2 Explain the legal/medical implications of medical documentation.
- 1-4.3 Identify the minimum dataset reference, patient information, and administrative information on the patient care report
- 1-4.4 Understand how to document refusal of care, including the legal implications.
- 1-4.5 Discuss the implications of the Health Insurance Portability and Accountability Act of 1996.

Affective Objectives

The student will be able to:

- 1-4.6 Explain the rationale for patient care documentation
- 1-4.7 Explain the rationale for the EMS system gathering data.
- 1-4.8 Explain the rationale for using medical terminology correctly
- 1-4.9 Explain the rationale for using an accurate and synchronous clock so that information can be used in trending
- 1-4.10 Describe the special considerations concerning mass casualty incident documentation.
- 1-4.11 Advocate among peers the relevance and importance of properly completed documentation

Psychomotor Objectives

The student will be able to:

- 1-4.12 Demonstrate completion of a patient care report for a medical and patient.

Lesson 1-5 EMS System Communication- At the completion of this lesson, the student will have a simple depth, simple breadth of the EMS communication system, communication with other health care professionals, and team communication and dynamics.

Cognitive Objectives

The student will be able to:

- 1-5.1 Understand the basic principles of the various types of communications equipment used in EMS
- 1-5.2 Describe the use of radio communication and correct radio procedures, including the proper methods of initiating and terminating the radio call/transmission
- 1-5.3 State the proper procedures and sequence for delivery of patient information to other healthcare professionals.
- 1-5.4 Identify the essential components of the verbal report and legal aspects that needs to be considered.

Psychomotor Objectives

The student will be able to:

- 1-4.12 Demonstrate completion of a patient care report for a medical and trauma patient.

Lesson 1-5 EMS Communication- At the completion of this lesson, the student will have a complex depth, comprehensive breadth of EMS communication system, communication with other health care professionals, and team communication and dynamics.

Cognitive Objectives

The student will be able to:

- 1-5.1 Understand the basic principles of the various types of communications equipment used in EMS
- 1-5.2 Describe the use of radio communication and correct radio procedures, including the proper methods of initiating and terminating the radio call/transmission
- 1-5.3 State the proper procedures and sequence for delivery of patient information to other healthcare professionals.
- 1-5.4 Identify the essential components of the verbal report and legal aspects that need to be considered.
- 1-5.5 Identify the role of verbal, written, and electronic communications in EMS.
- 1-5.6 Describe the phases of communications necessary to complete a typical EMS event.
- 1-5.7 Identify the importance of proper terminology when communicating during an EMS event.
- 1-5.8 List the internal and external factors that affect verbal and written communication.

- 1-5.9 identify the components of an EMS communications system and describe their function and use.
- 1-5.10 Identify and differentiate among the following communications systems: simplex, multiplex, duplex, trunked, digital communications, and cellular telephone.
- 1-5.11 Describe the functions and responsibilities of the Federal Communications Commission.
- 1-5.12 Describe how an Emergency Medical Dispatcher (EMD) functions as an integral part of the EMS team.
- 1-5.13 State the proper procedures and sequence for delivery of patient information to other healthcare professionals.
- 1-5.14 Analyze the elements of communication using a sender-receiver model.

Affective Objectives

The student will be able to:

- 1-5.15 Explain the rationale for providing efficient and effective radio communications and patient reports.

Psychomotor Objectives

The student will be able to:

- 1-5.16 Perform a simulated, organized, concise radio transmission.
- 1-5.17 Perform an organized, concise patient report that would be given to the staff at a receiving facility.
- 1-5.18 Perform a brief, organized report that would be given to an ALS provider arriving at an incident scene at which the RESCUER was already providing care.

Affective Objectives

The student will be able to:

- 1-5.5 Explain the rationale for providing efficient and effective radio communications and patient reports.

Psychomotor Objectives

The student will be able to:

- 1-5.6 Perform a simulated, organized, concise radio transmission.
- 1-5.7 Perform an organized, concise patient report that would be given to the staff at a receiving facility.
- 1-5.8 Perform a brief, organized report that would be given to an ALS provider arriving at an incident scene at which the RESCUER was already providing care.

Lesson 1-6 Therapeutic Communication At the completion of this lesson, the student will be able to have a simple depth and simple breadth of the principles of communicating with patients in a manner that achieves a positive relationship by adjusting communication strategies for age, stage of development, patients with special needs and differing cultures. The student will also have a fundamental depth and foundational breadth of interviewing techniques, verbal defusing strategies and family presence issues.

Cognitive Objectives

The student will be able to:

- 1-6.1 Describe principles of therapeutic and effective communication with patients in a manner that achieves a positive relationship.
- 1-6.2 Discuss adjusting communications strategies to effectively communicate to differing age groups, developmental stages, patients with special needs, difficult patients, and differing cultures, including language barriers.
- 1-6.3 Summarize the methods to assess mental status based on interview techniques.
- 1-6.4 Discuss the strategies for interviewing a patient who is unmotivated to talk.
- 1-6.5 Distinguish between verbal and non-verbal cues
- 1-6.6 Discuss the communication techniques that should be used to interact with the patient, patient family, bystanders, and individuals from other agencies, including verbal diffusion and interview techniques.
- 1-6.7 Respond to verbal and non-verbal cues.
- 1-6.8 Analyze elements of communication using a sender-receiver model.

Affective Objectives

The student will be able to:

- 1-6.9 Value the importance of using effective therapeutic

Lesson 1-6 Therapeutic Communication - At the completion of this lesson the student will be able to have a complex depth and comprehensive breadth of the principles of communicating with patients in a manner that achieves a positive relationship; as well as factors that affect communication, interviewing techniques, dealing with difficult patients and adjusting communication strategies for age, stage of development, patients with special needs and differing cultures.

Cognitive Objectives

The student will be able to:

- 1-6.1 Describe principles of therapeutic and effective communication with patients in a manner that achieves a positive relationship.
- 1-6.2 Discuss adjusting communications strategies to effectively communicate to differing age groups, developmental stages, patients with special needs, difficult patients, and differing cultures, including language barriers.
- 1-6.3 Summarize the methods to assess mental status based on interview techniques.
- 1-6.4 Discuss the strategies for interviewing a patient who is unmotivated to talk.
- 1-6.5 Distinguish between verbal and non-verbal cues
- 1-6.6 Discuss the communication techniques that should be used to interact with the patient, patient family, bystanders, and individuals from other agencies, including verbal diffusion and interview techniques.
- 1-6.7 Respond to verbal and non-verbal cues.
- 1-6.8 Analyze elements of communication using a sender-receiver model.

Affective Objectives

The student will be able to:

- 1-6.9 Value the importance of using effective therapeutic

communications with patients.

- 1-6.10 Serve as a model for an effective communication process.
- 1-6.11 Exhibit professional non-verbal behaviors.
- 1-6.12 Advocate development of proper patient rapport.
- 1-6.13 Exhibit professional behaviors in communicating with patients in special situations.
- 1-6.14 Exhibit professional behaviors in communication with patient from different cultures.

Psychomotor Objectives

The student will be able to:

- 1-6.15 Perform an effective and therapeutic interview with a patient during simulation.

Lesson 1-7 Medical/Legal and Ethics At the end of this lesson the student will have a fundamental depth, foundational breadth of consent / refusal of care, confidentiality, advanced directives, tort and criminal actions, evidence preservation, statutory responsibilities, mandatory reporting and ethical principles / moral obligations.

Cognitive Learning Objectives

The student will be able to:

- 1-7.1 Differentiate between expressed, informed, implied and involuntary consent
- 1-7.2 Differentiate between licensure and certification as they apply to the rescuer.
- 1-7.3 Discuss the methods of obtaining consent and procedures for minors.

communications with patients.

- 1-6.10 Serve as a model for an effective communication process.
- 1-6.11 Exhibit professional non-verbal behaviors.
- 1-6.12 Advocate development of proper patient rapport.
- 1-6.13 Exhibit professional behaviors in communicating with patients in special situations.
- 1-6.14 Exhibit professional behaviors in communication with patient from different cultures.

Psychomotor Objectives

The student will be able to:

- 1-6.15 Perform an effective and therapeutic interview with a patient during simulation

Lesson 1-7 Medical/Legal and Ethics- At the completion of this lesson, the student will have a complex depth, comprehensive breadth of consent/refusal of care, confidentiality, advanced directives, tort and criminal actions, statutory responsibilities, mandatory reporting, health care regulations, patient rights / advocacy, end of life issues, ethical principles / moral obligations, ethical tests and decision making.

Cognitive Objectives

The student will be able to:

- 1-7.1 Differentiate between expressed, informed, implied and involuntary consent
- 1-7.2 Differentiate between licensure and certification as they apply to the rescuer.
- 1-7.3 Discuss the methods of obtaining consent and procedures for minors.

1-7.4	Define terms, including but not limited to, the following: abandonment, battery, breach of duty, consent (expressed, implied, informed, voluntary), DNR orders, duty to act, emancipated minor, false imprisonment, liability, libel, negligence, proximate cause, scope of practice, slander, and tort.	1-7.4	Define terms, including but not limited to, the following: abandonment, battery, breach of duty, consent (expressed, implied, informed, voluntary), DNR orders, duty to act, emancipated minor, false imprisonment, liability, libel, negligence, proximate cause, scope of practice, slander, and tort.
1-7.5	Discuss the implications for the rescuer in patient refusal of care and/or transport.	1-7.5	Discuss the implications for the rescuer in patient refusal of care and/or transport.
1-7.6	Explain the importance, necessity and legality of patient confidentiality.	1-7.6	Explain the importance, necessity and legality of patient confidentiality.
1-7.7	Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or Florida provisions regarding EMS application.	1-7.7	Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or Florida provisions regarding EMS application.
1-7.8	Discuss State of Florida & Federal special reporting situations such as abuse, sexual assault, gunshots & knife wounds, communicable disease, etc.	1-7.8	Discuss State of Florida & Federal special reporting situations such as abuse, sexual assault, gunshots & knife wounds, communicable disease, etc.
1-7.9	Differentiate between civil tort & criminal actions	1-7.9	Differentiate between civil tort & criminal actions
1-7.10	List the elements of negligence and defenses/protections from liability.	1-7.10	List the elements of negligence and defenses/protections from liability.
1-7.11	Discuss the role of the rescuer at crime scenes and preservation of evidence.	1-7.11	Discuss the role of the rescuer at crime scenes and preservation of evidence.
1-7.12	Define ethics & morality and discuss their implication for the rescuer.	1-7.12	Define ethics & morality and discuss their implication for the rescuer.
1-7.13	Discuss Florida legislation such as the Baker Act, Marchman Act, and the Emergency Examination and Treatment of Incapacitated Persons Act.	1-7.13	Discuss Florida legislation such as the Baker Act, Marchman Act, and the Emergency Examination and Treatment of Incapacitated Persons Act.
1-7.14	Differentiate between the scope of practice and the standard of care for rescuer practice.	1-7.14	Differentiate between the scope of practice and the standard of care for rescuer practice.
1-7.15	Discuss the legal concept of immunity, including Good Samaritan statutes and governmental immunity, as it applies to the rescuer.	1-7.15	Discuss the legal concept of immunity, including Good Samaritan statutes and governmental immunity, as it applies to the rescuer.
1-7.16	Describe the appropriate patient management and care techniques in a refusal of care situation.	1-7.16	Describe the appropriate patient management and care techniques in a refusal of care situation.
1-7.17	Identify the premise that should underlie the rescuer's ethical decisions in out-of hospital care.	1-7.17	Identify the premise that should underlie the rescuer's ethical decisions in out-of hospital care.

<p>1-7.18 Analyze the relationship between the law and ethics in EMS.</p> <p>1-7.19 Describe the criteria necessary to honor an advance directive in our state.</p> <p>Affective Objectives</p> <p>The student will be able to:</p> <p>1-7.20 Explain the role of EMS and the RESCUER regarding patients with DNR orders.</p> <p>1-7.21 Explain the rationale for the needs, benefits and usage of advance directives.</p> <p>1-7.22 Explain the rationale for the concept of varying degrees of DNR.</p> <p><u>Psychomotor Objectives</u></p> <p>None</p>	<p>1-7.18 Analyze the relationship between the law and ethics in EMS.</p> <p>1-7.19 Describe the criteria necessary to honor an advance directive in our state.</p> <p><u>Affective Objectives</u></p> <p>The student will be able to:</p> <p>1-7.20 Explain the role of EMS and the RESCUER regarding patients with DNR orders.</p> <p>1-7.21 Explain the rationale for the needs, benefits and usage of advance directives.</p> <p>1-7.22 Explain the rationale for the concept of varying degrees of DNR</p> <p><u>Psychomotor Objectives</u></p> <p>None</p>
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<p>Module II Anatomy and Physiology- Applies fundamental knowledge of the anatomy and function of all human systems to the practice of EMS. Includes EMR plus the following</p> <p>Lesson 2-1 Human Anatomy and Physiology. Applies fundamental knowledge of the anatomy and function of all human systems to the practice of EMS.</p> <p><u>Cognitive Objectives</u></p> <p>The student will be able to:</p> <p>2-1.1 Define anatomy, physiology, pathophysiology, homeostasis</p> <p>2-1.2 Identify body parts and areas</p> <p>2-1.3 Identify planes and sections of the body</p> <p>2-1.3 Identify abdominal quadrants and regions</p>	<p>Module II Anatomy and Physiology- Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems. Includes AEMT plus the following</p> <p>Lesson 2-1 Anatomy and Physiology- Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems.</p> <p><u>Cognitive Objectives</u></p> <p>The student will be able to:</p> <p>2-1.1 Define anatomy, physiology, pathophysiology, homeostasis</p> <p>2-1.2 Identify body parts and areas</p> <p>2-1.3 Identify planes and sections of the body</p> <p>2-1.3 Identify abdominal quadrants and regions</p>
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2-1.4	Describe the anatomical position and body cavities	2-1.4	Describe the anatomical position and body cavities
2-1.5	Define the organization levels of the body; atomic and chemical	2-1.5	Define the organization levels of the body; atomic and chemical
2-1.6	Explain cellular anatomy and physiology	2-1.6	Explain cellular anatomy and physiology
2-1.7	Explain cellular respiration	2-1.7	Explain cellular respiration
2-1.8	Describe the cellular environment	2-1.8	Describe the cellular environment
2-1.9	Explain cellular transport mechanisms	2-1.9	Explain cellular transport mechanisms
2-1.10	Describe cell division	2-1.10	Describe cell division
2-1.11	Describe epithelial tissue, connective tissue, muscle tissue, neural tissue and membranes	2-1.11	Describe epithelial tissue, connective tissue, muscle tissue, neural tissue and membranes
2-1.12	Define the functions of the skeletal system	2-1.12	Define the functions of the skeletal system
2-1.13	Explain the classification of bones	2-1.13	Explain the classification of bones
2-1.14	Describe embryonic skeleton maturation	2-1.14	Describe embryonic skeleton maturation
2-1.15	Explain bone growth and maintenance	2-1.15	Explain bone growth and maintenance
2-1.16	Identify the major divisions of the skeleton	2-1.16	Identify the major divisions of the skeleton
2-1.17	Name and identify the location of the bones of the skull, vertebra column, rib cage, shoulder and upper extremity, and pelvis and lower extremity	2-1.17	Name and identify the location of the bones of the skull, vertebra column, rib cage, shoulder and upper extremity, and pelvis and lower extremity
2-1.18	Describe the classification and types of joints	2-1.18	Describe the classification and types of joints
2-1.19	Explain the gross and microscopic anatomy of the muscular System	2-1.19	Explain the gross and microscopic anatomy of the muscular System
2-1.20	Describe the action of muscles	2-1.20	Describe the action of muscles
2-1.21	Describe the contraction of a skeletal muscle fiber	2-1.21	Describe the contraction of a skeletal muscle fiber
2-1.22	Identify major muscles of the body	2-1.22	Identify major muscles of the body
2-1.23	Describe the general function of the respiratory system	2-1.23	Describe the general function of the respiratory system
2-1.24	Describe the structure and function of the nasal cavity, pharynx,	2-1.24	Describe the structure and function of the nasal cavity, pharynx,

	larynx, trachea, bronchial tree, lungs, and alveoli		larynx, trachea, bronchial tree, lungs, and alveoli
2-1.25	Discuss the mechanisms of breathing including mechanical Ventilation	2-1.25	Discuss the mechanisms of breathing including mechanical Ventilation
2-1.26	Explain the diffusion of gases in external and internal respiration	2-1.26	Explain the diffusion of gases in external and internal respiration
2-1.27	Discuss pulmonary volumes	2-1.27	Discuss pulmonary volumes
2-1.28	Explain physiological dead space and lung compliance	2-1.28	Explain physiological dead space and lung compliance
2-1.29	Describe oxygen and carbon dioxide transport in the blood	2-1.29	Describe oxygen and carbon dioxide transport in the blood
2-1.30	Describe nervous and chemical mechanisms that regulate Respirations	2-1.30	Describe nervous and chemical mechanisms that regulate Respirations
2-1.31	Discuss respiration and acid-base balance	2-1.31	Discuss respiration and acid-base balance
2-1.32	Describe the composition and function of blood and plasma	2-1.32	Describe the composition and function of blood and plasma
2-1.33	Describe the location and features of the heart including; chambers, valves, cardiac cycle, heart sounds, coronary arteries, major blood vessels, conduction, cardiac output, and nervous system regulation of heart function	2-1.33	Describe the location and features of the heart including; chambers, valves, cardiac cycle, heart sounds, coronary arteries, major blood vessels, conduction, cardiac output, and nervous system regulation of heart function
2-1.34	Discuss blood vessels and circulation	2-1.34	Discuss blood vessels and circulation
2-1.35	Discuss the hemodynamics of blood pressure	2-1.35	Discuss the hemodynamics of blood pressure
2-1.36	Describe the basic components of the nervous system	2-1.36	Describe the basic components of the nervous system
2-1.37	Discuss the anatomy and function of the central and peripheral nervous systems	2-1.37	Discuss the anatomy and function of the central and peripheral nervous systems
2-1.38	Discuss sensory function including general and special senses	2-1.38	Discuss sensory function including general and special senses
2-1.39	Describe the components and function of the eye	2-1.39	Describe the components and function of the eye
2-1.40	Describe the components and function of the ear	2-1.40	Describe the components and function of the ear
2-1.41	Describe the structures and functions of the integumentary system	2-1.41	Describe the structures and functions of the integumentary system
2-1.42	Describe the functions and major divisions of the digestive system	2-1.42	Describe the functions and major divisions of the digestive system
2-1.43	Describe the structures and functions of the endocrine system including glands and hormones	2-1.43	Describe the structures and functions of the endocrine system including glands and hormones

2-1.44	Describe the structures and functions of the renal system	2-1.44	Describe the structures and functions of the renal system
2-1.45	Describe the structures and functions of the male and female reproductive systems	2-1.45	Describe the structures and functions of the male and female reproductive systems
2-1.46	Identify the major components and functions of the lymphatic System	2-1.46	Identify the major components and functions of the lymphatic System
2-1.47	Discuss the role of nutrition, metabolism and body temperature on body function	2-1.47	Discuss the role of nutrition, metabolism and body temperature on body function
2-1.48	Describe methods in which heat is generated and lost in the body	2-1.48	Describe methods in which heat is generated and lost in the body
2-1.49	Describe the causes, advantages and disadvantages of a fever	2-1.49	Describe the causes, advantages and disadvantages of a fever
2-1.50	Discuss the hypothalamus functions as the thermostat in the body	2-1.50	Discuss the hypothalamus functions as the thermostat in the body
2-1.51	Discuss cellular respiration and cellular function	2-1.51	Discuss cellular respiration and cellular function
2-1.52	Discuss the functions of vitamins, minerals and other important nutrients on the body	2-1.52	Discuss the functions of vitamins, minerals and other important nutrients on the body
<u>Affective Objectives</u>		<u>Affective Objectives</u>	
None		None	
<u>Psychomotor Objectives</u>		<u>Psychomotor Objectives</u>	
None		None	

<p>Module III Medical Terminology- Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals. Includes EMR plus the following</p> <p>Lesson 3-1 Medical Terminology Applies fundamental knowledge in the use of medical terminology and medical terms.</p>	<p>Module III Medical Terminology- Integrates comprehensive anatomical and medical terminology and abbreviations into written and oral communication with colleagues and other health care professionals. Includes AEMT plus the following</p> <p>Lesson 3-1 Medical Terminology -Integrates comprehensive anatomical and medical terminology and abbreviations into written and oral communication with colleagues and other health care professionals.</p>
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<p><u>Cognitive Objectives</u></p> <p>The student will be able to:</p> <p>3-1.1 Identify medical terminology word parts such as root words, prefixes, suffixes, and combining forms.</p> <p>3-1.2 Correctly utilize medical terminology describing body structures, functions, conditions and disorders, body regions, cavities, areas, and landmarks.</p> <p>3-1.3 Correctly use medical abbreviations and symbols as they relate to body systems</p> <p>3-1.4 Read and understand basic medical documentation in medical records and medical reports</p> <p>3-1.5 Communicate with healthcare professionals utilizing basic medical terminology.</p> <p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>None</p>	<p><u>Cognitive Objectives</u></p> <p>The student will be able to:</p> <p>3-1.1 Identify medical terminology word parts such as root words, prefixes, suffixes, and combining forms.</p> <p>3-1.2 Correctly utilize medical terminology describing body structures, functions, conditions and disorders, body regions, cavities, areas, and landmarks.</p> <p>3-1.3 Correctly use medical abbreviations and symbols as they relate to body systems.</p> <p>3-1.4 Read and understand basic medical documentation in medical records and medical reports.</p> <p>3-1.5 Communicate with healthcare professionals utilizing basic medical terminology.</p> <p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>None</p>
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<p>Module IV Pathophysiology- Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management. Includes EMR plus the following.</p> <p>Lesson 4-1 Pathophysiology Apply a fundamental knowledge of the causes, pathophysiology and management of shock and the components of resuscitation.</p> <p><u>Cognitive Objectives</u></p> <p>The student will be able to:</p> <p>4-4.1 Discuss withholding resuscitation if irreversible death is obvious or if a</p>	<p>Module IV Pathophysiology- Integrates comprehensive knowledge of pathophysiology of major human systems. Includes AEMT plus the following</p> <p>Lesson 4-1 Pathophysiology - At the completion of this lesson the student will be able to integrate comprehensive knowledge of pathophysiology of major systems.</p> <p><u>Cognitive Objectives</u></p> <p>The student will be able to:</p> <p>4-4.1 Discuss withholding resuscitation if irreversible death is obvious or</p>
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<p>“Do Not Resuscitate” (DNR) is present.</p> <p>4-4.2 Review the anatomy & physiology of the respiratory & cardiovascular systems.</p> <p>4-4.3 Discuss, identify pathophysiologies & medical care for respiratory failure as well as respiratory and cardiac arrest.</p> <p>4-4.4 Explain the system components of CPR, the four links in the AHA chain of survival & how each one relates to maximizing the survival of the patient.</p> <p>4-4.5 Understand shock, including the pathophysiology, causes, and its signs and symptoms associated with the various types of shock.</p> <p>4-4.6 Discuss patient assessment and steps to the emergency care of the patient with signs & symptoms of shock.</p> <p>4-4.7 Discuss and distinguish the variations & causes between the emergency medical care of the infant, child, adult and geriatric patient experiencing shock.</p>	<p>if a “Do Not Resuscitate” (DNR) is present.</p> <p>4-4.2 Review the anatomy & physiology of the respiratory & cardiovascular systems.</p> <p>4-4.3 Discuss, identify pathophysiologies & medical care for respiratory failure as well as respiratory and cardiac arrest.</p> <p>4-4.4 Explain the system components of CPR, the four links in the AHA chain of survival & how each one relates to maximizing the survival of the patient.</p> <p>4-4.5 Understand shock, including the pathophysiology, causes, and its signs and symptoms associated with the various types of shock.</p> <p>4-4.6 Discuss patient assessment and steps to the emergency care of the patient with signs & symptoms of shock.</p> <p>4-4.7 Discuss and distinguish the variations & causes between the emergency medical care of the infant, child, adult and geriatric patient experiencing shock.</p> <p>4-1.8 Discuss the correlation of pathophysiology with disease processes.</p> <p>4-1.9 Identify the Major classes of cells.</p> <p>4-1.10 Describe the chief cellular functions.</p> <p>4-1.11 Discuss the cellular structure, function and components.</p> <p>4-1.12 Define the types of tissues.</p> <p>4-1.13 Describe alterations in cells and tissues including cellular adaptation, cellular injury, manifestation of cellular injury and cellular death/necrosis.</p> <p>4-1.14 Discuss the cellular environment including distribution of body fluids, aging and distribution of body fluids, water movement between ICF and ECF, water movement between plasma and interstitial fluid, alterations in water movement - edema, water balance and the role of electrolytes, and acid-base balances.</p> <p>4-1.15 Describe genetics and familial diseases including factors causing disease, analyzing risk, combined effects and interaction among risk factors, and common familial disease and associated risk</p>
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<p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>None</p>	<p>factors.</p> <p>4-1.16 Define hypoperfusion and discuss pathogenesis, types of shock, multiple organ dysfunction syndrome, cellular metabolism impairment.</p> <p>4-1.17 Describe the self –defense mechanisms including the lines of defense, characteristics of the immune response, introduction of the immune response, humoral immune response, cell-mediated immune response, cellular interactions in the immune response, fetal and neonatal immune function and aging and the immune response in the elderly.</p> <p>4-1.18 Describe the inflammation process including the acute inflammatory response, mast cells plasma protein systems, cellular components of inflammation, cellular products, systemic response of acute inflammation, chronic inflammation responses, local inflammation responses, phases of resolution and repair, and aging and self defense mechanisms.</p> <p>4-1.19 Discuss variances in immunity and inflammation including hypersensitivity, allergy, autoimmunity and isoimmunity, and immunity and inflammation deficiencies.</p> <p>4-1.20 Discuss stress and disease including the concepts of stress, the stress responses, and stress, coping and illness interrelationships.</p> <p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>None</p>
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<p>Module V Life Span Development- Applies fundamental knowledge of life span development to patient assessment and management. Includes EMR plus the following.</p> <p>Lesson 5-1 Human Life Span Development Fundamentals. At the end of</p>	<p>Module V Life Span Development- Integrates comprehensive knowledge of life span development. Includes AEMT plus the following</p> <p>Lesson 5-1 Life Span Development – At the end of this lesson the student will integrate the physiological, psychological, and sociological changes</p>
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this lesson, the student will apply fundamental knowledge of life span development to patient assessment and management.

Cognitive Objectives

The student will be able to:

- 5-1.1 Understand the terms used to designate the following stages of life: infants, toddlers, preschoolers, school-age children, adolescents (teenagers), early adults, middle adults & late adults.
- 5-1.2 Compare the physiological and psychosocial characteristics of an infant with those of an early adult.
- 5-1.3 Compare the physiological and psychosocial characteristics of a toddler with those of an early adult.
- 5-1.4 Compare the physiological and psychosocial characteristics of a pre-school child with those of an early adult.
- 5-1.5 Compare the physiological and psychosocial characteristics of a school-aged child with those of an early adult.
- 5-1.6 Compare the physiological and psychosocial characteristics of an adolescent with those of an early adult.
- 5-1.7 Compare the physiological and psychosocial characteristics of a middle aged adult with those of an early adult.
- 5-1.8 Compare the physiological and psychosocial characteristics of an adult in late adulthood with those of a middle aged adult.

Affective Objectives

None

Psychomotor Objectives

None

throughout human development with assessment and communication strategies for patients of all ages.

Cognitive Objectives

The student will be able to:

- 5-1.1 Understand the terms used to designate the following stages of life: infants, toddlers, preschoolers, school-age children, adolescents (teenagers), early adults, middle adults & late adults.
- 5-1.2 Compare the physiological and psychosocial characteristics of an infant with those of an early adult.
- 5-1.3 Compare the physiological and psychosocial characteristics of a toddler with those of an early adult.
- 5-1.4 Compare the physiological and psychosocial characteristics of a pre-school child with those of an early adult.
- 5-1.5 Compare the physiological and psychosocial characteristics of a school-aged child with those of an early adult.
- 5-1.6 Compare the physiological and psychosocial characteristics of an adolescent with those of an early adult.
- 5-1.7 Compare the physiological and psychosocial characteristics of a middle aged adult with those of an early adult.
- 5-1.8 Compare the physiological and psychosocial characteristics of an adult in late adulthood with those of a middle aged adult.

Affective Objectives

None

Psychomotor Objectives

None

Module VI Public Health- Uses simple knowledge of the principles of illness and injury prevention in emergency care.

Lesson 6-1 Principles of Illness and Injury Care At the completion of this lesson, the student will be able to use simple knowledge of the principles of illness and injury prevention in emergency care.

Cognitive Learning Objectives

The student will be able to:

- 6-1.1 Define public health and explain the goal of the public health field.
- 6-1.2 Identify the EMS role within the public health field.
- 6-1.3 Recognize the three categories of public health laws.
- 6-1.4 Discuss basic concepts of epidemiology
- 6-1.5 Discuss ways of EMS involvement in injury prevention.
- 6-1.6 Identify areas of need for prevention programs in the community.

Affective Objectives

None

Psychomotor Objectives

None

Module VI Public Health - Applies fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.. –

Lesson 6-1 Public Health – At the completion of this lesson, the student will apply fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.

Cognitive Objectives

The rescuer student will be able to:

- 6-1.1 Define public health and explain the goal of the public health field.
- 6-1.2 Identify the EMS role within the public health field.
- 6-1.3 Recognize the three categories of public health laws.
- 6-1.4 Discuss basic concepts of epidemiology
- 6-1.5 Discuss ways of EMS involvement in injury prevention.
- 6-1.6 Identify areas of need for prevention programs in the community.

Affective Objectives

None

Psychomotor Objectives

None

Module VII Pharmacology – Applies fundamental knowledge of the medications that the EMT may assist/administer to a patient during an emergency. Includes EMR plus the following.

Lesson 7-1 Principles of Pharmacology At the completion of this lesson the

Module VII Pharmacology- Integrates comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient. Includes AEMT plus the following:

Lesson 7-1 Principles of Pharmacology- At the completion of this lesson, the student will have a complex depth, comprehensive breadth for the

student will have a simple depth, simple breadth for medication safety and kinds of medications used during an emergency.

Cognitive Objectives

The student will be able to:

- 7-1.1 Explain the “six rights” of medication administration and describe how each one related to EMS.
- 7-1.2 Discuss the forms in which the medications may be found and provide examples of each and discuss how the form of a medication dictates its route of administration.
- 7-1.3 Discuss the components and elements of a drug profile including, actions, contraindications, side effects, dose and route.
- 7-1.4 Describe the role of medical direction in medication administration and explain the difference between direct orders (online) and standing orders (off-line).

following: medication safety, medication legislation, naming, classifications, schedules, pharmacokinetics, storage and security, autonomic pharmacology, metabolism and excretion, mechanism of action, phases of medication activity, medication response relationships, medication interactions, and toxicity

Cognitive Objectives

The student will be able to:

- 7-1.1 Explain the “six rights” of medication administration and describe how each one related to EMS.
- 7-1.2 Discuss the forms in which the medications may be found and provide examples of each and discuss how the form of a medication dictates its route of administration.
- 7-1.3 Discuss the components and elements of a drug profile including, actions, contraindications, side effects, dose and route.
- 7-1.4 Describe the role of medical direction in medication administration and explain the difference between direct orders (online) and standing orders (off-line).
- 7-1.5 Differentiate among the chemical, generic (nonproprietary), and trade (proprietary) names of a drug.
- 7-1.6 List the four main sources of drug products.
- 7-1.7 Describe how drugs are classified.
- 7-1.8 List legislative acts controlling drug use and abuse in the United States.
- 7-1.9 Differentiate among Schedule I, II, III, IV, and V substances.
- 7-1.10 Use reference materials to research medications.
- 7-1.11 Discuss standardization of drugs.
- 7-1.12 Discuss investigational drugs, including the Food and Drug Administration (FDA) approval process and the FDA classifications for newly approved drugs.
- 7-1.13 Discuss the rescuer's responsibilities and scope of management pertinent to the storage, security, and accountability of medications.

- 7-1.14 List and describe general properties of drugs.
- 7-1.15 List and describe liquid and solid drug forms.
- 7-1.16 List and differentiate all methods and routes of medication administration covered in the current National EMS Scope of Practice Model.
- 7-1.17 Differentiate between enteral and parenteral routes of drug administration.
- 7-1.18 Describe mechanisms of drug action.
- 7-1.19 Describe the process called pharmacokinetics, pharmacodynamics, including theories of drug action, drug-response relationship, factors altering drug responses, predictable drug responses, iatrogenic drug responses, and unpredictable adverse drug responses.
- 7-1.20 Synthesize patient history information and assessment findings to form a field impression.
- 7-1.21 Describe specific medications used by rescuers in the prehospital setting.
- 7-1.22 Describe common unintended adverse effects of medication administration.
- 7-1.23 Discuss the prevention, recognition and management of adverse medication reactions.
- 7-1.24 Anticipate how various factors, such as age, body mass, and others, can alter drug responses.
- 7-1.25 Select the optimal medication and method of medication administration for patients with a particular clinical condition or situation.

Affective Objectives

None

Psychomotor Objectives

None

Affective Objectives

None

Psychomotor Objectives

None

Lesson 7-2 Medication Administration. At the completion of this lesson the student will have a fundamental depth and foundational breadth within the scope of practice of the EMT how to assist/administer medications to a patient.

Cognitive Objectives

The student will be able to:

- 7-2.1 Discuss the difference between administration versus assistance of medications
- 7-2.2 Understand the different techniques of medication administration by the following routes:
 - a. oral
 - b. sublingual
 - c. Inhalation
 - d. auto- injector

Lesson 7-2 Medication Administration - At the completion of this lesson the student will have a complex depth, comprehensive breadth of routes of administration within the scope of practice of the paramedic, administer medications to a patient.

Cognitive Objectives

The student will be able to:

- 7-2.1 Discuss the difference between administration versus assistance of medications.
- 7-2.2 Understand the different techniques of medication by the following routes:
 - a. oral
 - b. sublingual
 - c. inhalation
 - d. auto-injector
- 7-2.3 Review the specific anatomy and physiology pertinent to medication administration.
- 7-2.4 Review mathematical principles.
- 7-2.5 Discuss the rescuer's responsibilities and scope of management pertinent to the administration of medications.
- 7-2.6 Discuss mathematical equations as a basis for performing drug calculations.
- 7-2.7 Describe the use of universal precautions and body substance isolation (BSI) procedures when administering a medication.
- 7-2.8 Describe the role of medical direction in medication administration and describe the difference between direct orders (online) and standing orders (off-line).
- 7-2.9 Explain why determining what medications (prescribed / OTC) a patient is taking is a critical aspect of patient assessment.
- 7-2.10 Describe the indications, equipment needed, technique used, precautions, and general principles of peripheral venous or external jugular cannulation.

- 7-2.11 Describe the indications, equipment needed, technique used, precautions, and general principles of intraosseous needle placement and infusion.
- 7-2.12 Describe complications that can occur as a result of IV therapy.
- 7-2.13 Describe the equipment needed and general principles of administering oral medications.
- 7-2.14 Describe the indications, equipment needed, techniques used, precautions, and general principles of administering medications by the following routes:
 - a. inhalation route.
 - b. gastric tube
 - c. rectal route
- 7-2.15 Differentiate among the different percutaneous routes of medication administration.
- 7-2.16 Describe the purpose, equipment needed, techniques used, complications, and general principles for obtaining a blood sample.
- 7-2.17 Obtain venous and capillary blood for testing and discuss blood chemistry and normal values as referenced in the National EMS educational guidelines: Rescuer Instructional Guidelines.
- 7-2.18 Synthesize a pharmacologic management plan including medication administration.
- 7-2.19 Demonstrate to procedure for disposal of contaminated items and supplies.

Affective Objectives

The student will be able to:

- 7-2.20 Explain the rationale for the administration of medications.

Psychomotor Objectives

The student will be able to:

- 7-2.21 Demonstrate administration of medications by the following routes:
 - a. oral

Affective Objectives

The student will be able to:

- 7-2.3 Explain the rationale for the administration of medications.

Psychomotor Objectives

The student will be able to:

- 7-2.4 Demonstrate administration of medications by the following routes:
 - a. oral

- b. sublingual
- c. inhalation
- d. auto- injector

- b. sublingual
- c. inhalation
- d. auto- injector

- 7-2.22 Demonstrate cannulation of peripheral or external jugular veins.
- 7-2.23 Demonstrate intraosseous needle placement and infusion.
- 7-2.24 Demonstrate clean technique during medication administration.
- 7-2.25 Demonstrate administration of medications by intranasal route.
- 7-2.26 Demonstrate administration of medications by subcutaneous route.
- 7-2.27 Demonstrate administration of medications by intramuscular route.
- 7-2.28 Demonstrate administration of medications by intravenous route.
- 7-2.29 Demonstrate administration of medications by intraosseous route.

Lesson 7-3 Emergency Medications At the completion of this lesson the student will have a fundamental depth and simple breadth within the scope of practice of the EMT for medication names, actions, indications, contraindications, complications, routes of administration, side effects, interactions, and dosages for medications administered.

Lesson 7-3 Emergency Medications- At the completion of this lesson, the student will have a complex depth, comprehensive breadth within the scope of practice for the paramedic for medication names, actions, indications, contraindications, routes of administration, side effects, interactions, and dosages for medications administered.

Cognitive Objectives

The student will be able to:

- 7-3.1 Identify which medications will be carried on the unit.
- 7-3.2 State the medications carried on the unit by the generic name.
- 7-3.3 Give the generic and trade names, actions, indication, contraindications, routes of administration, side effects, interactions & doses of medications that may be administered by the rescuer in an emergency as dictated by the State of Florida & local medical direction.
- 7-3.4 Discuss the forms in which the medications may be found.

Cognitive Objectives

The student will be able to:

- 7-3.1 Identify which medications will be carried on the unit.
- 7-3.2 State the medications carried on the unit by the generic name.
- 7-3.3 Give the generic and trade names, actions, indication, contraindications, routes of administration, side effects, interactions & doses of medications that may be administered by the rescuer in an emergency as dictated by the State of Florida & local medical direction.
- 7-3.4 Discuss the forms in which the medications may be found.

- 7-3.5 Identify airway management medications used by the rescuer, including indications, contraindications, dosages, adverse reactions, side effects, and interactions.
- 7-3.6 Identify respiratory medications used by the rescuer, including indications, contraindications, dosages, adverse reactions, side effects, and interactions.
- 7-3.7 Identify cardiovascular system medications used by the rescuer, including indications, contraindications, dosages, adverse reactions, side effects, and interactions.
- 7-3.8 Identify medications for neurologic conditions used by the rescuer, including indications, contraindications, dosages, adverse reactions, side effects, and interactions.
- 7-3.9 Identify medications affecting the gastrointestinal that are used by the rescuer, including indications, contraindications, dosages, adverse reactions, side effects, and interactions.
- 7-3.10 Identify any miscellaneous medications used by the rescuer, including indications, contraindications, dosages, adverse reactions, side effects, and interactions.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 7-3.5 Demonstrate the steps in properly inspecting each type of medication.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 7-3.11 Demonstrate the steps in properly inspecting each type of medication.

Module VIII Airway Management, Respirations, and Artificial Ventilations

– Applies knowledge (fundamental depth, foundational breadth) of 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. Includes all EMR plus the following

Lesson 8-1 Airway Management At the completion of this lesson the student will have a foundational depth, foundational breadth within the scope of practice of the EMT of airway anatomy, airway assessment and techniques of assuring a patent airway.

Cognitive Objectives

The student will be able to:

- 8-1.1 Name & label the structures of the respiratory system.
- 8-1.2 State what care should be provided for a patient with or without adequate breathing.
- 8-1.3 Describe the steps for relief of FBAO in the infant, child and adult.
- 8-1.4 Describe the steps in performing the head-tilt chin-lift.
- 8-1.5 Relate mechanism of injury to opening the airway.
- 8-1.6 Describe the steps in performing the jaw thrust.
- 8-1.7 Describe the differences for airway opening in the infant, child and adult.
- 8-1.8 Describe the techniques of suctioning and its importance.
- 8-1.9 Describe the steps for insertion of an NPA and OPA airway adjunct
- 8-1.10 Explain the differences between adult and pediatric airway anatomy.
- 8-1.11 Define gag reflex.
- 8-1.12 Describe the use of an oral and nasal airway.
- 8-1.13 Describe indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient

Module VIII Airway Management, Respiration, and Artificial Ventilation-

Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages. Includes AEMT plus the following:

Lesson 8-1 Airway Management - At the completion of this lesson, the student will have a complex depth, comprehensive breadth within the scope of practice of the paramedic for airway anatomy, airway assessment, and techniques of assuring a patent airway.

Cognitive Objectives

The student will be able to:

- 8-1.1 Name & label the structures of the respiratory system.
- 8-1.2 State what care should be provided for a patient with or without adequate breathing.
- 8-1.3 Describe the steps for relief of FBAO in the infant, child and adult.
- 8-1.4 Describe the steps in performing the head-tilt chin-lift.
- 8-1.5 Relate mechanism of injury to opening the airway.
- 8-1.6 Describe the steps in performing the jaw thrust.
- 8-1.7 Describe the differences for airway opening in the infant, child and adult.
- 8-1.8 Describe the techniques of suctioning and its importance.
- 8-1.9 Describe the steps for insertion of an NPA and OPA airway adjunct
- 8-1.10 Explain the differences between adult and pediatric airway anatomy.
- 8-1.11 Define gag reflex.
- 8-1.12 Describe the use of an oral and nasal airway.
- 8-1.13 Describe indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a

<p>with an automatic transport ventilator (ATV).</p> <p>8-1.14 Describe the indications, contraindications, advantages, disadvantages, complications, liter flow range, and concentration of delivered oxygen for supplemental oxygen delivery devices.</p> <p>8-1.15 Define, identify and describe a tracheostomy, stoma, and tracheostomy tube.</p> <p>8-1.16 Describe the Sellick's (cricoid pressure) maneuver.</p> <p>8-1.17 Define, identify, and describe a laryngectomy.</p> <p>8-1.18 Describe the special considerations in airway management and ventilation for the pediatric patient.</p> <p><u>Affective Objectives</u></p> <p>None</p>	<p>patient with an automatic transport ventilator (ATV).</p> <p>8-1.14 Describe the indications, contraindications, advantages, disadvantages, complications, liter flow range, and concentration of delivered oxygen for supplemental oxygen delivery devices.</p> <p>8-1.15 Define, identify and describe a tracheostomy, stoma, and tracheostomy tube.</p> <p>8-1.16 Describe the Sellick's (cricoid pressure) maneuver.</p> <p>8-1.17 Define, identify, and describe a laryngectomy.</p> <p>8-1.18 Describe the special considerations in airway management and ventilation for the pediatric patient.</p> <p>8-1.19 Describe the indications, contraindications, advantages, disadvantages, complications and equipment for rapid sequence intubation with neuromuscular blockade.</p> <p>8-1.20 Identify neuromuscular blocking drugs and other agents used in rapid sequence intubation.</p> <p>8-1.21 Describe the indications, contraindications, advantages, disadvantages, complications and equipment for sedation during intubation.</p> <p>8-1.22 Describe the indications, contraindications, advantages, disadvantages and complications for performing an open cricothyrotomy.</p> <p>8-1.23 Describe methods of assessment for confirming correct placement of any airway device.</p> <p>8-1.24 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for extubation.</p> <p>8-1.25 Describe methods of endotracheal intubation in the pediatric patient.</p> <p><u>Affective Objectives</u></p> <p>None</p>
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Psychomotor Objectives

The student will be able to:

- 8-1.19 Demonstrate the steps in performing the head-tilt chin-lift in the infant, child and adult.
- 8-1.20 Demonstrate the steps in performing the jaw thrust in the infant, child and adult.
- 8-1.21 Demonstrate the techniques of suctioning in all age groups.
- 8-1.22 Demonstrate relief of FBAO in the infant, child and adult.
- 8-1.23 Demonstrate how to insert an oropharyngeal (oral) airway in all age groups.
- 8-1.24 Demonstrate how to insert a nasopharyngeal (nasal) airway in all age groups.
- 8-1.25 Demonstrate how to insert supra-glottic airways in all age groups.

Psychomotor Objectives

The student will be able to:

- 8-1.26 Demonstrate the steps in performing the head-tilt chin-lift in the infant, child and adult.
- 8-1.27 Demonstrate the steps in performing the jaw thrust in the infant, child and adult.
- 8-1.28 Demonstrate the techniques of suctioning in all age groups.
- 8-1.29 Demonstrate relief of FBAO in the infant, child and adult.
- 8-1.30 Demonstrate how to insert an oropharyngeal (oral) airway in all age groups.
- 8-1.31 Demonstrate how to insert a nasopharyngeal (nasal) airway in all age groups.
- 8-1.32 Demonstrate how to insert supra-glottic airways in all age groups.
- 8-1.33 Demonstrate adequate endotracheal, nasotracheal, subglottic, supraglottic, placement of airway devices in all age groups.
- 8-1.34 Demonstrate methods of assessment for confirming correct placement of any airway device.
- 8-1.35 Demonstrate the procedure for the following :
 - a. digital intubation
 - b. lighted stylet
 - c. fiber optic
- 8-1.36 Demonstrate the procedure for percutaneous cricothyrotomy.

Lesson 8-2 Respirations At the completion of this lesson the student will have a fundamental depth, foundational breadth of the anatomy of the respiratory system, physiology and pathophysiology of respiration including pulmonary ventilation, oxygenation, external, internal and cellular respiration, assessment and management of adequate and inadequate respiration and supplemental oxygen therapy.

Cognitive Objectives

The student will be able to:

- 8-2.1 Describe the pulmonary ventilation process to include mechanics of ventilation & alveolar ventilation (tidal volumes, dead space, etc.)
- 8-2.2 Describe the oxygenation process
- 8-2.3 Explain both external, internal and cellular respiration process
- 8-2.4 Discuss the various pathophysiologies of the respiratory system.
- 8-2.5 Describe how to assess for adequate and inadequate respiration, including the use of pulse oximetry.
- 8-2.6 List the components, purpose, indications, contraindications, complications and procedures for oxygen delivery devices.
- 8-2.7 Describe the steps in performing the skill of assisting ventilations in the conscious patient in respiratory distress using a bag-valve-mask (BVM), and continuous positive airway pressure (CPAP).
- 8-2.8 Describe the anatomy and physiology of the respiratory system including:
 - a. control of respirations
 - b. mechanics of respiration
- 8-2.9 Discuss the physiology of respiration including:
 - a. pulmonary ventilation
 - b. oxygenation
 - c. mechanical ventilation

Lesson 8-2 Respiration -At the completion of this lesson the student will have a complex depth, comprehensive breadth of the anatomy of the respiratory system, physiology and pathophysiology of respiration including pulmonary ventilation, oxygenation, external, internal and cellular respiration, assessment and management of adequate and inadequate respiration and supplemental oxygen therapy.

Cognitive Objectives

The student will be able to:

- 8-2.1 Describe the pulmonary ventilation process to include mechanics of ventilation & alveolar ventilation (tidal volumes, dead space, etc.)
- 8-2.2 Describe the oxygenation process
- 8-2.3 Explain both external, internal and cellular respiration process
- 8-2.4 Discuss the various pathophysiologies of the respiratory system.
- 8-2.5 Describe how to assess for adequate and inadequate respiration, including the use of pulse oximetry.
- 8-2.6 List the components, purpose, indications, contraindications, complications and procedures for oxygen delivery devices.
- 8-2.7 Describe the steps in performing the skill of assisting ventilations in the conscious patient in respiratory distress using a bag-valve-mask (BVM), and continuous positive airway pressure (CPAP).
- 8-2.8 Describe the anatomy and physiology of the respiratory system including:
 - a. control of respirations
 - b. mechanics of respiration
- 8-2.9 Discuss the physiology of respiration including:
 - a. pulmonary ventilation
 - b. oxygenation
 - c. mechanical ventilation
 - d. ventilation-perfusion mismatch

8-2.10 Discuss the management of adequate and inadequate respiration

8-2.11 Discuss gas exchange and gas transport

Affective Objectives

The student will be able to:

8-2.12 Explain the rationale for providing adequate oxygenation through high inspired oxygen concentrations to patients who, in the past, may have received low concentrations.

Psychomotor Objectives

The student will be able to:

8-2.13 Demonstrate the correct operation of oxygen tanks and regulators.

8-2.14 Demonstrate the use of a nonrebreather face mask and state the oxygen flow requirements needed for its use.

8-2.15 Demonstrate the use of a venturi face mask and state the oxygen flow requirements needed for its use.

8-2.16 Demonstrate the use of a oxygen humidifier and the requirements needed for its use.

8-2.17 Demonstrate the use of a nasal cannula and state the flow requirements needed for its use.

8-2.18 Demonstrate oxygen tank and regulator preparation for oxygen administration for all age groups

8-2.10 Discuss the management of adequate and inadequate respiration

8-2.11 Discuss gas exchange and gas transport

8-2.12 Discuss blood volume circulation disturbances

8-2.13 Describe the buffer system

8-2.14 Discuss blood volume circulation disturbances

Affective Objectives

The student will be able to:

8-2.15 Explain the rationale for providing adequate oxygenation through high inspired oxygen concentrations to patients who, in the past, may have received low concentrations.

Psychomotor Objectives

The student will be able to:

8-2.16 Demonstrate the correct operation of oxygen tanks and regulators.

8-2.17 Demonstrate the use of a nonrebreather face mask and state the oxygen flow requirements needed for its use.

8-2.18 Demonstrate the use of a venturi face mask and state the oxygen flow requirements needed for its use.

8-2.19 Demonstrate the use of a oxygen humidifier and the requirements needed for its use.

8-2.20 Demonstrate the use of a nasal cannula and state the flow requirements needed for its use.

8-2.21 Demonstrate oxygen tank and regulator preparation for oxygen administration for all age groups

8-2.22 Demonstrate the steps using a BVM and continuous positive airway

8-2.19 Demonstrate the steps using a BVM and continuous positive airway pressure (CPAP) in all age groups

Lesson 8-3 Artificial Ventilations At the completion of this lesson the student will have a fundamental depth, foundational breadth of assessment and management of adequate and inadequate ventilation including: artificial ventilations, minute ventilation, alveolar ventilation and effect of artificial ventilation on cardiac output.

Cognitive Objectives

The student will be able to:

- 8-3.1 Describe how to artificially ventilate a patient with a pocket mask.
- 8-3.2 Describe the steps in performing the skill of artificially ventilating a patient with a BVM for one or two rescuers.
- 8-3.3 Describe signs of adequate & inadequate artificial ventilation using the BVM.
- 8-3.4 Describe the steps in artificially ventilating a patient with a manually triggered ventilation device.
- 8-3.5 Describe how to perform the Sellick maneuver (cricoid pressure).
- 8-3.6 Recognize the differences between normal and positive pressure ventilation.
- 8-3.7 Describe the steps involved in performing a comprehensive assessment of ventilations in all age groups.
- 8-3.8 Describe the use of various devices used in ventilation assessment including:
 - a. pulse Oximetry
 - b. manual airway devices
 - c. mechanical airway devices
 - d. CPAP

pressure (CPAP) in all age groups

Lesson 8-3 Artificial Ventilation- At the completion of this lesson the student will have a complex breadth, comprehensive breadth of assessment and management of adequate and inadequate ventilation including: artificial ventilations, minute ventilation, alveolar ventilation and effect of artificial ventilation on cardiac output.

Cognitive Objectives

The student will be able to:

- 8-3.1 Describe how to artificially ventilate a patient with a pocket mask.
- 8-3.2 Describe the steps in performing the skill of artificially ventilating a patient with a BVM for one or two rescuers.
- 8-3.3 Describe signs of adequate & inadequate artificial ventilation using the BVM.
- 8-3.4 Describe the steps in artificially ventilating a patient with a manually triggered ventilation device.
- 8-3.5 Describe how to perform the Sellick maneuver (cricoid pressure).
- 8-3.6 Recognize the differences between normal and positive pressure ventilation.
- 8-3.7 Describe the steps involved in performing a comprehensive assessment of ventilations in all age groups.
- 8-3.8 Describe the use of various devices used in ventilation assessment including:
 - a. pulse Oximetry
 - b. wave form capnography
 - c. manual airway devices
 - d. mechanical airway devices
 - e. BiPAP/CPAP
 - f. PEEP

Affective Objectives

The student will be able to:

- 8-3.9 Explain the rationale for basic life support artificial ventilation and airway protective skills taking priority over most other basic life support skills.

Psychomotor Objectives

The student will be able to:

- 8-3.10 Demonstrate how to use a pocket mask to artificially ventilate a patient.
- 8-3.11 Demonstrate the assembly of a bag-valve-mask unit.
- 8-3.12 Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag valve-mask for one and two rescuers.
- 8-3.13 Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag valve-mask while using the jaw thrust.
- 8-3.14 Demonstrate artificial ventilation of a patient with a flow restricted, oxygen- powered ventilation device.
- 8-3.15 Demonstrate how to artificially ventilate a patient with a stoma.
- 8-3.16 Demonstrate how to artificially ventilate a patient across the life span.
- 8-3.17 Discuss how to perform the Sellick's maneuver (cricoid pressure).

Affective Objectives

The student will be able to:

- 8-3.9 Explain the rationale for basic life support artificial ventilation and airway protective skills taking priority over most other basic life support skills.

Psychomotor Objectives

The student will be able to:

- 8-3.10 Demonstrate how to use a pocket mask to artificially ventilate a patient.
- 8-3.11 Demonstrate the assembly of a bag-valve-mask unit.
- 8-3.12 Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag valve-mask for one and two rescuers.
- 8-3.13 Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag valve-mask while using the jaw thrust.
- 8-3.14 Demonstrate artificial ventilation of a patient with a flow restricted, oxygen- powered ventilation device.
- 8-3.15 Demonstrate how to artificially ventilate a patient with a stoma.
- 8-3.16 Demonstrate how to artificially ventilate a patient across the life span.
- 8-3.17 Discuss how to perform the Sellick's maneuver (cricoid pressure).
- 8-3.18 Perform and interpret wave form capnography and colorimetric devices in all age groups.
- 8-3.19 Perform pulse Oximetry in all age groups.
- 8-3.20 Perform ventilations using a PEEP devices in all age groups.

EMT

Module IX Patient Assessment – Applies scene information and patient assessment findings (scene size up, primary assessment, patient history, and reassessment) to guide emergency management. Includes EMR plus the following:

Lesson 9-1 Scene Size-Up At the end of this lesson the student will have a fundamental depth, foundational breadth of scene management and multiple patient situations.

Cognitive Objectives

The student will be able to:

- 9-1.1 Recognize and describe hazards/potential hazards at the scene.
- 9-1.2 Determine if the scene is safe to enter.
- 9-1.3 Discuss common mechanisms of injury/nature of illness.
- 9-1.4 Discuss the procedures for multiple-patient situations.
- 9-1.5 Explain why it is important for the rescuer to determine the need for additional or specialized resources.
- 9-1.6 List the minimum standard precautions that should be followed and PPE that should be worn at the emergency scene.
- 9-1.7 Determine special considerations for dealing with a violent scene.

Affective Objectives

The student will be able to:

- 9-1.8 Explain the rationale for crew members to evaluate scene safety prior to entering.
- 9-1.9 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness.

Paramedic

Module IX Patient Assessment - Integrates scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan. Includes AEMT plus the following:

Lesson 9-1 Scene Size-Up- At the end of this lesson, the student will have a complex depth, comprehensive breadth of scene management including: impact of the environment of patient care, addressing hazards, violence and multiple patient situations.

Cognitive Objectives

The student will be able to:

- 9-1.1 Recognize and describe hazards/potential hazards at the scene.
- 9-1.2 Determine if the scene is safe to enter.
- 9-1.3 Discuss common mechanisms of injury/nature of illness.
- 9-1.4 Discuss the procedures for multiple-patient situations.
- 9-1.5 Explain why it is important for the rescuer to determine the need for additional or specialized resources.
- 9-1.6 List the minimum standard precautions that should be followed and PPE that should be worn at the emergency scene.
- 9-1.7 Discuss special considerations for dealing with a violent scene.

Affective Objectives

The student will be able to:

- 9-1.8 Explain the rationale for crew members to evaluate scene safety prior to entering.
- 9-1.9 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness.

Psychomotor Objectives

The student will be able to:

- 9-1.10 Demonstrate the scene-size-up given various scenarios and identify potential hazards.

Lesson 9-2 Primary Assessment At the completion of this lesson the student will have a fundamental depth, simple breadth of the primary assessment for all patient situations including: initial general impression, level of consciousness, ABCs, identifying life threats, assessment of vital functions, and integration of treatment/procedures needed to preserve life.

Cognitive Objectives

The student will be able to:

- 9-2.1 Summarize the elements of a general impression of the patient.
- 9-2.2 Explain the reason for performing a primary assessment.
- 9-2.3 Describe methods for assessing disability using a brief neurological evaluation
- 9-2.4 Discuss methods of assessing altered mental status using assess for level of consciousness (AVPU).
- 9-2.5 Categorize levels of consciousness in the adult, infant and child.
- 9-2.6 Describe methods of assessing the airway in the non-traumatic and traumatic adult, child and infant patient.
- 9-2.7 Distinguish between methods of assessing breathing in the adult, child and infant patient.
- 9-2.8 Differentiate between a patient with adequate and inadequate breathing.
- 9-2.9 Compare the methods of providing airway care to the adult, child and infant patient.
- 9-2.10 Differentiate between locating and assessing a pulse in an adult,

Psychomotor Objectives

The student will be able to:

- 9-1.10 Demonstrate the scene-size-up given various scenarios and identify potential hazards.

Lesson 9-2 Primary Assessment At the completion of this lesson the student will have a complex depth, comprehensive breadth of the primary assessment for all patient situations including: initial general impression, level of consciousness, ABCs, identifying life threats, assessment of vital functions, and integration of treatment/procedures needed to preserve life.

Cognitive Objectives

The student will be able to:

- 9-2.1 Summarize the elements of a general impression of the patient.
- 9-2.2 Explain the reason for performing a primary assessment.
- 9-2.3 Describe methods for assessing disability using a brief neurological evaluation
- 9-2.4 Discuss methods of assessing altered mental status using assess for level of consciousness (AVPU).
- 9-2.5 Categorize levels of consciousness in the adult, infant and child.
- 9-2.6 Describe methods of assessing the airway in the non-traumatic and traumatic adult, child and infant patient.
- 9-2.7 Distinguish between methods of assessing breathing in the adult, child and infant patient.
- 9-2.8 Differentiate between a patient with adequate and inadequate breathing.
- 9-2.9 Compare the methods of providing airway care to the adult, child and infant patient.
- 9-2.10 Differentiate between locating and assessing a pulse in an adult,

child and infant patient.

- 9-2.11 Describe normal and abnormal findings when assessing skin color, temperature, moisture & capillary refill in adult, child & infant
- 9-2.12 Discuss the need for assessing the patient for external bleeding.
- 9-2.13 Describe when it is appropriate to expose the patient completely. Identifying life threats
- 9-2.14 Differentiate between critical life-threatening, potentially life-threatening, and non life-threatening patient presentations.

Affective Objectives

The student will be able to:

- 9-2.15 Explain the importance of forming a general impression of the patient.
- 9-2.16 Explain the value of performing a primary assessment.

Psychomotor Objectives

The student will be able to:

- 9-2.17 Demonstrate the techniques for assessing mental status.
- 9-2.18 Demonstrate the techniques for assessing the airway.
- 9-2.19 Demonstrate the techniques for assessing if the patient is breathing.
- 9-2.20 Demonstrate the techniques for assessing if the patient has a pulse.
- 9-2.21 Demonstrate the techniques for assessing the patient for external bleeding.
- 9-2.22 Demonstrate the techniques for assessing the patient's skin color, temperature, and condition.
- 9-2.23 Demonstrate Identifying life threats

child and infant patient.

- 9-2.11 Describe normal and abnormal findings when assessing skin color, temperature, moisture & capillary refill in adult, child & infant
- 9-2.12 Discuss the need for assessing the patient for external bleeding.
- 9-2.13 Describe when it is appropriate to expose the patient completely. Identifying life threats
- 9-2.14 Differentiate between critical life-threatening, potentially life-threatening, and non life-threatening patient presentations.

Affective Objectives

The student will be able to:

- 9-2.15 Explain the importance of forming a general impression of the patient.
- 9-2.16 Explain the value of performing a primary assessment.

Psychomotor Objectives

The student will be able to:

- 9-2.17 Demonstrate the techniques for assessing mental status.
- 9-2.18 Demonstrate the techniques for assessing the airway.
- 9-2.19 Demonstrate the techniques for assessing if the patient is breathing.
- 9-2.20 Demonstrate the techniques for assessing if the patient has a pulse.
- 9-2.21 Demonstrate the techniques for assessing the patient for external bleeding.
- 9-2.22 Demonstrate the techniques for assessing the patient's skin color, temperature, and condition.
- 9-2.23 Demonstrate Identifying life threats

9-2.24 Demonstrate the ability to prioritize patients.

Lesson 9-3 History-Taking At the end of this lesson the student will have a fundamental depth, foundational breadth of investigation of the chief complaint, mechanism of injury/nature of illness, past medical history, associated signs and symptoms and pertinent negatives.

Cognitive Objectives

The student will be able to:

- 9-3.1 Determine the chief complaint.
- 9-3.2 Investigate of the chief complaint.
- 9-3.3 Describe components of the patient history
- 9-3.4 Discuss the process of taking a history, its key components and its relationship to the primary assessment process.
- 9-3.5 Explain the importance of obtaining a SAMPLE & OPQRST history.
- 9-3.6 Recognize and respond to the feelings patients experience during assessment.
- 9-3.7 Describe the technique for obtaining past medical history. (AMPLE)
- 9-3.8 Discuss the value of obtaining a family and social history. Review the critical role of therapeutic communication in EMS.
- 9-3.9 Describe examples of different techniques the rescuer may use to obtain information from patients, family or bystanders during the history taking process.

9-2.24 Demonstrate the ability to prioritize patients.

Lesson 9-3 History Taking At the end of this lesson the student will have a complex depth, comprehensive breath of components of the patient history, interviewing techniques, how to integrate therapeutic communications techniques and adapt the line of inquiry based on findings and presentation.

Cognitive Objectives

The student will be able to:

- 9-3.1 Determine the chief complaint.
- 9-3.2 Investigate of the chief complaint.
- 9-3.3 Describe components of the patient history
- 9-3.4 Discuss the process of taking a history, its key components and its relationship to the primary assessment process.
- 9-3.5 Explain the importance of obtaining a SAMPLE & OPQRST history.
- 9-3.6 Recognize and respond to the feelings patients experience during assessment.
- 9-3.7 Describe the technique for obtaining past medical history. (AMPLE)
- 9-3.8 Discuss the value of obtaining a family and social history. Review the critical role of therapeutic communication in EMS.
- 9-3.9 Describe examples of different techniques the rescuer may use to obtain information from patients, family or bystanders during the history taking process.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 9-3.10 Demonstrate the technique for history-taking on patients of all age groups with:
 - a. a medical complaint
 - b. a trauma complaint

Lesson 9-4 Secondary Assessment At the end of this lesson the student will have a fundamental depth, foundational breadth of techniques of physical examination for the respiratory system including presence of breath sounds, the cardiovascular system, the neurological system, the musculoskeletal system and all anatomical regions.

Cognitive Objectives

The student will be able to:

- 9-4.1 Describe the unique needs assessing an individual with a specific chief complaint with no known prior history.
- 9-4.2 Discuss the components of the physical exam and skills involved.
- 9-4.3 Differentiate between the history and physical exam that are performed for responsive patients with no known prior history, responsive patients with a known prior history and unresponsive patients.
- 9-4.4 State the reasons for performing a rapid assessment.
- 9-4.5 Discuss the reason for performing a focused history and physical exam.
- 9-4.6 Appreciate the limitations of conducting a physical exam in the out-of-hospital environment.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 9-3.10 Demonstrate the technique for history-taking on patients of all age groups with:
 - a. a medical complaint
 - b. a trauma complaint

Lesson 9-4 Secondary Assessment – At the end of this lesson the student will have a complex depth, comprehensive breadth of techniques of physical examination for all major body systems and anatomical regions.

Cognitive Objectives

The student will be able to:

- 9-4.1 Describe the unique needs assessing an individual with a specific chief complaint with no known prior history.
- 9-4.2 Discuss the components of the physical exam and skills involved.
- 9-4.3 Differentiate between the history and physical exam that are performed for responsive patients with no known prior history, responsive patients with a known prior history and unresponsive patients.
- 9-4.4 State the reasons for performing a rapid assessment.
- 9-4.5 Discuss the reason for performing a focused history and physical exam.
- 9-4.6 Appreciate the limitations of conducting a physical exam in the out-of-hospital environment.
- 9-4.7 Discuss the components of the detailed physical exam in relation

9-4.7	Discuss the components of the detailed physical exam in relation to the techniques of examination.		to the techniques of examination.
9-4.8	Describe the techniques of inspection, palpation, percussion, and auscultation.	9-4.8	Describe the techniques of inspection, palpation, percussion, and auscultation.
9-4.9	Describe the evaluation of a detailed mental assessment.	9-4.9	Describe the evaluation of a detailed mental assessment.
9-4.10	Describe the evaluation of patient's perfusion status based on findings in the initial assessment.	9-4.10	Describe the evaluation of patient's perfusion status based on findings in the initial assessment.
9-4.11	Distinguish the importance of abnormal findings of the assessment of the skin.	9-4.11	Distinguish the importance of abnormal findings of the assessment of the skin.
9-4.12	Describe the importance of obtaining a baseline set of vital signs.	9-4.12	Describe the importance of obtaining a baseline set of vital signs.
9-4.13	Describe the examination of the head and neck.	9-4.13	Describe the examination of the head and neck.
9-4.14	Differentiate normal and abnormal assessment findings of the mouth and pharynx.	9-4.14	Differentiate normal and abnormal assessment findings of the mouth and pharynx.
9-4.15	Discuss when to perform an examination of the female genitalia.	9-4.15	Discuss when to perform an examination of the female genitalia.
9-4.16	Discuss when to perform an examination of the male genitalia.	9-4.16	Discuss when to perform an examination of the male genitalia.
9-4.17	Discuss when to perform an examination of the anus.	9-4.17	Discuss when to perform an examination of the anus.
<u>Affective Objectives</u>		<u>Affective Objectives</u>	
None		None	
<u>Psychomotor Objectives</u>		<u>Psychomotor Objectives</u>	
The student will be able to:		The student will be able to:	
9-4.18	Demonstrate how to assess a pulse, respiration, temperature.	9-4.18	Demonstrate how to assess a pulse, respiration, temperature.
9-4.19	Demonstrate the examination of the head.	9-4.19	Demonstrate the examination of the head.
9-4.20	Demonstrate the examination of skin, hair and nails.	9-4.20	Demonstrate the examination of skin, hair and nails.
9-4.21	Perform a detailed physical examination.	9-4.21	Perform a detailed physical examination.
9-4.22	Demonstrate the examination of the eyes. (PERRL)	9-4.22	Demonstrate the examination of the eyes. (PERRL)

9-4.23	Demonstrate the examination of the ears.	9-4.23	Demonstrate the examination of the ears.
9-4.24	Demonstrate the examination of the nose.	9-4.24	Demonstrate the examination of the nose.
9-4.25	Demonstrate the examination of the mouth and pharynx.	9-4.25	Demonstrate the examination of the mouth and pharynx.
9-4.26	Demonstrate the examination of the neck.	9-4.26	Demonstrate the examination of the neck.
9-4.27	Demonstrate the examination of the thorax and ventilation.	9-4.27	Demonstrate the examination of the thorax and ventilation.
9-4.28	Demonstrate the examination of the posterior chest.	9-4.28	Demonstrate the examination of the posterior chest.
9-4.29	Demonstrate auscultation of the chest.	9-4.29	Demonstrate auscultation of the chest.
9-4.30	Demonstrate percussion of the chest.	9-4.30	Demonstrate percussion of the chest.
9-4.31	Demonstrate special examination techniques of the cardiovascular examination.	9-4.31	Demonstrate special examination techniques of the cardiovascular examination.
9-4.32	Demonstrate the examination of the arterial pulse including locations, rate, rhythm, and amplitude.	9-4.32	Demonstrate the examination of the arterial pulse including locations, rate, rhythm, and amplitude.
9-4.33	Demonstrate the examination of the peripheral vascular system.	9-4.33	Demonstrate the examination of the peripheral vascular system.
9-4.34	Demonstrate the examination of the abdomen.	9-4.34	Demonstrate the examination of the abdomen.
9-4.35	Demonstrate auscultation of the abdomen.	9-4.35	Demonstrate auscultation of the abdomen.
9-4.36	Demonstrate the examination of the musculoskeletal system.	9-4.36	Demonstrate the examination of the musculoskeletal system.
9-4.37	Demonstrate the examination of the nervous system	9-4.37	Demonstrate the examination of the nervous system
9-4.38	Demonstrate a physical exam performed for a responsive patient with no known prior history.	9-4.38	Demonstrate a physical exam performed for a responsive patient with no known prior history.
9-4.39	Demonstrate a physical exam performed for a responsive patient with a known history.	9-4.39	Demonstrate a physical exam performed for a responsive patient with a known history.
9-4.40	Demonstrate a physical exam performed for an unresponsive patient.	9-4.40	Demonstrate a physical exam performed for an unresponsive patient.

Lesson 9-5 Monitoring Devices At the end of this lesson the student will have a simple depth, simple breath within the scope of practice of the EMT for obtaining and using information from patient monitoring devices including (but not limited to) pulse oximetry and non-invasive blood pressure.

Cognitive Objectives

The student will be able to:

- 9-5.1 Explain the use and interpretation of pulse oximetry device readings.
- 9-5.2 List normal blood pressure ranges for adults, children & infants.
- 9-5.3 Understand the findings of a blood pressure by palpation, auscultation and electronic devices while in the field.
- 9-5.4 Understand the findings during assessment of pupils.
- 9-5.5 Understand the findings during assessment of skin condition for various age groups.
- 9-5.6 Describe the purpose, indications, procedure, normal findings, and limitations of the following patient monitoring technologies.
 - a. Pulse Oximetry
 - b. Glucometry

Affective Objectives

The student will be able to:

- 9-5.7 Explain the value of performing the baseline vital signs.
- 9-5.8 Recognize and respond to the feelings patients

Lesson 9-5 Monitoring Devices – At the end of this lesson the student will have a fundamental depth, foundational breadth within the scope of practice of the paramedic for obtaining and using the information from patient monitoring devices including (but not limited to): continuous ECG monitoring, 12 lead ECG interpretation, carbon dioxide monitoring and basic blood chemistry.

Cognitive Objectives

The student will be able to:

- 9-5.1 Explain the use and interpretation of pulse oximetry device readings.
- 9-5.2 List normal blood pressure ranges for adults, children & infants.
- 9-5.3 Understand the findings of a blood pressure by palpation, auscultation and electronic devices while in the field.
- 9-5.4 Understand the findings during assessment of pupils.
- 9-5.5 Understand the findings during assessment of skin condition for various age groups.
- 9-5.6 Describe the purpose, indications, procedure, normal findings, and limitations of the following patient monitoring technologies.
 - a. Continuous ECG monitoring
 - b. 12-Lead ECG
 - c. Pulse oximetry
 - d. Capnography
 - e. CO-oximetry
 - f. Methaglobin monitoring
 - g. Total hemoglobin
 - h. Glucometry
 - i. Basic blood chemistry
 - j. Ultrasound

Affective Objective

The student will be able to:

- 9-5.7 Explain the value of performing the baseline vital signs.
- 9-5.8 Recognize and respond to the feelings patients experience during assessment.

experience during assessment.

9-5.9 Defend the need for obtaining and recording an accurate set of vital signs.

9-5.10 Explain the rationale of recording additional sets of vital signs.

Psychomotor Objectives

The student will be able to:

9-5.11 Demonstrate the skills associated with obtaining blood pressure by palpation, auscultation and electronic devices in all age groups.

9-5.12 Demonstrate the use and interpretation of pulse oximetry device readings.

9-5.13 Demonstrate then use of glucometry device.

Lesson 9-6 Reassessment At the end of this lesson the student will have a fundamental depth, foundational breadth of how and when to perform a reassessment for all patient situations.

Cognitive Objectives

The student will be able to:

9-6.1 Describe the components of the skills involved in the patient reassessment.

9-6.2 Discuss the reasons for repeating the primary assessment as part of the reassessment.

9-6.3 Explain trending assessment components and its value to other health professionals who assume care of the patient.

9-5.9 Defend the need for obtaining and recording an accurate set of vital signs.

9-5.10 Explain the rationale of recording additional sets of vital signs

Psychomotor Objectives

The student will be able to:

9-5.11 Demonstrate the skills associated with obtaining blood pressure by palpation, auscultation and electronic devices in all age groups.

9-5.12 Demonstrate the use and interpretation of pulse oximetry device readings.

9-5.13 Demonstrate the use of the following patient monitoring technologies.

a. Continuous ECG monitoring

b. 12-Lead ECG

c. Capnometry (colorimetric)

d. Capnography (wave form)

e. Glucometry

f. other devices identified at the AEMT level

Lesson 9-6 Reassessment- At the end of this lesson the student will have a complex depth, comprehensive breadth of how and when to perform a reassessment for all patient situations.

Cognitive Objectives

The student will be able to:

9-6.1 Describe the components of the skills involved in the patient reassessment.

9-6.2 Discuss the reasons for repeating the primary assessment as part of the reassessment.

9-6.3 Explain trending assessment components and its value to other health professionals who assume care of the patient.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

9-6.4 Demonstrate the steps for performing the reassessment of patients in various age groups.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

9-6.4 Demonstrate the steps for performing the reassessment of patients in various age groups.

Module X Medicine – Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient. Includes EMR plus the following.

Lesson 10-1 Medical Overview At the end of this lesson the student will have a simple depth, foundation breadth of pathophysiology, assessment and management of medical complaints to include: transportation mode and destination decisions.

Cognitive Objectives

The student will be able to:

- 10-1.1 Describe the evaluation of the “nature of illness”.
- 10-1.2 Discuss the importance of an evaluation of a patient with a medical emergency.
- 10-1.3 Identify the assessment factors for a patient with a medical complaint including:
 - a. scene safety
 - b. environmental factors
 - c. chief complaint
 - d. life threatening conditions

Module 10 Medicine- Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint. Includes all AEMT plus the following.

Lesson 10-1 Medical Overview- At the completion of this lesson the student will have a complex depth, comprehensive breadth of pathophysiology, assessment, and management of medical complaints to include: transport mode and destination decisions.

Cognitive Objectives

The student will be able to:

- 10-1.1 Describe the evaluation of the “nature of illness”.
- 10-1.2 Discuss the importance of an evaluation of a patient with a medical emergency.
- 10-1.3 Identify the assessment factors for a patient with a medical complaint including:
 - a. scene safety
 - b. environmental factors
 - c. chief complaint
 - d. life threatening conditions

- e. non-life threatening conditions
- f. distracting injuries
- g. tunnel vision
- h. patient cooperation
- i. rescuer attitude

10-1.2 Discuss the components of the primary assessment for a patient with a medical complaint.

10-1.2 Discuss the components of the secondary assessment for a patient with a medical complaint.

10-1.3 Discuss the components of the re-assessment for a patient with a medical complaint.

10-1.4 Discuss forming a field impression for a patient with a medical complaint.

10-1.5 Determine a field differential diagnosis based on available information.

Affective Objectives

None

Psychomotor Objectives

None

- e. non-life threatening conditions
- f. distracting injuries
- g. tunnel vision
- h. patient cooperation
- i. rescuer attitude

10-1.2 Discuss the components of the primary assessment for a patient with a medical complaint.

10-1.2 Discuss the components of the secondary assessment for a patient with a medical complaint.

10-1.3 Discuss the components of the re-assessment for a patient with a medical complaint.

10-1.4 Discuss forming a field impression for a patient with a medical complaint.

10-1.5 Determine a field differential diagnosis based on available information.

Affective Objectives

None

Psychomotor Objectives

None

Lesson 10-2 Neurology At the end of this lesson the student will have a fundamental depth, foundational breadth of anatomy, physiology, assessment and management of stroke/transient ischemic attack, seizure, status epilepticus and headache.

Cognitive Objectives

The student will be able to:

- 10-2.1 Discuss & review the anatomy, physiology & pathophysiology of the nervous system.
- 10-2.2 Relate the anatomy and physiology of the nervous system to the pathophysiology and assessment of patients with neurologic disorders.
- 10-2.3 Discuss & identify the causes of ischemic strokes, hemorrhagic strokes & transient ischemic attacks and their similarities & differences.
- 10-2.4 Describe the types of stroke and intracranial hemorrhage.
- 10-2.5 Discuss the assessment findings associated with stroke and intracranial hemorrhage.
- 10-2.6 Apply prehospital stroke scoring systems in the assessment of patients with suspected stroke.
- 10-2.7 Discuss the management/treatment plan of stroke and intracranial hemorrhage.
- 10-2.8 Discuss the assessment findings associated with transient ischemic attack.
- 10-2.9 Discuss the management/treatment plan of transient ischemic attack.
- 10-2.10 Describe and differentiate the major types of seizures.
- 10-2.11 Describe the management/treatment plan of seizures and status

Lesson 10-2 Neurology - At the completion of this lesson the student will have a complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis and management of stroke/intracranial hemorrhage/transient ischemic attack, seizure, status epilepticus, headache. The student will also have a fundamental depth, foundational breadth of dementia, neoplasms, demyelinating disorders, Parkinson's disease, cranial nerve disorders, movement disorders, neurologic inflammation/infection, spinal cord compression hydrocephalus and Wernicke's encephalopathy.

Cognitive Objectives

The student will be able to:

- 10-2.1 Discuss & review the anatomy, physiology & pathophysiology of the nervous system.
- 10-2.2 Relate the anatomy and physiology of the nervous system to the pathophysiology and assessment of patients with neurologic disorders.
- 10-2.3 Discuss & identify the causes of ischemic strokes, hemorrhagic strokes & transient ischemic attacks and their similarities & differences.
- 10-2.4 Describe the types of stroke and intracranial hemorrhage.
- 10-2.5 Discuss the assessment findings associated with stroke and intracranial hemorrhage.
- 10-2.6 Apply prehospital stroke scoring systems in the assessment of patients with suspected stroke.
- 10-2.7 Discuss the management/treatment plan of stroke and intracranial hemorrhage.
- 10-2.8 Discuss the assessment findings associated with transient ischemic attack.
- 10-2.9 Discuss the management/treatment plan of transient ischemic attack.
- 10-2.10 Describe and differentiate the major types of seizures.
- 10-2.11 Describe the management/treatment plan of seizures and status

	epilepticus.		epilepticus.
10-2.12	Define and differentiate generalize seizure, partial seizure & status epilepticus and list their possible causes.	10-2.12	Define and differentiate generalize seizure, partial seizure & status epilepticus and list their possible causes.
10-2.13	Discuss the assessment findings associated with headaches.	10-2.13	Discuss the assessment findings associated with headaches.
10-2.14	Discuss the management/treatment plan of headaches.	10-2.14	Discuss the management/treatment plan of headaches.
		10-2.15	Describe the assessment & medical care of the infant, child, adult and geriatric patient with neurological emergencies.
		10-2.16	Describe the significance of the prevalence of neurologic disorders in the United States.
		10-2.17	Identify the risk factors most predisposing to the nervous system.
		10-2.18	Discuss the assessment findings associated with non-traumatic neurologic emergencies.
		10-2.19	Use a process of clinical reasoning to guide and interpret the patient assessment and management process for patients with neurologic disorders.
		10-2.20	Discuss the management of non-traumatic neurological emergencies.
		10-2.21	Discuss the pathophysiology of coma and altered mental status.
		10-2.22	Discuss the management/treatment plan of coma and altered mental status.
		10-2.23	Describe the pathophysiology/management/treatment plan of chronic alcoholism.
		10-2.24	Discuss the assessment findings associated with syncope.
		10-2.25	Discuss the management/treatment plan of syncope.
		10-2.26	Discuss the assessment findings associated with cranial nerve disorders.
		10-2.27	Discuss the management/treatment plan of cranial nerve disorders.
		10-2.28	Discuss the assessment findings associated with degenerative

neurological disorders and dementia.

- 10-2.29 Discuss the management/treatment plan of degenerative neurological disorders and dementia.
- 10-2.30 Differentiate among the various treatment and pharmacological interventions used in the management of degenerative neurological disorders and dementia.
- 10-2.31 Describe the pathophysiology of back pain and nontraumatic spinal disorders.
- 10-2.32 Discuss the management/treatment plan of back pain and nontraumatic spinal disorders.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 10-2.15 Demonstrate the assessment & management of various neurological emergencies for patients of all age groups.
- 10-2.16 Demonstrate how to use an approved stroke assessment tool.
- 10-2.17 Demonstrate the assessment and management of a patient with stroke and Intracranial hemorrhage or TIA.
- 10-2.18 Demonstrate the assessment and management of a patient with various types of seizures including status epilepticus.
- 10-2.19 Demonstrate the assessment and management of a patient with headache.
- 10-2.20 Perform an appropriate assessment of a patient with coma or altered mental status.
- 10-2.21 Perform an appropriate assessment of a patient with syncope.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 10-2.33 Demonstrate the assessment & management of various neurological emergencies for patients of all age groups.
- 10-2.34 Demonstrate how to use an approved stroke assessment tool.
- 10-2.35 Demonstrate the assessment and management of a patient with stroke and Intracranial hemorrhage or TIA.
- 10-2.36 Demonstrate the assessment and management of a patient with various types of seizures including status epilepticus.
- 10-2.37 Demonstrate the assessment and management of a patient with headache.
- 10-2.38 Perform an appropriate assessment of a patient with coma or altered mental status.
- 10-2.39 Perform an appropriate assessment of a patient with syncope.

Lesson 10-3 Abdominal and Gastrointestinal Disorder At the completion of this lesson, the student will have a fundamental depth, foundational breadth of anatomy, physiology, pathophysiology, assessment and management of acute and chronic gastrointestinal hemorrhage. The student will have a simple depth, simple breadth of peritonitis and ulcerative diseases.

Cognitive Objectives

The student will be able to:

- 10-3.1 Discuss the anatomy and physiology of the organs and structures related to gastrointestinal diseases.
- 10-3.2 Define the term, "acute abdomen."
- 10-3.3 Identify the signs & symptoms, and common causes of an acute abdomen.

- 10-2.40 Adapt the scene size-up, primary assessment, patient history, secondary assessment, and use of monitoring technology to meet the needs of patients with complaints and presentations related to neurologic disorders.
- 10-2.41 Perform a complete neurological examination as part of the comprehensive physical examination of a patient with coma or altered mental status.
- 10-2.42 Appropriately manage a patient with coma or altered mental status, including the administration of oxygen, oral glucose, 50% dextrose and narcotic reversal agents.
- 10-2.43 Appropriately manage a patient with syncope.

Lesson 10-3 Abdominal and Gastrointestinal Disorders - At the completion of this lesson, the student will have a complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis and management of acute and chronic gastrointestinal hemorrhage, liver disorders, peritonitis and ulcerative diseases. The student will have a fundamental depth, foundational breadth of irritable bowel syndrome, inflammatory disorders, pancreatitis, bowel obstruction, hernias, infectious disorders, gall bladder and biliary tract disorders. The student will have a simple depth, simple breadth of rectal abscess, rectal foreign body obstruction and mesenteric ischemia.

Cognitive Objectives

The student will be able to:

- 10-3.1 Discuss the anatomy and physiology of the organs and structures related to gastrointestinal diseases.
- 10-3.2 Define the term, "acute abdomen."
- 10-3.3 Identify the signs & symptoms, and common causes of an acute abdomen.
- 10-3.4 Describe the technique for performing a comprehensive physical

10-3.4	Describe the technique for performing a comprehensive physical examination on a patient complaining of abdominal pain.		examination on a patient complaining of abdominal pain.
10-3.5	Discuss the assessment and management abdominal and gastrointestinal disorders in various ages of patients.	10-3.5	Discuss the assessment and management abdominal and gastrointestinal disorders in various ages of patients.
10-3.6	Define upper gastrointestinal bleeding.	10-3.6	Define upper gastrointestinal bleeding.
10-3.7	Recognize the signs and symptoms related to upper gastrointestinal bleeding.	10-3.7	Recognize the signs and symptoms related to upper gastrointestinal bleeding.
10-3.8	Describe the management for upper gastrointestinal bleeding.	10-3.8	Describe the management for upper gastrointestinal bleeding.
10-3.9	Recognize the signs and symptoms related to lower gastrointestinal bleeding.	10-3.9	Recognize the signs and symptoms related to lower gastrointestinal bleeding.
10-3.10	Describe the management for lower gastrointestinal bleeding.	10-3.10	Describe the management for lower gastrointestinal bleeding.
10-3.11	Define acute gastroenteritis.	10-3.11	Define acute gastroenteritis.
10-3.12	Differentiate between hemorrhagic and non-hemorrhagic abdominal pain.	10-3.12	Differentiate between hemorrhagic and non-hemorrhagic abdominal pain.
10-3.13	Discuss the signs and symptoms of peritoneal inflammation relative to acute abdominal pain.	10-3.13	Discuss the signs and symptoms of peritoneal inflammation relative to acute abdominal pain.
		10-3.14	Identify patients with risk factors for gastrointestinal emergencies.
		10-3.15	Discuss the pathophysiology of inflammation and its relationship to acute abdominal pain.
		10-3.16	Use a process of clinical reasoning to guide and interpret the patient assessment and management process for patients with complaints and presentations related to gastrointestinal disorders.
		10-3.17	Adapt the scene size-up, primary assessment, patient history, secondary assessment, and use of monitoring technology to meet the needs of patients with complaints and presentations related to gastrointestinal disorders.
		10-3.18	Describe the questioning technique and specific questions the rescuer should ask when gathering a focused history in a patient with abdominal pain.
		10-3.19	Recognize the signs and symptoms and describe the prehospital management for the following abdominal and gastrointestinal disorders:

- a. Acute gastroenteritis.
- b. Colitis.
- c. Diverticulitis.
- d. Appendicitis.
- e. Peptic ulcer disease.
- f. Bowel obstruction.
- g. Crohn's disease.
- h. Pancreatitis.
- i. Esophageal varices.
- j. Hemorrhoids.
- k. Cholecystitis.
- l. Acute hepatitis.

10-3.20 Differentiate between gastrointestinal emergencies based on assessment findings.

10-3.21 Correlate abnormal findings in the assessment with the clinical significance in the patient with abdominal pain.

10-3.22 Develop a patient management plan based on field impression in the patient with abdominal pain.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

10-3.14 Demonstrate how to palpate the abdomen to assess for pain, rebound tenderness, and masses.

10-3.15 Demonstrate the assessment & medical care of all age groups with gastrointestinal emergencies.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

10-3.23 Demonstrate how to palpate the abdomen to assess for pain, rebound tenderness, and masses.

10-3.24 Demonstrate how to palpate the right upper quadrant to assess for Murphy's sign, indicating cholecystitis.

10-3.25 Demonstrate how to auscultate the abdomen to assess for diminished, absent or abnormal bowel sounds.

10-3.26 Demonstrate the assessment & medical care of all age groups with gastrointestinal emergencies.

Lesson 10-4 Immunology – At the completion of this lesson, the student will have a fundamental depth, foundational breadth of anatomy, physiology, pathophysiology, assessment and management of hypersensitivity disorders and/or emergencies including anaphylactic reactions.

Cognitive Objectives

The student will be able to:

- 10-4.1 Discuss the anatomy and physiology of the organs and structures related to anaphylaxis.
- 10-4.2 Define the terms allergic reaction and anaphylaxis
- 10-4.3 Describe the incidence, morbidity and mortality of anaphylaxis.
- 10-4.4 Identify the risk factors most predisposing to anaphylaxis.
- 10-4.5 Recognize the signs and symptoms related to anaphylaxis
- 10-4.6 Describe the prevention of anaphylaxis and appropriate patient education.
- 10-4.7 List common antigens most frequently associated with anaphylaxis.
- 10-4.8 Discuss the pathophysiology of allergy and anaphylaxis.
- 10-4.9 Describe physical manifestations in anaphylaxis.
- 10-4.10 Differentiate manifestations of an allergic reaction from anaphylaxis.
- 10-4.11 Differentiate among the various treatment and pharmacological interventions used in the management of anaphylaxis.
- 10-4.12 Describe the emergency medical care of the infant, child, adult and geriatric patient experiencing an allergic reaction.
- 10-4.13 State the generic and trade names, medication forms, dose, administration, action, and contraindications for the epinephrine auto-injector.

Lesson 10-4 Immunology - At the completion of this lesson, the student will have a complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis and management of common or major immune system disorders and/or emergencies. The student will have a fundamental depth, foundational breadth of collagen vascular diseases and transplant related problems.

Cognitive Objectives

The student will be able to:

- 10-4.1 Discuss the anatomy and physiology of the organs and structures related to anaphylaxis.
- 10-4.2 Define the terms allergic reaction and anaphylaxis
- 10-4.3 Describe the incidence, morbidity and mortality of anaphylaxis.
- 10-4.4 Identify the risk factors most predisposing to anaphylaxis.
- 10-4.5 Recognize the signs and symptoms related to anaphylaxis
- 10-4.6 Describe the prevention of anaphylaxis and appropriate patient education.
- 10-4.7 List common antigens most frequently associated with anaphylaxis.
- 10-4.8 Discuss the pathophysiology of allergy and anaphylaxis.
- 10-4.9 Describe physical manifestations in anaphylaxis.
- 10-4.10 Differentiate manifestations of an allergic reaction from anaphylaxis.
- 10-4.11 Differentiate among the various treatment and pharmacological interventions used in the management of anaphylaxis.
- 10-4.12 Describe the emergency medical care of the infant, child, adult and geriatric patient experiencing an allergic reaction.
- 10-4.13 State the generic and trade names, medication forms, dose, administration, action, and contraindications for the epinephrine auto-injector.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 10-4.14 Demonstrate how to remove a stinger from a bee sting and proper management following its removal.
- 10-4.15 Demonstrate the use of epinephrine auto-injector.
- 10-4.16 Demonstrate the assessment & management of an allergic reaction and immunologic emergency in patients of all age groups.

Lesson 10-5 Infectious Disease At the completion of this lesson the student will have a simple depth, simple breadth of assessment and management of a patient who may have an infectious disease and how to decontaminate the ambulance and equipment after treating a patient.

Cognitive Objectives

The student will be able to:

- 10-5.1 List the causes of infectious diseases.
- 10-5.2 Identify patients with risk factors for infectious disease.
- 10-5.3 Explain the principles and practices of infection control in prehospital care.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 10-4.14 Demonstrate how to remove a stinger from a bee sting and proper management following its removal.
- 10-4.15 Demonstrate how to administer epinephrine using an auto injector.
- 10-4.16 Demonstrate the assessment & management of an allergic reaction and immunologic emergency in patients of all age groups.

Lesson 10-5 Infectious Diseases and Sepsis - At the completion of this lesson, the student will have a complex depth, comprehensive breadth of anatomy and physiology, epidemiology, pathophysiology, psychosocial impact, reporting requirements, prognosis and management of HIV-related disease, hepatitis, pneumonia, meningococcal meningitis. The student will have a fundamental depth, foundational breadth of tuberculosis, tetanus, viral diseases, sexually transmitted disease, gastroenteritis, fungal infections, rabies, scabies and lice, Lyme disease, Rocky Mountain Spotted fever and antibiotic resistant infections.

Cognitive Objectives

The student will be able to:

- 10-5.1 List the causes of infectious diseases.
- 10-5.2 Identify patients with risk factors for infectious disease.
- 10-5.3 Explain the principles and practices of infection control in prehospital care.

10-5.4	Describe and discuss the rationale for the various types of PPE.	10-5.4	Describe and discuss the rationale for the various types of PPE.
10-5.5	Describe the assessment and management of a patient suspected of, or identified as having, an Infectious disease.	10-5.5	Describe the assessment and management of a patient suspected of, or identified as having, an Infectious disease.
10-5.6	Discuss the proper disposal of contaminated supplies (sharps, gauze sponges, tourniquets, etc.).	10-5.6	Discuss the proper disposal of contaminated supplies (sharps, gauze sponges, tourniquets, etc.).
10-5.7	Discuss decontamination of the ambulance and disinfection of patient care equipment, and areas in which care of the patient occurred.	10-5.7	Discuss decontamination of the ambulance and disinfection of patient care equipment, and areas in which care of the patient occurred.
10-5.8	Describe the actions to take if the EMS provider is exposed to an infectious disease.	10-5.8	Describe the actions to take if the EMS provider is exposed to an infectious disease.
		10-5.9	Review the specific anatomy and physiology pertinent to infectious disease and sepsis.
		10-5.10	Explain public health principles related to infectious disease.
		10-5.11	Describe the roles of local, state, and federal agencies involved in infectious disease surveillance and outbreaks.
		10-5.12	Differentiate between the characteristics of bacteria, viruses, prions, fungi, protozoa, and parasites as causes of infectious diseases.
		10-5.13	Describe the interactions of the agent, host, and environment as determining factors in disease transmission.
		10-5.14	Describe the phases of the infectious process.
		10-5.15	Describe the body's defenses against disease.
		10-5.16	Describe characteristics of the immune system, including the categories of white blood cells, the reticuloendothelial system (RES), and the complement system.
		10-5.17	Explain the principles and practices of infection control in prehospital care.
		10-5.18	Describe and discuss the rationale for the various types of PPE.
		10-5.19	Describes the EMS professional's responsibilities as well as their rights under the Ryan White Act.

<p><u>Affective Objectives</u></p> <p>None</p>	<p>10-5.20 Describe a process of clinical reasoning to guide and interpret the patient assessment and management process for patients with complaints and presentations related to infectious diseases.</p> <p>10-5.21 Discuss the causative agent, body systems affected and potential secondary complications, routes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective/control measures, and immunization for the following infectious diseases:</p> <ul style="list-style-type: none"> a. HIV b. Hepatitis A, B, C, D, E c. Tuberculosis d. Meningococcal meningitis (spinal meningitis) e. Pneumonia f. Tetanus g. Varicella (chickenpox) h. Mumps i. Rubella (German measles) j. Measles (rubeola, hard measles) k. Influenza l. Mononucleosis <p>10-5.22 Discuss gastroenteritis, including the causative organisms, the body system affected, modes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization.</p> <p>10-5.23 Describe the pathophysiology of infectious diseases of immediate concern to EMS providers.</p> <p>10-5.24 Describe the EMS provider's role in patient education and preventing disease transmission.</p> <p>10-5.25 Explain the pathophysiology, risk factors, assessment, and prehospital management of sepsis/systemic inflammatory response syndrome (SIRS).</p> <p><u>Affective Objectives</u></p> <p>None</p>
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Psychomotor Objectives

The student will be able to:

- 10-5.9 Demonstrate the ability to comply with body substance isolation guidelines.
- 10-5.10 Demonstrate how to properly clean and disinfect equipment.
- 10-5.11 Demonstrate the emergency medical care of all age groups experiencing an infectious disease

Lesson 10-6 Endocrine Disorders - At the completion of the lesson the student will have a fundamental depth, foundational breadth of anatomy, physiology, pathophysiology, assessment and management of acute diabetic emergencies.

Cognitive Objectives

The student will be able to:

- 10-6.1 Review the anatomy, physiology & pathophysiology of the endocrine system and its main function in the body.
- 10-6.2 Discuss the general assessment findings associated with endocrinologic emergencies.
- 10-6.3 Discuss the management of endocrinologic emergencies.
- 10-6.4 Discuss the management of diabetic emergencies.
- 10-6.5 Differentiate between the pathophysiology of normal glucose metabolism and diabetic glucose metabolism.
- 10-6.6 Recognize the signs and symptoms of the patient with hypoglycemia.
- 10-6.7 Describe the compensatory mechanisms utilized by the body to

Psychomotor Objectives

The student will be able to:

- 10-5.26 Demonstrate the ability to comply with body substance isolation guidelines.
- 10-5.27 Demonstrate how to properly clean and disinfect equipment.
- 10-5.28 Demonstrate the emergency medical care of all age groups experiencing an infectious disease

Lesson 10-6 Endocrine Disorders - At the completion of this lesson, the student will have a complex depth, comprehensive breadth in anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of acute diabetic emergencies, diabetes, with a fundamental depth, foundational breadth of adrenal disease and pituitary and thyroid disorders.

Cognitive Objectives

The student will be able to:

- 10-6.1 Review the anatomy, physiology & pathophysiology of the endocrine system and its main function in the body.
- 10-6.2 Discuss the general assessment findings associated with endocrinologic emergencies.
- 10-6.3 Discuss the management of endocrinologic emergencies.
- 10-6.4 Discuss the management of diabetic emergencies.
- 10-6.5 Differentiate between the pathophysiology of normal glucose metabolism and diabetic glucose metabolism.
- 10-6.6 Recognize the signs and symptoms of the patient with hypoglycemia.
- 10-6.7 Describe the compensatory mechanisms utilized by the body to

promote homeostasis relative to hypoglycemia.

10-6.8 Describe the management of a responsive hypoglycemic patient.

10-6.9 Recognize the signs and symptoms of the patient with hyperglycemia.

10-6.10 Describe the management of hyperglycemia.

10-6.11 Discuss the pathophysiology of diabetic ketoacidosis.

10-6.12 Recognize the signs and symptoms of the patient with diabetic ketoacidosis.

10-6.13 Describe the management of diabetic ketoacidosis.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

10-6.1 Demonstrate the steps of using a glucometer device.

10-6.2 Demonstrate the assessment and management of hypoglycemia.

10-6.3 Demonstrate the assessment and management of hyperglycemia.

10-6.4 Demonstrate how to administer oral glucose to a patient with an altered mental status within the appropriate scope of practice.

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promote homeostasis relative to hypoglycemia.

10-6.8 Describe the management of a responsive hypoglycemic patient.

10-6.9 Recognize the signs and symptoms of the patient with hyperglycemia.

10-6.10 Describe the management of hyperglycemia.

10-6.11 Discuss the pathophysiology of diabetic ketoacidosis.

10-6.12 Recognize the signs and symptoms of the patient with diabetic ketoacidosis.

10-6.13 Describe the management of diabetic ketoacidosis.

10-6.14 Discuss the pathophysiology, signs, symptoms and management of the following endocrine disorders:
a. Adrenal disease .
c. Pituitary and thyroid disorders.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

10-6.1 Demonstrate the steps of using a glucometer device.

10-6.2 Demonstrate the assessment and management of hypoglycemia.

10-6.3 Demonstrate the assessment and management of hyperglycemia.

10-6.4 Demonstrate how to administer glucose to a patient with an altered mental status within the appropriate scope of practice.

10-6.5 Demonstrate how to administer glucagon to a hypoglycemic patient.

Lesson 10-7 Psychiatric - At the completion of this lesson the student will have simple depth, simple breadth of the basic principles of the mental health system and have a fundamental depth, foundational breadth regarding the assessment and management of acute psychosis, suicidal/risk and agitated delirium.

Cognitive Objectives:

The student will be able to:

- 10-7.1 Define behavior and distinguish between normal and abnormal behavior.
- 10-7.2 Describe the biological, psychosocial, and sociocultural influences on psychiatric disorders.
- 10-7.3 Discuss the pathophysiology of behavioral and psychiatric disorders.
- 10-7.4 Describe the special considerations for the safety of the EMS provider and EMS crew, the patient and bystanders when dealing with behavioral and psychiatric disorders.
- 10-7.5 Discuss the factors that may alter the behavioral or emotional status of an ill or injured patient.
- 10-7.6 Discuss special medical/legal considerations for managing behavioral emergencies to include Florida statutes:
 - a. Baker Act
 - b. Marchman Act
 - c. Emergency examination & treatment of incapacitated
- 10-7.7 Identify techniques for physical assessment in a patient with behavioral problems.
- 10-7.8 Describe the characteristics and develop a patient management plan for a patient with a psychiatric emergency.
- 10-7.9 List the risk factors for suicide.

Lesson 10-7 Psychiatric - At the completion of this lesson the student will have a complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of acute psychosis, agitated delirium, and a fundamental depth, foundational breadth of cognitive disorders, thought disorders, mood disorders, neurotic disorders, substance-related disorders/addictive behavior, somatoform disorders, factitious disorders personality disorders patterns of violence/abuse/neglect and organic psychoses.

Cognitive Objectives

The student will be able to:

- 10-7.1 Define behavior and distinguish between normal and abnormal behavior.
- 10-7.2 Describe the biological, psychosocial, and sociocultural influences on psychiatric disorders.
- 10-7.3 Discuss the pathophysiology of behavioral and psychiatric disorders.
- 10-7.4 Describe the special considerations for the safety of the EMS provider and EMS crew, the patient and bystanders when dealing with behavioral and psychiatric disorders.
- 10-7.5 Discuss the factors that may alter the behavioral or emotional status of an ill or injured patient.
- 10-7.6 Discuss special medical/legal considerations for managing behavioral emergencies to include Florida statutes:
 - a. Baker Act
 - b. Marchman Act
 - c. Emergency examination & treatment of incapacitated
- 10-7.7 Identify techniques for physical assessment in a patient with behavioral problems.
- 10-7.8 Describe the characteristics and develop a patient management plan for a patient with a psychiatric emergency.
- 10-7.9 List the risk factors for suicide.

10-7.10 Describe methods of restraint that may be necessary in managing the emotionally disturbed patient and the possible legal implications.

Affective Objectives

The student will be able to:

10-7.11 Explain the rationale for learning how to modify your behavior toward the patient with a behavioral emergency.

Psychomotor Objectives

The student will be able to:

10-7.12 Demonstrate the assessment and emergency medical care of patients in all age groups experiencing a behavioral emergency.

10-7.13 Demonstrate various techniques to safely restrain a patient with behavioral problems.

Lesson 10-8 Cardiovascular- At the completion of this lesson the student will have a fundamental depth, foundational breadth of anatomy, physiology, pathophysiology, and management of acute coronary syndrome such as angina pectoris, myocardial infarction, abdominal aortic aneurysm, thromboembolism and a simple depth, simple breadth of heart failure and hypertensive emergencies.

Cognitive Objectives

The student will be able to:

10-8.1 Review the basic anatomy, physiology and pathophysiology of the cardiovascular system.

10-7.10 Describe methods of restraint that may be necessary in managing the emotionally disturbed patient and the possible legal implications.

Affective Objectives

The student will be able to:

10-7.11 Explain the rationale for learning how to modify your behavior toward the patient with a behavioral emergency.

Psychomotor Objectives

The student will be able to:

10-7.12 Demonstrate the assessment and emergency medical care of patients in all age groups experiencing a behavioral emergency.

10-7.13 Demonstrate various techniques to safely restrain a patient with behavioral problems.

Lesson 10-8 Cardiovascular At the completion of this lesson the student will have a complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of acute coronary syndrome such as angina pectoris, myocardial infarction, heart failure, non-traumatic cardiac tamponade, hypertensive emergencies, cardiogenic shock, vascular disorders such as abdominal aortic aneurysm, arterial occlusion, venous thrombosis; aortic aneurysm/dissection, thromboembolism, cardiac rhythm disturbances; and a fundamental depth, foundational breadth of infectious diseases of the heart such as endocarditis, pericarditis and congenital abnormalities.

Cognitive Objectives

The student will be able to:

10-8.1 Review the basic anatomy, physiology and pathophysiology of the cardiovascular system.

<p>10-8.2 Describe the anatomy, physiology, pathophysiology and demonstrate the assessment & management of :</p> <ul style="list-style-type: none"> a. Angina pectoris b. Thromboembolism c. Myocardial infarction d. Hypertensive emergencies e. Aortic aneurysm/dissection f. Heart Failure 	<p>10-8.2 Describe the anatomy, physiology, pathophysiology and demonstrate the assessment & management of :</p> <ul style="list-style-type: none"> a. Angina pectoris b. Thromboembolism c. Myocardial infarction d. Hypertensive emergencies e. Aortic aneurysm/dissection f. Heart Failure
<p>10-8.3 Discuss the ability to assess and treat a patient with signs and symptoms of cardiac issues, including airway, medication administration, position of comfort and life span considerations.</p>	<p>10-8.3 Discuss the ability to assess and treat a patient with signs and symptoms of cardiac issues, including airway, medication administration, position of comfort and life span considerations.</p>
<p>10-8.4 List the indications & contraindications for automated external defibrillation (AED).</p>	<p>10-8.4 List the indications & contraindications for automated external defibrillation (AED).</p>
<p>10-8.5 Explain the impact of age and weight on defibrillation.</p>	<p>10-8.5 Explain the impact of age and weight on defibrillation.</p>
<p>10-8.6 Discuss the position of comfort for patients with various cardiac emergencies.</p>	<p>10-8.6 Discuss the position of comfort for patients with various cardiac emergencies.</p>
<p>10-8.7 Explain the rationale for early defibrillation.</p>	<p>10-8.7 Explain the rationale for early defibrillation.</p>
<p>10-8.8 Explain that not all chest pain patients result in cardiac arrest and do not need to be attached to an automated external defibrillator.</p>	<p>10-8.8 Explain that not all chest pain patients result in cardiac arrest and do not need to be attached to an automated external defibrillator.</p>
<p>10-8.9 Discuss the various types of automated external defibrillators.</p>	<p>10-8.9 Discuss the various types of automated external defibrillators.</p>
<p>10-8.10 Differentiate between the fully automated and the semi-automated defibrillator.</p>	<p>10-8.10 Differentiate between the fully automated and the semi-automated defibrillator.</p>
<p>10-8.11 Understand the importance of maintenance and operators check list for AED's.</p>	<p>10-8.11 Understand the importance of maintenance and operators check list for AED's.</p>
<p>10-8.12 Explain the role medical direction plays in the use of automated external defibrillation.</p>	<p>10-8.12 Explain the role medical direction plays in the use of automated external defibrillation.</p>
	<p>10-8.13 Describe the incidence and prevention strategies involving the morbidity and mortality of cardiovascular disease.</p>
	<p>10-8.14 Identify the risk factors most predisposing to coronary artery disease.</p>
	<p>10-8.15 Understand the basic structure and function of the cardiovascular system.</p>

- 10-8.16 Identify the major structures of the vascular system.
- 10-8.17 Describe the blood flow pathway through the vascular system; including the arteries, veins and associated structures.
- 10-8.18 Explain how the heart functions as a pump; including the concepts of cardiac output, stroke volume, heart rate, and ejection fraction.
- 10-8.19 Discuss the physiology of the cardiac cycle and the fluid dynamics associated with the cardiovascular system including Starling's Law, systole and diastole.
- 10-8.20 Identify the four properties that aid in the function of the heart including excitability, conductivity, automaticity, and contractility.
- 10-8.21 Define depolarization and repolarization.
- 10-8.22 List the ions involved in myocardial action potential and their primary and their primary function in this process.
- 10-8.23 Describe the events involved in the steps from excitation to contraction of the cardiac muscle fibers.
- 10-8.24 Identify and understand the structures of the autonomic nervous system and how it influences heart rate, rhythm and contractility.
- 10-8.25 Define and give examples of positive and negative inotropism, chronotropism and dromotropism.
- 10-8.26 Identify the structure and course of all divisions and subdivisions of the cardiac conduction system.
- 10-8.27 Identify and describe how the heart's pacemaker control, rate and rhythm is determined.
- 10-8.28 Compare and contrast the coronary artery distribution to the major portions of the cardiac conduction systems.
- 10-8.29 Explain the assessment of the cardiovascular patient; including scene size up, primary assessment, history taking, secondary assessment and re-assessment.
- 10-8.30 Identify and describe the details of inspection, auscultation, and palpation specific to the cardiovascular system.

- 10-8.31 Define pulse deficit, pulses paradoxus and pulses alternans.
- 10-8.32 Identify the normal characteristics of the point of maximal impulse (PMI).
- 10-8.33 Identify and define the normal and abnormal heart sounds.
- 10-8.34 Relate heart sounds to hemodynamic events in the cardiac cycle.
- 10-8.35 Explain the purpose of ECG monitoring and how ECG wave forms are produced.
- 10-8.36 Identify the components of the ECG rhythm strip and list any limitations.
- 10-8.37 Correlate the electrophysiological and hemodynamic events occurring throughout the entire cardiac cycle with the various ECG wave forms, segments, and intervals.
- 10-8.38 Identify how heart rates, durations, and amplitudes may be determined from ECG tracings.
- 10-8.39 Describe the placement of leads and electrodes in 3 lead and 12 lead ECG monitoring..
- 10-8.40 Differentiate among the primary mechanisms responsible for producing cardiac arrhythmias.
- 10-8.41 Describe a systematic approach to the analysis and interpretation of cardiac arrhythmias.
- 10-8.42 Given an ECG, identify the arrhythmia.
- 10-8.43 Describe the arrhythmias originating in the sinus node, the AV junction, bundle branch system, the atria and the ventricles.
- 10-8.44 Describe the process and the pitfalls of differentiation of wide QRS complex tachycardias.
- 10-8.45 Describe the conditions of pulseless electrical activity.
- 10-8.46 Describe the phenomena of reentry, aberration and accessory pathways.
- 10-8.47 Identify the ECG changes characteristically produced by electrolyte imbalances and specify the clinical implications.

	<p>10-8.48 Identify patient situations where ECG rhythm analysis is indicated.</p> <p>10-8.49 Recognize the changes, and any limitations on the ECG that may be reflected during myocardial ischemia or injury.</p> <p>10-8.50 Identify the major mechanical, pharmacological and electrical therapeutic interventions of the patient with any arrhythmia.</p> <p>10-8.51 Compare manual defibrillation from cardioversion.</p> <p>10-8.52 Describe the components of a transcutaneous pacer, its application and setting adjustments</p> <p>10-8.53 Identify the clinical indications for permanent artificial cardiac pacing.</p> <p>10-8.54 List the possible complications of pacing and hazards that interfere with pacemaker function including artifacts that may cause confusion and pacemaker failure.</p> <p>10-8.55 Based on field impressions, identify the need for rapid intervention for the patient in cardiovascular compromise.</p> <p>10-8.56 Describe the epidemiology, morbidity and mortality, and pathophysiology of the following:</p> <ul style="list-style-type: none">a. Anginab. Myocardial infarction STEMI/Non-STEMIc. Congestive heart failured. Cardiac tamponadee. Cardiogenic shockf. Hypertension and acute hypertensive statesg. Cardiac arresth. Vascular disordersi. Hypertrophic cardiomyopathiesj. Infectious diseases of the heart <p>10-8.57 Discuss the clinical presentation, assessment, ECG findings, clinical problems, and management for the following conditions:</p> <ul style="list-style-type: none">a. Anginab. Myocardial infarction STEMI/Non-STEMIc. Congestive heart failured. Cardiac tamponadee. Cardiogenic shockf. Hypertension and acute hypertensive statesg. Cardiac arrest
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	<p>h. Vascular disorders i. Hypertrophic cardiomyopathies j. Infectious diseases of the heart</p> <p>10-8.58 Identify the drugs of choice, the rationale for use, clinical precautions and disadvantages and or complications for the following conditions: a. Angina b. Myocardial infarction STEMI/Non-STEMI c. Congestive heart failure d. Cardiac tamponade e. Cardiogenic shock f. Hypertension and acute hypertensive states g. Cardiac arrest h. Vascular disorders i. Hypertrophic cardiomyopathies j. Infectious diseases of the heart</p> <p>10-8.59 List the patient characteristics of a patient eligible for Thrombolytic therapy.</p> <p>10-8.60 Compare fibrinolysis from percutaneous intervention as reperfusion techniques used in patients with AMI or suspected AMI and describe the "window of opportunity" as it pertains to reperfusion of a Myocardial infarction.</p> <p>10-8.61 Define the term "acute pulmonary edema" and describes its relationship to left ventricular heart failure.</p> <p>10-8.62 Define pre-load, afterload, and left ventricular end-diastolic pressure and differentiate it from heart failure.</p> <p>10-8.63 Explain clinical significance of paroxysmal nocturnal dyspnea.</p> <p>10-8.64 Explain clinical significance of edema of the extremities and sacrum.</p> <p>10-8.65 Describe how to determine if pulses paradoxus, pulses alternans, or electrical alternans is present.</p> <p>10-8.66 Identify non-cardiac causes of cardiac arrest.</p> <p>10-8.67 Identify the clinical significance of claudication and presence of arterial bruits in a patient with peripheral vascular disorders.</p> <p>10-8.68 Describe the clinical significance of unequal arterial blood pressure readings in the arms.</p>
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	<p>10-8.69 Discuss the components of post resuscitation care including how to determine the return of spontaneous circulation (ROSC).</p> <p>10-8.70 Explain how to confirm asystole using 3 lead ECG.</p> <p>10-8.71 Identify circumstances and situations where resuscitation efforts would not be initiated.</p> <p>10-8.72 Identify and list inclusion and exclusion criteria for termination of resuscitative efforts.</p> <p>10-8.73 Identify communication and documentation protocols with medical direction and law enforcement used for termination of resuscitation efforts.</p> <p>10-8.74 Apply knowledge of the epidemiology of cardiovascular disease to develop prevention strategies..</p> <p>10-8.75 Integrate pathophysiological principles into the assessment of a patient with the following:</p> <ul style="list-style-type: none"> a. Angina b. Myocardial infarction STEMI/Non-STEMI c. Congestive heart failure d. Cardiac tamponade e. Cardiogenic shock f. Hypertension and acute hypertensive states g. Cardiac arrest h. Vascular disorders i. Hypertrophic cardiomyopathies j. Infectious diseases of the heart <p>10-8.76 Synthesize patient history, assessment findings, and ECG analysis to form a field impression of the patient with the following:</p> <ul style="list-style-type: none"> a. Angina b. Myocardial infarction STEMI/Non-STEMI c. Congestive heart failure d. Cardiac tamponade e. Cardiogenic shock f. Hypertension and acute hypertensive states g. Cardiac arrest h. Vascular disorders i. Hypertrophic cardiomyopathies j. Infectious diseases of the heart <p>10-8.77 Develop, execute, and evaluate a treatment planned based on a field impression of the following:</p> <ul style="list-style-type: none"> a. Angina
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Affective Objectives

The student will be able to:

- 10-8.13 Defend the reasons for obtaining initial training in automated external defibrillation and the importance of continuing education.
- 10-8.14 Defend the reason for maintenance of automated external defibrillators.
- 10-8.15 Explain the rationale for administering nitroglycerin and ASA to a patient with chest pain or discomfort.

- b. Myocardial infarction STEMI/Non-STEMI
- c. Congestive heart failure
- d. Cardiac tamponade
- e. Cardiogenic shock
- f. Hypertension and acute hypertensive states
- g. Cardiac arrest
- h. Vascular disorders
- i. Hypertrophic cardiomyopathies
- j. Infectious diseases of the heart

Affective Objectives

The student will be able to:

- 10-8.78 Defend the reasons for obtaining initial training in automated external defibrillation and the importance of continuing education.
- 10-8.79 Defend the reason for maintenance of automated external defibrillators.
- 10-8.80 Explain the rationale for administering nitroglycerin and ASA to a patient with chest pain or discomfort.
- 10-8.81 Value the sense of urgency for initial assessment and intervention in the patient with cardiac compromise.
- 10-8.82 Value and defend the sense of urgency necessary to protect the window of opportunity for reperfusion in the patient with suspected myocardial infarction.
- 10-8.83 Defend patient situations where ECG rhythm analysis is indicated.
- 10-8.84 Value and defend the application of transcutaneous pacing system.
- 10-8.85 Value and defend the urgency in identifying pacemaker malfunction.
- 10-8.86 Based on the pathophysiology and clinical evaluation of the patient with acute myocardial infarction, characterize the clinical problems according to their life-threatening potential.
- 10-8.87 Defend the measures that may be taken to prevent or minimize

complications in the patient with a suspected myocardial infarction.

- 10-8.88 Defend the urgency based on the severity of the patient's clinical problems in a hypertensive emergency.
- 10-8.89 From the priority of clinical problems identified, state the management responsibilities for the patient with a hypertensive emergency.
- 10-8.90 Value and defend the urgency in rapid determination of and rapid intervention of patients in cardiac arrest.
- 10-8.91 Value and defend the possibility of termination of resuscitative efforts in the out-of-hospital setting.
- 10-8.92 Based on the pathophysiology and clinical evaluation of the patient with vascular disorders, characterize the clinical problems according to their life-threatening potential.
- 10-8.93 Value and defend the sense of urgency in identifying peripheral vascular occlusion.
- 10-8.94 Value and defend the sense of urgency in recognizing signs of aortic aneurysm.

Psychomotor Objectives

The student will be able to:

- 10-8.16 Demonstrate the assessment & medical care of a patient with signs and symptoms of cardiac issues, including airway, medication administration, position of comfort and life span considerations.
- 10-8.17 Demonstrate the application and operation of the automated external defibrillator.
- 10-8.18 Discuss the maintenance of an automated external defibrillator.
- 10-8.19 Demonstrate the assessment and documentation of patient response to the automated external defibrillator.
- 10-8.20 Discuss the skills necessary to complete the Automated Defibrillator Operator's Shift Checklist.

Psychomotor Objectives

The student will be able to:

- 10-8.95 Demonstrate the assessment & medical care of a patient with signs and symptoms of cardiac issues, including airway, medication administration, position of comfort and life span considerations.
- 10-8.96 Demonstrate the application and operation of the automated external defibrillator.
- 10-8.97 Discuss the maintenance of an automated external defibrillator.
- 10-8.98 Demonstrate the assessment and documentation of patient response to the automated external defibrillator.
- 10-8.99 Discuss the skills necessary to complete the Automated Defibrillator Operator's Shift Checklist.

10-8.21 Perform the steps in facilitating the use of aspirin and nitroglycerin for chest pain or discomfort.

10-8.22 Demonstrate the assessment and documentation of patient response to nitroglycerin.

10-8.100 Perform the steps in facilitating the use of aspirin and nitroglycerin for chest pain or discomfort.

10-8.101 Demonstrate the assessment and documentation of patient response to nitroglycerin.

10-8.102 Demonstrate how to set and adjust the ECG monitor settings to varying patient situations.

10-8.103 Demonstrate a working knowledge of various ECG lead systems

10-8.104 Demonstrate how to record a 3, 4, 10 and 12 lead ECG.

10-8.105 Demonstrate the patient assessment of the cardiac patient including: a primary survey, history and physical, SAMPLE, OPQRST, secondary survey, and ongoing exam.

10-8.106 Demonstrate how to assess and provide emergency care for a patient with chest pain or discomfort.

10-8.107 Given the model of a patient with signs and symptoms of heart failure, position the patient to afford them comfort or relief.

10-8.108 Demonstrate how to determine if pulsus paradoxus, pulsus alternans, or electrical alternans is present.

10-8.109 Demonstrate how to perform:
a. manual defibrillation
b. cardioversion
c. transcutaneous pacing

10-8.110 Demonstrate how to perform post-resuscitative care.

10-8.111 Demonstrate satisfactory performance of psychomotor skills of basic and advanced life support techniques according to the current American Heart Association Standards and Guidelines, including:
a. Cardiopulmonary Resuscitation
b. Advanced Cardiac Life Support

Lesson 10-9 Toxicology - At the completion of this lesson the student will have a fundamental depth, foundational breadth of anatomy, physiology, pathophysiology, including the assessment and management of inhaled poisons, ingested poisons, injected poisons, absorbed poisons, alcohol intoxication and withdrawal.

Cognitive Learning Objectives

The student will be able to:

- 10-9.1 Define toxicology, poisoning & overdose.
- 10-9.2 List various ways that poisons enter the body.
- 10-9.3 List signs/symptoms associated with poisoning.
- 10-9.4 Discuss the assessment and management of inhaled poisons, ingested poisons, injected poisons, absorbed poisons, alcohol intoxication and withdrawal.
- 10-9.5 State the generic and trade names, indications, contraindications, medication form, dose, administration, actions, side effects and re-assessment strategies for activated charcoal.
- 10-9.6 Integrate pathophysiological principles and identify the assessment findings to formulate a field impression and implement a treatment plan for the patient with the most common poisonings by ingestion, inhalation, injection, and absorption.
- 10-9.7 Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for patients with the most common poisonings by overdose and abused drugs.
- 10-9.8 Discuss the role of the Poison Control Center with the nationwide contact number 800-222-1222 in the United States.

Lesson 10.9 Toxicology – At the completion of this lesson the student will be have a complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis and management of toxidromes and poisonings including cholinergics, anticholinergics, sympathomimetics, sedative/hypnotics, opiates, alcohol intoxication and withdrawal, over-the-counter and prescription medications, carbon monoxide, illegal drugs and herbal preparations.

Cognitive Objectives

The student will be able to:

- 10-9.1 Define toxicology, poisoning & overdose.
- 10-9.2 List various ways that poisons enter the body.
- 10-9.3 List signs/symptoms associated with poisoning.
- 10-9.4 Discuss the assessment and management of inhaled poisons, ingested poisons, injected poisons, absorbed poisons, alcohol intoxication and withdrawal.
- 10-9.5 State the generic and trade names, indications, contraindications, medication form, dose, administration, actions, side effects and re-assessment strategies for activated charcoal.
- 10-9.6 Integrate pathophysiological principles and identify the assessment findings to formulate a field impression and implement a treatment plan for the patient with the most common poisonings by ingestion, inhalation, injection, and absorption.
- 10-9.7 Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for patients with the most common poisonings by overdose and abused drugs.
- 10-9.8 Discuss the role of the Poison Control Center with the nationwide contact number 800-222-1222 in the United States.
- 10-9.9 Describe the epidemiology of toxicologic disorders and substance abuse.
- 10-9.10 Describe the incidence, morbidity and mortality of toxic emergencies.

- 10-9.11 Identify the risk factors most predisposing to toxic emergencies.
- 10-9.12 Discuss the specific differences and considerations in the pathophysiology, assessment findings and treatment associated with a patient suffering from the following toxins and toxidromes.
 - a. Carbon Monoxide.
 - b. Cyanide.
 - c. Cardiac Medications
 - d. Organophosphates.
 - e. Caustic Substances.
 - f. Hydrocarbons.
 - g. Hydrofluoric Acid
 - h. Prescription Medications (pain relievers, psychiatric medications).
 - i. Alcohol, Alcoholism and withdrawal.
 - j. Tricyclic Antidepressants
 - k. Monoamine Oxidase Inhibitors
 - l. Newer Antidepressants and Serotonin Syndrome
 - m. Lithium
 - n. Salicylates
 - o. Acetaminophens
 - p. NSAIDs
 - q. Theophylline
 - r. Metals (iron, lead, mercury).
 - s. Contaminated Food.
 - t. Poisonous plants and Mushrooms
 - u. Animal bites, Insect Stings
 - v. Commonly Abused Drugs
- 10-9.13 Discuss common causative agents, pharmacology, assessment findings and management for a patient with food poisoning.
- 10-9.14 Discuss common offending organisms, pharmacology, assessment findings and management for a patient with a bite or sting.
- 10-9.15 Explain the proper procedures for transporting a patient exposed to a toxic chemical to a receiving facility.

Affective Objectives

The student will be able to:

- 10-9.9 Explain the rationale for administering activated charcoal.

Affective Objectives

The student will be able to:

- 10-9.16 Explain the rationale for administering activated charcoal.

10-9.10 Explain the rationale for contacting medical direction early in the prehospital management of the poisoning or overdose patient.

Psychomotor Objectives

10-9.11 Demonstrate the assessment & medical care for all age groups with a poisoning or overdose.

10-9.12 Discuss administration of activated charcoal

Lesson 10-10 Respiratory - At the completion of this lesson the student will have the fundamental depth, foundational breadth of anatomy, physiology, pathophysiology, assessment and management of epiglottitis, spontaneous pneumothorax, pulmonary edema, asthma, chronic obstructive pulmonary disease, environmental/industrial exposure, toxic gas, and a simple depth, simple breadth of pertussis, cystic fibrosis, pulmonary embolism, pneumonia, and viral respiratory infections.

Cognitive Objectives

The student will be able to:

10-10.1 List the structure, function and pathophysiology of the respiratory system.

10-10.2 List signs of adequate air exchange.

10-10.3 State the signs and symptoms of a patient with respiratory distress.

10-10.4 Describe the assessment & medical care of the infant, child, adult and geriatric patient with a respiratory emergency.

10-10.5 State the generic name, medication forms, dose, administration, action, indications and contraindications for the metered-dose inhaler.

10-10.6 Describe the steps in facilitating the use of an inhaler and small volume nebulizer.

10-9.17 Explain the rationale for contacting medical direction early in the prehospital management of the poisoning or overdose patient.

Psychomotor Objectives

10-9-18 Demonstrate the steps for assessment and management of the suspected poisoning patient.

10-9.19 Demonstrate the steps in the assessment and treatment of a patient with suspected overdose

10-9.20 Discuss administration of activated charcoal

Lesson 10-10 Respiratory - At the completion of this lesson, the student will have a complex depth, comprehensive breadth of anatomy, physiology, psychosocial impact, presentations, prognosis and with management of acute upper airway infections, spontaneous pneumothorax, obstructive/restrictive lung diseases, pulmonary infections, along with fundamental depth, foundational breadth of neoplasm, pertussis and cystic fibrosis.

Cognitive Objectives

The student will be able to:

10-10.1 List the structure, function and pathophysiology of the respiratory system.

10-10.2 List signs of adequate air exchange.

10-10.3 State the signs and symptoms of a patient with respiratory distress.

10-10.4 Describe the assessment & medical care of the infant, child, adult and geriatric patient with a respiratory emergency.

10-10.5 State the generic name, medication forms, dose, administration, action, indications and contraindications for the metered-dose inhaler.

10-10.6 Describe the steps in facilitating the use of an inhaler and small volume nebulizer.

<p>10-10.7 Differentiate between upper airway obstruction and lower airway disease in the pediatric and geriatric patient.</p>	<p>10-10.7 Differentiate between upper airway obstruction and lower airway disease in the pediatric and geriatric patient</p>
<p>10-10.8 Discuss the measures needed to ensure personal safety while attending to the patient with a respiratory emergency or infection.</p>	<p>10-10.8 Discuss the measures needed to ensure personal safety while attending to the patient with a respiratory emergency or infection.</p>
	<p>10-10.9 Discuss the epidemiology, morbidity, and mortality of respiratory illness in the United States</p>
	<p>10-10.10 Define hypoventilation and hyperventilation, and outline the conditions with which they are often associated</p>
	<p>10-10.11 Discuss, identify and describe the structures of the upper and lower airways and accessory structures of the respiratory system.</p>
	<p>10-10.12 List the three primary functions of the respiratory system.</p>
	<p>10-10.13 Explain how gas exchange occurs at the interface of the alveoli and the pulmonary capillary bed.</p>
	<p>10-10.14 Describe the physiology of respiration including; nervous, cardiovascular, muscular, chemical and renal respiratory control mechanisms.</p>
	<p>10-10.15 Discuss those factors that contribute to the formation of a general impression and degree of respiratory distress.</p>
	<p>10-10.16 Discuss age related assessment and care considerations for the patient with respiratory distress.</p>
	<p>10-10.17 Identify breathing patterns that are associated with respiratory distress and neurologic insults and their correlation with the signs of increased work of breathing.</p>
	<p>10-10.18 Differentiate between normal and abnormal breath sounds and its physiologic significance.</p>
	<p>10-10.19 Explain how to assess the adequacy of the circulation of a patient with dyspnea.</p>
	<p>10-10.20 Discuss the way transport decisions are made for patients with respiratory distress.</p>
	<p>10-10.21 Discuss the components of the chief complaint, SAMPLE history, and physical examination of a patient with respiratory distress.</p>

- 10-10.22 Describe interventions available for treating patients with respiratory emergencies.
- 10-10.23 List those devices used to monitor patients with respiratory complaints.
- 10-10.24 Discuss the pathophysiology, assessment, and management of a patient whose upper airway has anatomic or foreign body obstruction.
- 10-10.25 Discuss the pathophysiology, assessment, and management of a patient who has an upper airway infection, who has aspirated, or may have obstructive lower airway disease.
- 10-10.26 Discuss the pathophysiology, assessment, and management of the asthma, emphysema, and chronic bronchitis patient.
- 10-10.27 Discuss those complications which cause the COPD patient to decompensate.
- 10-10.28 Explain the concepts of hypoxic drive and auto-PEEP as they relate to the COPD patient.
- 10-10.29 Discuss the pathophysiology, assessment, and management of patients with pulmonary infections, atelectasis, cancer, toxic inhalations, pulmonary edema and acute respiratory distress syndrome (ARDS).
- 10-10.30 Discuss the pathophysiology, assessment, and management of patients with a spontaneous pneumothorax, pneumothorax, pleural effusion, and pulmonary embolism.
- 10-10.31 Describe the variations of respiratory anatomy and the pathophysiology of respiratory disease across the life spans.
- 10-10.32 Identify common pathological events that affect the pulmonary system.
- 10-10.33 Review the pharmacological preparations that paramedics use for management of respiratory diseases and conditions.

Affective Objectives

None

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 10-10.9 Perform the steps in facilitating the use of a metered dose inhaler.
- 10-10.10 Perform the steps in facilitating the use of a small volume nebulizer
- 10-10.11 Demonstrate proper use of airway and ventilation devices.
- 10-10.12 Conduct a history and patient assessment for patients with pulmonary diseases and conditions.
- 10-10.12 Demonstrate the application of a CPAP/ BiPAP unit
- 10-10.14 Demonstrate the assessment and management of all age groups with a respiratory emergency.

Lesson 10-11 Hematology - At the completion of this lesson, the student will have simple depth, simple breadth of anatomy, physiology, pathophysiology, assessment, and management of sickle cell crisis and clotting disorders.

Cognitive Objectives:

The student will be able to:

- 10-11.1 Describe the anatomy and physiology of the hematologic system to the pathophysiology and assessment of patients with hematologic disorders such as Sickle cell.
- 10-11.1 List the composition, physiology & pathophysiology of blood.
- 10-11.2 State the signs and symptoms of a patient with a Sickle Cell crisis

Psychomotor Objectives:

The student will be able to:

- 10-10.34 Perform the steps in facilitating the use of a metered dose inhaler.
- 10-10.35 Perform the steps in facilitating the use of a small volume nebulizer
- 10-10.36 Demonstrate proper use of airway and ventilation devices.
- 10-10.37 Conduct a history and patient assessment for patients with pulmonary diseases and conditions.
- 10-10.38 Demonstrate the application of a CPAP/ BiPAP unit
- 10-10.39 Demonstrate the assessment and management of all age groups with a respiratory emergency.

Lesson 10-11 Hematology - At the completion of this lesson, the student will have a complex depth, foundational breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major hematological diseases and/or emergencies such as; sickle cell disease, and a foundational depth, foundational breadth of blood transfusion complications, hemostatic disorders, lymphomas, red blood cell disorders, white blood cell disorders and coagulopathies.

Cognitive Objectives:

The student will be able to:

- 10-11.1 Describe the anatomy and physiology of the hematologic system to the pathophysiology and assessment of patients with hematologic disorders such as Sickle cell.
- 10-11.1 List the composition, physiology & pathophysiology of blood.
- 10-11.2 State the signs and symptoms of a patient with a Sickle Cell crisis

or a clotting disorder.

10-11.3 Describe the emergency medical care of the patient with Sickle cell distress or a clotting disorder.

or a clotting disorder.

10-11.3 Describe the emergency medical care of the patient with Sickle cell distress or a clotting disorder.

10-11.4 Identify the role of heredity in the risk for hematologic disorders.

10-11.5 Describe volume and volume-control related to the hematopoietic system.

10-11.6 Describe normal red blood cell (RBC) production, function and destruction.

10-11.7 Recognize medications used to decrease the risk of thrombosis.

10-11.8 Describe normal white blood cell (WBC) production, function and destruction.

10-11.9 Identify alterations in immunologic response.

10-11.10 Describe the components of the hemostatic mechanism.

10-11.11 Identify blood groups.

10-11.12 Identify the components of physical assessment as they relate to the hematologic system.

10-11.13 Describe the pathology and clinical manifestations and prognosis associated with:

- a. Anemia
- b. Sickle cell disease
- c. Polycythemia
- d. Leukopenia/neutropenia
- e. Leukcytosis
- f. Leukemia
- g. Lymphoma
- h. Thrombocytosis
- i. Thrombocytopenia
- j. Hemophilia and von Willebrand's disease
- k. Disseminated intravascular coagulation
- l. Multiple myeloma

10-11.14 Integrate pathophysiological principles into the assessment of a patient with hematologic disease.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

10-11.4 Demonstrate the assessment and management of Sickle cell distress or clotting disorder in patients of all age groups

Lesson 10-12 Genitourinary /Renal - At the completion of this lesson the student will have a simple depth, simple breath of anatomy, physiology, pathophysiology, assessment and management of complications related to renal dialysis, urinary catheter management (not insertion), kidney stones.

Cognitive Objectives

The student will be able to:

10-12.1 Discuss the anatomy and physiology of the urinary system to the pathophysiology and assessment of patients with urologic and renal disorders.

10-12.2 Understand the principles of kidney dialysis.

10-12.3 Discuss the signs and symptoms associated with a dialysis emergency.

10-12.4 Describe the emergency medical care of the patient with a dialysis emergency.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

10-11.15 Demonstrate the assessment and management of Sickle cell distress or clotting disorder in patients of all age groups

Lesson 10-12 Genitourinary/Renal - At the completion of this lesson the student will have a complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of complications of acute renal failure, chronic renal failure, dialysis, and renal calculi. The student will have a fundamental depth, foundational breadth for acid base disturbances, fluid and electrolyte, infection and male genital tract conditions.

Cognitive Objectives

The student will be able to:

10-12.1 Discuss the anatomy and physiology of the urinary system to the pathophysiology and assessment of patients with urologic and renal disorders.

10-12.2 Understand the principles of kidney dialysis.

10-12.3 Discuss the signs and symptoms associated with a dialysis emergency.

10-12.4 Describe the emergency medical care of the patient with a dialysis emergency.

10-12.5 Describe the incidence, morbidity, mortality, and risk factors predisposing to urological emergencies.

10-12.6 Adapt the scene size-up, primary assessment, patient history, secondary assessment, and use of monitoring technology to meet

<p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>The student will be able to:</p> <p>10-12.5 Demonstrate the assessment and management of a renal emergency in a patient of all ages.</p>	<p>the needs of patients with complaints and presentations related to urologic and renal disorders.</p> <p>10-12.7 Use a process of clinical reasoning to guide and interpret the patient assessment and management process for patients with urologic and renal disorders.</p> <p>10-12.8 Describe the pathophysiology of specific urologic and renal problems, including the following:</p> <ul style="list-style-type: none"> a. Acute renal failure b. Chronic renal failure c. Complications related to hemodialysis and peritoneal dialysis. d. Renal Calculi e. Priapism f. Testicular torsion g. Urinary tract infection <p>Define referred pain and visceral pain as it relates to urology.</p> <p>Develop, execute, and evaluate a treatment plan based on the field impression made in the assessment.</p> <p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>The student will be able to:</p> <p>10-12.9 Demonstrate the assessment and management of a renal emergency in a patient of all ages.</p>
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Lesson 10-13 Gynecology - At the completion of this lesson, the student will have a fundamental depth, foundational breadth of anatomy, physiology, assessment findings and the management of vaginal bleeding, sexual assault (to include appropriate emotional support). The student will have a simple depth, simple breath of infections.

Cognitive Objectives

The student will be able to:

- 10-13.1 Describe the basic anatomy, physiology and pathophysiology of the female reproductive system.
- 10-13.2 Describe the Age-related variations found in gynecological emergencies.
- 10-13.3 Explain the general management of a gynecologic emergency in relation to patient privacy and communication.
- 10-13.4 Describe the assessment and management of a patient who has experienced a sexual assault including the psychosocial impact, assessment findings/presentations.
- 10-13.5 Describe how to assess a patient with a gynecological complaint.
- 10-13.6 Explain how to recognize a gynecological emergency.

Lesson 10-13 Gynecology- – At the completion of this lesson the student will have a complex depth, comprehensive breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major gynecological diseases and/or emergencies including vaginal bleeding and sexual assault. The student will have a fundamental depth, foundational breadth of infections, pelvic inflammatory disease, ovarian cysts, dysfunctional uterine bleeding and vaginal foreign body.

Cognitive Objectives

The student will be able to:

- 10-13.1 Describe the basic anatomy, physiology and pathophysiology of the female reproductive system.
- 10-13.2 Describe the Age-related variations found in gynecological emergencies.
- 10-13.3 Explain the general management of a gynecologic emergency in relation to patient privacy and communication.
- 10-13.4 Describe the assessment and management of a patient who has experienced a sexual assault including the psychosocial impact, assessment findings/presentations.
- 10-13.5 Describe how to assess a patient with a gynecological complaint.
- 10-13.6 Explain how to recognize a gynecological emergency.
- 10-13.7 Identify the normal events of the menstrual and ovarian cycles:
 - a. Proliferative phase
 - b. Secretory phase
 - c. Menstrual phase
 - d. Menopause
- 10-13.8 Describe the signs, and symptoms along with assessment findings in a gynecological patient complaining of:
 - a. Abdominal pain or vaginal pain
 - b. Vaginal bleeding
 - c. Vaginal discharge
 - d. Fever
 - e. Nausea and vomiting
 - f. Syncope

10-13.9 Describe the general management for any patient experiencing a gynecological emergency.

10-13.10 Describe the pathophysiology, assessment, and management of specific gynecological emergencies including:
a. Infection (including Pelvic inflammatory disease, Bartholin's abscess, and vaginitis/ vulvovaginitis)
b. Ovarian cyst and ruptured ovarian cyst
c. Ovarian torsion
d. Endometriosis
e. Dysfunctional uterine bleeding
f. Prolapsed uterus
g. Vaginal foreign body
h. Vaginal Hemorrhage
i. Ectopic Pregnancy

Affective Objectives

The student will be able to:

- 10-13.5 Value the importance of maintaining a patient's modesty and privacy while still being able to obtain necessary information.
- 10-13.6 Defend the need to provide care for a patient of sexual assault, while still preventing destruction of crime scene information.

Psychomotor Objectives

- 10-13.7 Demonstrate how to assess a patient with a gynecological complaint
- 10-13.8 Demonstrate how to provide care for a patient with
 - a. excessive bleeding
 - b. abdominal pain
 - c. sexual assault

Affective Objectives

The student will be able to:

- 10-13.11 Value the importance of maintaining a patient's modesty and privacy while still being able to obtain necessary information.
- 10-13.12 Defend the need to provide care for a patient of sexual assault, while still preventing destruction of crime scene information.

Psychomotor Objectives

- 10-13.13 Demonstrate how to assess a patient with a gynecological complaint
- 10-13.14 Demonstrate how to provide care for a patient with
 - a. excessive bleeding
 - b. abdominal pain
 - c. sexual assault

Lesson 10-14 Non-Traumatic Musculoskeletal Disorders - At the completion of this lesson, the student will have a fundamental depth, foundational breadth of anatomy, physiology, pathophysiology, assessment and management of non-traumatic fractures.

Cognitive Objectives

The student will be able to:

- 10-14.1 Describe the basic anatomy, physiology and pathophysiology of the musculoskeletal system.
- 10-14.2 Discuss the emergency medical care of the patient with a non-traumatic musculoskeletal emergency such as non-traumatic fractures.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 10-14.3 Demonstrate the assessment and management of patients in all age groups with a non-traumatic musculoskeletal emergency.

Lesson 10-14 Non-Traumatic Musculoskeletal Disorders - At the completion of this lesson, the student will have a fundamental depth, foundation breadth of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major non-traumatic musculoskeletal disorders of disorders of the spine, joint abnormalities, muscle abnormalities and overuse syndromes.

Cognitive Objectives

The student will be able to:

- 10-14.1 Describe the basic anatomy, physiology and pathophysiology of the musculoskeletal system.
- 10-14.2 Discuss the general management for patients with common or major non-traumatic musculoskeletal disorders.
- 10-14.3 Discuss the epidemiology of non-traumatic musculoskeletal disorders.
- 10-14.4 Discuss various non-traumatic musculoskeletal disorders such as:
 - a. osteomyelitis and tumors
 - b. disc disorders, lower back pain (cauda equine syndrome, sprain, strain.
 - c. joint abnormalities
 - d. muscle abnormalities
 - e. overuse syndrome
 - f. soft tissue infections

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 10-14.5 Demonstrate the assessment and management of patients in all age groups with a non-traumatic musculoskeletal emergency.

Lesson 10-15 Diseases of the Eyes, Ears, Nose, and Throat - At the completion of this lesson the student will have simple depth, simple breadth in recognition and management of nose bleed.

Cognitive Objectives

The student will be able to:

10-15.1 Discuss the recognition and management of a nose bleed.

Lesson 10-15 Diseases of the Eyes, Ears, Nose , and Throat - At the completion of this lesson, the student will have a fundamental depth, foundational breadth of knowledge of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major diseases of the eyes, ears, nose and throat including nose bleed.

Cognitive Objectives

The student will be able to:

10-15.1 Discuss the recognition and management of a nose bleed.

10-15.2 Relate the anatomy and physiology of the eyes, ears, nose, and throat to the pathophysiology and assessment of patients with diseases of the eyes, ears, nose, and throat.

10-15.3 Integrates assessment findings to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient suffering from various eye diseases/injuries including:

- a. Burns of eye and adnexa
- b. Conjunctivitis
- c. Corneal abrasions
- d. Foreign body
- e. Inflammation of the eyelid
- f. Glaucoma
- g. Hyphema
- h. Iritis
- i. Papilledema
- j. Retinal detachment and defect
- k. Cellulitis of orbit

10-15.4 Integrates assessment findings to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient suffering from various ear diseases/injuries including:

- a. Foreign body
- b. Impacted cerumen
- c. Labyrinthitis
- d. Meniere's disease
- e. Otitis external and media
- f. Perforated tympanic membrane

<p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>The student will be able to:</p> <p>10-15.2 Demonstrate the assessment and management of abnormal conditions affecting the eyes, ears, nose and throat in patients of all age groups.</p>	<p>10-15.5 Integrates assessment findings to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient suffering from various nose diseases/injuries including:</p> <ol style="list-style-type: none"> a. Epistaxis b. Foreign body intrusion c. Rhinitis d. Sinusitis <p>10-15.6 Integrates assessment findings to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient suffering from oropharynx/throat diseases/injuries including:</p> <ol style="list-style-type: none"> a. Dentalgia and dental abscess b. Diseases of oral soft tissue/ Ludwig's angina c. Foreign body intrusion d. Epiglottitis e. Laryngitis f. Tracheitis g. Oral candidiasis h. Peritonsillar abscess i. Pharyngitis/tonsillitis j. Temporomandibular joint disorders <p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>The student will be able to:</p> <p>10-15.7 Demonstrate the assessment and management of abnormal conditions affecting the eyes, ears, nose and throat in patients of all age groups.</p>
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<p>Module 11 Shock and Resuscitation – Applies a fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management. Includes EMR plus the following.</p>	<p>Module 11 Shock and Resuscitation- Integrates comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states. Integrates a comprehensive knowledge of the causes and</p>
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Lesson 11-1 Shock and Resuscitation- At the completion of this lesson the student will apply a fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management.

Cognitive Objectives

The student will be able to:

- 11-1.1 Discuss and identify causes, pathophysiology and management of shock.
- 11-1.2 Discuss and identify causes, pathophysiology and management of respiratory failure and arrest.
- 11-1.3 Discuss and identify causes, pathophysiology and management of cardiac failure or arrest.
- 11-1.4 Discuss the various types and degrees of shock
- 11-1.5 Discuss and identify post resuscitation and management.
- 11-1.6 Explain the system components of CPR, the four links in the AHA chain of survival & how each one relates to maximizing the survival of the patient.
- 11-1.7 Show Provider (AHA guidelines) certification required prior to rescuer program completion.
- 11-1.8 Discuss and distinguish the variations & causes between the emergency medical care of the infant, child, adult and geriatric patient experiencing shock.
- 11-1.9 Discuss the pathophysiology of hemorrhage and shock.
- 11-1.10 Discuss the assessment findings associated with hemorrhage and shock.

pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest. Includes AEMT plus the following.

11-1 Shock and Resuscitation – At the completion of this lesson the student will Integrate comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states. Integrates a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.

Cognitive Objectives

The student will be able to:

- 11-1.1 Discuss and identify causes, pathophysiology and management of shock.
- 11-1.2 Discuss and identify causes, pathophysiology and management of respiratory failure and arrest.
- 11-1.3 Discuss and identify causes, pathophysiology and management of cardiac failure or arrest.
- 11-1.4 Discuss the various types and degrees of shock.
- 11-1.5 Discuss and identify post resuscitation and management.
- 11-1.6 Explain the system components of CPR, the four links in the AHA chain of survival & how each one relates to maximizing the survival of the patient.
- 11-1.7 Show Provider (AHA guidelines) certification required prior to rescuer program completion.
- 11-1.8 Discuss and distinguish the variations & causes between the emergency medical care of the infant, child, adult and geriatric patient experiencing shock.
- 11-1.9 Discuss the pathophysiology of hemorrhage and shock.
- 11-1.10 Discuss the assessment findings associated with hemorrhage and shock.

- 11-1.11 Discuss the treatment plan and management of hemorrhage and shock.
- 11-1.12 Discuss the management of external hemorrhage.
- 11-1.13 Define compensated and decompensated hemorrhagic shock.
- 11-1.14 Differentiate between compensated and decompensated shock

- 11-1.11 Discuss the treatment plan and management of hemorrhage and shock.
- 11-1.12 Discuss the management of external hemorrhage.
- 11-1.13 Differentiate between the administration rate and amount of IV fluid in a patient with controlled versus uncontrolled hemorrhage.
- 11-1.14 Relate internal hemorrhage to the assessment findings of compensated and decompensated hemorrhagic shock.
- 11-1.15 Discuss the management of internal hemorrhage.
- 11-1.16 Describe the effects of decreased perfusion at the capillary level.
- 11-1.17 Relate pulse pressure changes to perfusion status.
- 11-1.18 Relate orthostatic vital sign changes to perfusion status.
- 11-1.19 Define compensated and decompensated hemorrhagic shock.
- 11-1.20 Differentiate between compensated and decompensated shock.
- 11-1.21 Differentiate between the normotensive, hypotensive, or profoundly hypotensive patient.
- 11-1.22 Differentiate between the administration of fluid in the normotensive, hypotensive, or profoundly hypotensive patient.

Affective Objectives

The student will be able to:

- 11-1.15 Defend the importance of teamwork, experience, and practice in preparation to manage the critical patient

Psychomotor Objectives

The student will be able to:

- 11-1.16 Demonstrate how to perform one and two rescuer CPR, adult, child, infant
- 11-1.17 Demonstrate how to perform rescuer level appropriate

Affective Objectives

The student will be able to:

- 11-1.23 Defend the importance of teamwork, experience, and practice in preparation to manage the critical patient

Psychomotor Objectives

The student will be able to:

- 11-1.24 Demonstrate how to perform one and two rescuer CPR, adult, child, infant
- 11-1.25 Demonstrate how to perform rescuer level appropriate

	defibrillation in an adult, child and infant patient		defibrillation in an adult, child and infant patient
11-1.18	Demonstrate how to manage a patient suffering from an abnormal heart rate or rhythm.	11-1.26	Demonstrate how to manage a patient in ventricular fibrillation or ventricular tachycardia
11-1.19	Demonstrate the steps of rescuer level appropriate post resuscitative care	11-1.27	Demonstrate how to manage a patient in asystole or pulseless electrical activity
11-1.20	Management and resuscitation of the critical patient	11-1.28	Demonstrate the steps of rescuer level appropriate post resuscitative care.
11-1.21	Demonstrate rapid decision making based on differential field diagnosis of the critical patient with a peri-arrest condition	11-1.29	Management and resuscitation of the critical patient
11-1.22	Demonstrate the management of shock	11-1.30	Demonstrate rapid decision making based on differential field diagnosis of the critical patient with a peri-arrest condition
		11-1.31	Demonstrate the management of shock

<p>Module XII Trauma – Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient. Includes EMR plus the following.</p> <p>Lesson 12-1 Trauma Overview- At the completion of this lesson, the student will have a fundamental depth, foundational breadth of pathophysiology, assessment and management of the trauma patient including trauma scoring, rapid transport and destination issues and transport mode.</p> <p><u>Cognitive Objectives</u></p> <p>The student will be able to:</p> <p>12-1.1 Describe and provide a general overview of multisystem trauma patient management.</p> <p>12-1.2 Discuss the golden principle of out-of-hospital trauma care</p> <p>12-1.3 Discuss the National Trauma Triage Protocol of injured patients (http://cdc.gov/fieldtriage/)</p>	<p>Module 12 Trauma- Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient. Includes EAEMT plus the following.</p> <p>12-1 Trauma Overview- At the completion of this lesson, the student will have a complex depth, comprehensive breadth of pathophysiology, assessment and management of the trauma patient including trauma scoring and transport and destination issues.</p> <p><u>Cognitive Objectives</u></p> <p>The student will be able to:</p> <p>12-1.1 Describe and provide a general overview of multisystem trauma patient management.</p> <p>12-1.2 Discuss the golden principle of out-of-hospital trauma care</p> <p>12-1.3 Discuss the National Trauma Triage Protocol of injured patients (http://cdc.gov/fieldtriage/)</p>
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12-1.4	Discuss and describe State of Florida's Trauma Scorecard methodologies as required in FS 401.2701 & 64J-2.004 & 2.005	12-1.4	Discuss and describe State of Florida's Trauma Scorecard methodologies as required in FS 401.2701 & 64J-2.004 & 2.005
12-1.5	List and describe the components of a comprehensive trauma system.	12-1.5	List and describe the components of a comprehensive trauma system.
12-1.5	Describe the role of and differences between levels of trauma centers.	12-1.5	Describe the role of and differences between levels of trauma centers.
12-1.6	Describe the criteria for different transportation modes to a trauma center.	12-1.6	Describe the criteria for different transportation modes to a trauma center.
12-1.7	Discuss and describe significant & non-significant Mechanism of Injury (MOI) & provide examples of each.	12-1.7	Discuss and describe significant & non-significant Mechanism of Injury (MOI) & provide examples of each.
12-1.8	Discuss the pathophysiology and assessment of the trauma patient.	12-1.8	Discuss the pathophysiology and assessment of the trauma patient.
12-1.9	Explain the relationship between mechanism of injury and potential energy, kinetic energy and work.	12-1.9	Explain the relationship between mechanism of injury and potential energy, kinetic energy and work.
12-1.10	Define the term blunt & penetrating trauma and provide examples of the mechanism of injury (MOI) that would cause each to occur and include: a. Effects of high, medium & low velocity penetrating trauma b. Primary, secondary, tertiary and miscellaneous blast injuries c. Factors to consider of a patient injured in a fall d. Consider age (pediatric & geriatrics)	12-1.10	Define the term blunt & penetrating trauma and provide examples of the mechanism of injury (MOI) that would cause each to occur and include: a. Effects of high, medium & low velocity penetrating trauma b. Primary, secondary, tertiary and miscellaneous blast injuries c. Factors to consider of a patient injured in a fall d. Consider age (pediatric & geriatrics)
12-1-11	Describe the criteria and procedure for air medical transport.	12-1-11	Describe the criteria and procedure for air medical transport.
12-1-12	Define energy and force as they relate to trauma.	12-1-12	Define energy and force as they relate to trauma.
12-1.13	Define laws of motion and energy and understand the role that increased speed has on injuries.	12-1.13	Define laws of motion and energy and understand the role that increased speed has on injuries.
12-1.14	Discuss the assessment and management of the trauma patient.	12-1.14	Discuss the assessment and management of the trauma patient.
12-1.15	Describe the pathophysiology of the head, spine, thorax, and abdomen that result from the above forces.	12-1.15	Describe the pathophysiology of the head, spine, thorax, and abdomen that result from the above forces.
12-1.116	List specific injuries and their causes as related to interior and exterior vehicle damage.	12-1.16	List specific injuries and their causes as related to interior and exterior vehicle damage.

12-1.17 Describe the kinematics of penetrating injuries.

12-1.18 Discuss the role of documentation in trauma.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

12-1.19 Use the Florida Trauma Alert Criteria, classify various types of trauma patients. .

Lesson 12-2 Bleeding At the completion of this lesson, the student will have a fundamental depth, foundational breadth of pathophysiology, assessment, and management of bleeding.

Cognitive Objectives

The student will be able to:

12-2.1 Discuss the anatomy and physiology of the cardiovascular system.

12-2.2 Discuss the pathophysiology of external and internal bleeding.

12-2.3 Describe the body's physiologic response to bleeding.

12-2.4 Describe the assessment and management of a bleeding patient.

12-2.5 Discuss the pathophysiology of hemorrhagic shock.

12-2.6 Discuss the classes of hemorrhage.

12-2.7 Describe how to assess and manage a patient with internal and external hemorrhage.

12-2.8 Describe how to assess and manage hemorrhagic shock.

12-1.17 Describe the kinematics of penetrating injuries.

12-1.18 Discuss the role of documentation in trauma.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

12-1.19 Use the Florida Trauma Alert Criteria, classify various types of trauma patients. .

12-2 Bleeding- At the completion of this lesson the student will have a complex depth, comprehension breadth of pathophysiology, assessment and management of bleeding.

Cognitive Objectives

The student will be able to:

12-2.1 Discuss the anatomy and physiology of the cardiovascular system.

12-2.2 Discuss the pathophysiology of external and internal bleeding.

12-2.3 Describe the body's physiologic response to bleeding.

12-2.4 Describe the assessment and management of a bleeding patient.

12-2.5 Discuss the pathophysiology of hemorrhagic shock.

12-2.6 Discuss the classes of hemorrhage.

12-2.7 Describe how to assess and manage a patient with internal and external hemorrhage.

12-2.8 Describe how to assess and manage hemorrhagic shock.

12-2.9 Discuss the management of bleeding using fluid resuscitation.

Affective Objectives

The student will be able to:

- 12-2.9 Explain the sense of urgency to transport patients that are bleeding and show signs of shock (hypoperfusion).

Psychomotor Objectives

The student will be able to:

- 12-2.10 Demonstrate the assessment and management of a patient with s/s of external hemorrhage
- 12-2.11 Demonstrate how to apply a commercial tourniquet.
- 12-2.12 Demonstrate the assessment and management of a patient with signs and symptoms of internal hemorrhage
- 12-2.13 Demonstrate the assessment and management of a patient experiencing hemorrhagic shock

Lesson 12-3 Chest Trauma - At the completion of this lesson, the student will have a fundamental depth, simple breadth of pathophysiology, assessment and management of blunt versus penetrating mechanisms, hemothorax, pneumothorax-open, simple, tension, cardiac tamponade, rib fractures, flail chest and commotio cordis.

Cognitive Objectives

The student will be able to:

- 12-3.1 Discuss the pathophysiology, assessment and management of Chest Trauma.
- 12-3.2 Differentiate between a pneumothorax (open, simple & tension) & hemothorax.
- 12-3.3 Describe the assessment & management of a patient with a suspected chest (open and closed) injury.

Affective Objectives

The student will be able to:

- 12-2.10 Explain the sense of urgency to transport patients that are bleeding and show signs of shock (hypoperfusion).

Psychomotor Objectives

The student will be able to:

- 12-2.11 Demonstrate the assessment and management of a patient with s/s of external hemorrhage
- 12-2.12 Demonstrate how to apply a commercial tourniquet
- 12-2.13 Demonstrate the assessment and management of a patient with signs and symptoms of internal hemorrhage
- 12-2.14 Demonstrate the assessment and management of a patient experiencing hemorrhagic shock

12-3 Chest Trauma - At the completion of this lesson, the student will have a complex depth, comprehensive breadth of pathophysiology, assessment, and management of traumatic aortic disruption, pulmonary contusion, blunt cardiac injury, hemothorax, pneumothorax, such as open, simple, tension; cardiac tamponade, rib fractures, flail chest, commotio cordis, tracheobronchial disruption, diaphragmatic rupture and traumatic asphyxia.

Cognitive Objectives

The student will be able to:

- 12-3.1 Discuss the pathophysiology, assessment and management of Chest Trauma.
- 12-3.2 Differentiate between a pneumothorax (open, simple & tension) & hemothorax.
- 12-3.3 Describe the assessment & management of a patient with a suspected chest (open and closed) injury.

12-3.4	Discuss the pathophysiology of myocardial injuries, including the following: pericardial tamponade, myocardial contusion, myocardial rupture, commotio cordis	12-3.4	Discuss the pathophysiology of myocardial injuries, including the following: pericardial tamponade, myocardial contusion, myocardial rupture, commotio cordis
12-3.5	Identify the need for rapid intervention and transport of the patient with thoracic injuries.	12-3.5	Identify the need for rapid intervention and transport of the patient with thoracic injuries.
12-3.6	Discuss the pathophysiology of specific chest wall injuries, including the following: rib fracture, flail segment, sternal fracture.	12-3.6	Discuss the pathophysiology of specific chest wall injuries, including the following: rib fracture, flail segment, sternal fracture.
12-3.7	Discuss the assessment findings associated with chest wall injuries.	12-3.7	Discuss the assessment findings associated with chest wall injuries.
12-3.8	Identify the need for rapid intervention and transport of the patient with chest wall injuries.	12-3.8	Identify the need for rapid intervention and transport of the patient with chest wall injuries.
12-3.9	Discuss the management of chest wall injuries.	12-3.9	Discuss the management of chest wall injuries.
12-3.10	Discuss the assessment findings associated with lung injuries.	12-3.10	Discuss the assessment findings associated with lung injuries.
12-3.11	Identify the need for rapid intervention and transport of the patient with lung injuries.	12-3.11	Identify the need for rapid intervention and transport of the patient with lung injuries.
12-3.12	Discuss the pathophysiology of myocardial injuries, including the following: pericardial tamponade, myocardial contusion, myocardial rupture, commotio cordis.	12-3.12	Discuss the pathophysiology of myocardial injuries, including the following: pericardial tamponade, myocardial contusion, myocardial rupture, commotio cordis.
12-3.13	Discuss the assessment findings associated with myocardial injuries.	12-3.13	Discuss the assessment findings associated with myocardial injuries.
12-3.14	Discuss the management of myocardial injuries.	12-3.14	Discuss the management of myocardial injuries.
12-3.15	Identify the need for rapid intervention and transport of the patient with myocardial injuries.	12-3.15	Identify the need for rapid intervention and transport of the patient with myocardial injuries.
		12-3.16	Discuss the pathophysiology of vascular injuries, including injuries to the following: aorta, vena cava, pulmonary arteries/veins.
		12-3.17	Discuss the assessment findings associated with vascular injuries.
		12-3.18	Discuss the management of vascular injuries.
		12-3.19	Identify the need for rapid intervention and transport of the patient with vascular injuries.

	12-3.20	Discuss the pathophysiology of diaphragmatic injuries.
	12-3.21	Discuss the assessment findings associated with diaphragmatic injuries.
	12-3.22	Discuss the management of diaphragmatic injuries.
	12-3.23	Identify the need for rapid intervention and transport of the patient with diaphragmatic injuries.
	12-3.24	Identify the need for rapid intervention and transport of the patient with esophageal injuries.
	12-3.25	Discuss the pathophysiology of tracheo-bronchial injuries.
	12-3.26	Discuss the assessment findings associated with tracheo-bronchial injuries.
	12-3.27	Discuss the management of tracheo-bronchial injuries.
	12-3.28	Identify the need for rapid intervention and transport of the patient with tracheobronchial injuries.
	12-3.29	Discuss the pathophysiology of traumatic asphyxia.
	12-3.30	Discuss the assessment findings associated with traumatic asphyxia.
	12-3.31	Discuss the management of traumatic asphyxia.
	12-3.32	Identify the need for rapid intervention and transport of the patient with traumatic asphyxia.
	12-3.33	Integrate the pathophysiological principles to the assessment of a patient with a thoracic injury.
	12-3.34	Develop a patient management plan based on the field impression.
	12-3.35	Recognize the need for the use of a thorough assessment to determine a differential diagnosis and treatment plan for thoracic trauma.
	12-3.36	Discuss the management of lung injuries, to include assisting in the insertion of a chest tube as well as monitoring and management of a chest tube.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

12-3.16 Demonstrate the assessment & management of a patient with a suspected chest (open and closed) injury.

Lesson 12-4 Abdominal and Genitourinary Trauma- At the completion of this lesson, the student will have a fundamental depth, simple breadth of pathophysiology, assessment and management of solid and hollow organ injuries, blunt versus penetrating mechanisms, evisceration, injuries to the external genitalia, vaginal bleeding due to trauma, and sexual assault.

Cognitive Objectives

The student will be able to:

12-4.1 Discuss the differences between hollow & solid organs.

12-4.2 Describe open and closed abdominal injuries.

12-4.3 Explain the pathophysiology of abdominal injuries.

12-4.4 Describe the assessment findings associated with abdominal injuries.

12-4.5 Describe the management of abdominal injuries.

12-4.6 Integrate the pathophysiological principles to the assessment of a patient with abdominal injury.

12-4.7 Formulate a field impression for patients with abdominal trauma based on the assessment findings.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

12-3.37 Demonstrate the assessment & management of a patient with a suspected chest (open and closed) injury.

12-3.38 Demonstrate the following techniques of management for thoracic injuries: needle decompression, fracture stabilization, elective intubation, ECG monitoring, oxygenation and ventilation

12-4 Abdominal and Genitourinary Trauma - At the completion of this lesson the student will have a complex depth, comprehensive breadth of pathophysiology, assessment, and management of vascular injury, solid and hollow organ injuries, blunt versus penetrating mechanisms, evisceration, retroperitoneal injuries and injuries to the external genitalia.

Cognitive Objectives

The student will be able to:

12-4.2 Discuss the differences between hollow & solid organs.

12-4.2 Describe open and closed abdominal injuries.

12-4.3 Explain the pathophysiology of abdominal injuries.

12-4.4 Describe the assessment findings associated with abdominal injuries.

12-4.5 Describe the management of abdominal injuries.

12-4.6 Integrate the pathophysiological principles to the assessment of a patient with abdominal injury.

12-4.7 Formulate a field impression for patients with abdominal trauma based on the assessment findings.

12-4.8	Develop a patient management plan for patients with abdominal trauma based on the field impression.	12-4.8	Develop a patient management plan for patients with abdominal trauma based on the field impression.
12-4.9	Explain the pathophysiology of solid organ injuries.	12-4.9	Explain the pathophysiology of solid organ injuries.
12-4.10	Describe the assessment findings associated with solid organ injuries.	12-4.10	Describe the assessment findings associated with solid organ injuries.
12-4.11	Describe the treatment plan and management of solid organ injuries.	12-4.11	Describe the treatment plan and management of solid organ injuries.
12-4.12	Explain the pathophysiology of hollow organ injuries.	12-4.12	Explain the pathophysiology of hollow organ injuries.
12-4.13	Describe the assessment findings associated with hollow organ injuries.	12-4.13	Describe the assessment findings associated with hollow organ injuries.
12-4.14	Describe the treatment plan and management of hollow organ injuries.	12-4.14	Describe the treatment plan and management of hollow organ injuries.
12-4.15	Describe the epidemiology, including the morbidity/mortality and prevention strategies for abdominal vascular injuries.	12-4.15	Describe the epidemiology, including the morbidity/mortality and prevention strategies for abdominal vascular injuries.
12-4.16	Explain the pathophysiology of abdominal vascular injuries.	12-4.16	Explain the pathophysiology of abdominal vascular injuries.
12-4.17	Describe the assessment findings associated with abdominal vascular injuries.	12-4.17	Describe the assessment findings associated with abdominal vascular injuries.
12-4.18	Describe the treatment plan and management of abdominal vascular injuries.	12-4.18	Describe the treatment plan and management of abdominal vascular injuries.
12-4.19	Integrate the pathophysiological principles to the assessment of a patient with abdominal injuries.	12-4.19	Integrate the pathophysiological principles to the assessment of a patient with abdominal injuries.
12-4.20	Formulate a field impression based upon the assessment findings for a patient with abdominal injuries.	12-4.20	Formulate a field impression based upon the assessment findings for a patient with abdominal injuries.
12-4.21	Develop a patient management plan for a patient with abdominal injuries, based upon field impression.	12-4.21	Develop a patient management plan for a patient with abdominal injuries, based upon field impression.
12-4.22	Recognize the need for the use of a thorough assessment to determine a differential diagnosis and treatment plan for abdominal trauma.	12-4.22	Recognize the need for the use of a thorough assessment to determine a differential diagnosis and treatment plan for abdominal trauma.
12-4.23	Describe and demonstrate the assessment & management of a patient with a suspected abdominal (penetrating or blunt) or	12-4.23	Describe and demonstrate the assessment & management of a patient with a suspected abdominal (penetrating or blunt) or genitourinary injury.

genitourinary injury.

12-4.24 Explain special consideration related to a patient who has experienced an injury by sexual assault/abuse.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

12-4.25 Demonstrate the assessment & management of a patient with a suspected abdominal (penetrating or blunt) or genitourinary injury.

Lesson 12-5 Orthopedic Trauma- At the completion of this lesson, the student will have a fundamental depth, foundational breadth of pathophysiology, assessment, and management of upper and lower extremity-orthopedic trauma, open fractures, closed fractures, dislocations, sprains/strains, pelvic fractures and amputations/replantation.

Cognitive Objectives

The student will be able to:

12-5.1 Discuss the pathophysiology of musculoskeletal injuries.

12-5.2 Discuss the types of musculoskeletal injuries: fracture (open and closed), dislocation/ fracture, sprain, strain.

12-5.3 Discuss the assessment findings associated with musculoskeletal injuries.

12-5.4 List the six "Ps" of musculoskeletal injury assessment.

12-5.5 List the primary signs and symptoms of extremity trauma.

12-4.24 Explain special consideration related to a patient who has experienced an injury by sexual assault/abuse.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

12-4.25 Demonstrate the assessment & management of a patient with a suspected abdominal (penetrating or blunt) or genitourinary injury

12-5 Orthopedic Trauma_ At the completion of this lesson, the student will have a fundamental depth, foundational breadth of pathophysiology, assessment, and management of pediatric fractures, tendon laceration/transaction/rupture (Achilles and patellar), compartment syndrome and a complex depth, foundational breadth of upper and lower extremity orthopedic trauma, open fractures, closed fractures and dislocations.

Cognitive Objectives

The student will be able to:

12-5.1 Discuss the pathophysiology of musculoskeletal injuries.

12-5.2 Discuss the types of musculoskeletal injuries: fracture (open and closed), dislocation/ fracture, sprain, strain.

12-5.3 Discuss the assessment findings associated with musculoskeletal injuries.

12-5.4 List the six "Ps" of musculoskeletal injury assessment.

12-5.5 List the primary signs and symptoms of extremity trauma.

12-5.6 Discuss the need for assessment of pulses, motor, and sensation

12-5.6	Discuss the need for assessment of pulses, motor, and sensation before and after splinting.		before and after splinting.
12-5.7	Discuss the management of musculoskeletal injuries.	12-5.7	Discuss the management of musculoskeletal injuries.
12-5.8	Discuss the general guidelines for splinting.	12-5.8	Discuss the general guidelines for splinting.
12-5.9	Explain the benefits of cold application for musculoskeletal injury.	12-5.9	Explain the benefits of cold application for musculoskeletal injury.
12-5.10	Explain the benefits of heat application for musculoskeletal injury.	12-5.10	Explain the benefits of heat application for musculoskeletal injury.
12-5.11	Describe age-associated changes in the bones.	12-5.11	Describe age-associated changes in the bones.
12-5.12	Discuss the assessment findings associated with fractures.	12-5.12	Discuss the assessment findings associated with fractures.
12-5.13	Discuss the management of fractures.	12-5.13	Discuss the management of fractures.
12-5.14	Discuss the usefulness of the pneumatic anti-shock garment (PASG) in the management of fractures.	12-5.14	Discuss the usefulness of the pneumatic anti-shock garment (PASG) in the management of fractures.
12-5.15	Discuss the assessment findings of dislocations.	12-5.15	Discuss the assessment findings of dislocations.
12-5.16	Discuss the out-of-hospital management of dislocation/fractures, including splinting and realignment.	12-5.16	Discuss the out-of-hospital management of dislocation/fractures, including splinting and realignment.
12-5.17	Discuss the pathophysiology of sprains.	12-5.17	Discuss the pathophysiology of sprains.
12-5.18	Discuss the assessment and management of sprains.	12-5.18	Discuss the assessment and management of sprains.
12-5.19	Discuss the pathophysiology of strains.	12-5.19	Discuss the pathophysiology of strains.
12-5.20	Discuss the assessment and management of strains.	12-5.20	Discuss the assessment and management of strains.
12-5.21	Discuss the pathophysiology of a tendon injury.	12-5.21	Discuss the pathophysiology of a tendon injury.
12-5.22	Discuss the assessment and management of tendon injury.	12-5.22	Discuss the assessment and management of tendon injury.
12-5.23	Discuss the pathophysiology of a pelvic injury.	12-5.23	Discuss the pathophysiology of a pelvic injury.
12-5.24	Discuss the assessment and management of a pelvic injury.	12-5.24	Discuss the assessment and management of a pelvic injury.
12-5.25	Discuss the pathophysiology of an amputation / replantation	12-5.25	Discuss the pathophysiology of an amputation / replantation
12-5.26	Discuss the assessment and management of an amputation.	12-5.26	Discuss the assessment and management of an amputation.
		12-5.27	Recognize the use of pain management in the treatment of musculoskeletal injuries.

Affective Objectives

The student will be able to:

12-5.27 Explain the rationale for splinting at the scene versus load and go.

12-5.28 Explain the rationale for immobilization of the painful, swollen, deformed extremity.

Psychomotor Objectives

The student will be able:

12-5.29 Demonstrate a clinical assessment to determine the proper treatment plan for a patient with a suspected musculoskeletal injury.

12-5.30 Demonstrate the proper use of fixation, soft, and traction splints for a patient with a suspected fracture.

Lesson 12-6 Soft Tissue Trauma- At the completion of this lesson, the student will have a fundamental depth, foundational breadth of pathophysiology, assessment, and management of wounds, avulsions, bite wounds, lacerations, puncture wounds, incisions, burns (electrical, chemical, and radiation), and a simple depth, simple breadth of crush syndrome.

Cognitive Objectives

The student will be able to:

12-6.1 Discuss the pathophysiology, assessment and management of wounds, burns, crush injuries and high pressure injection injuries.

12-6.2 Differentiate between the following types of closed soft tissue injuries: wounds, burns, high pressure injection and crush syndrome injuries.

12-6.3 Discuss the assessment and management of closed soft

Affective Objectives

The student will be able to:

12-5.28 Explain the rationale for splinting at the scene versus load and go.

12-5.29 Explain the rationale for immobilization of the painful, swollen, deformed extremity.

Psychomotor Objectives

The student will be able to:

12-5.30 Demonstrate a clinical assessment to determine the proper treatment plan for a patient with a suspected musculoskeletal injury.

12-5.31 Demonstrate the proper use of fixation, soft, and traction splints for a patient with a suspected fracture.

12-6 Soft Tissue Trauma. At the completion of this lesson, the student will have a complex depth, comprehensive breadth of pathophysiology, assessment, and management of wounds such as avulsions, bite wounds, lacerations, puncture wounds, burns (electrical, chemical and thermal), high-pressure injection and crush syndrome.

Cognitive Objectives

The student will be able to:

12-6.1 Discuss the pathophysiology, assessment and management of wounds, burns, crush injuries and high pressure injection injuries.

12-6.2 Differentiate between the following types of closed soft tissue injuries: wounds, burns, high pressure injection and crush syndrome injuries.

12-6.3 Discuss the assessment and management of closed soft

	tissue injuries.		tissue injuries.
12-6.4	Discuss the assessment and management of open soft tissue injuries.	12-6.4	Discuss the assessment and management of open soft tissue injuries.
12-6.5	Differentiate between the following types of open soft tissue injuries: abrasions, lacerations, major arterial lacerations, avulsions, bites, impaled objects, amputations, incisions, crush injuries, blast injuries, and penetrations/punctures.	12-6.5	Differentiate between the following types of open soft tissue injuries: abrasions, lacerations, major arterial lacerations, avulsions, bites, impaled objects, amputations, incisions, crush injuries, blast injuries, and penetrations/punctures.
12-6.6	Define the following conditions: crush injury, crush syndrome, compartment syndrome.	12-6.6	Define the following conditions: crush injury, crush syndrome, compartment syndrome.
12-6.7	Discuss the mechanisms of injury in a crush injury	12-6.7	Discuss the mechanisms of injury in a crush injury
12-6.8	Discuss the assessment and management of crush injuries.	12-6.8	Discuss the assessment and management of crush injuries.
12-6.9	Differentiate between the various management techniques for hemorrhage control of open soft tissue injuries, including but not limited to: direct pressure, pressure dressing, and tourniquet application.	12-6.9	Differentiate between the various management techniques for hemorrhage control of open soft tissue injuries, including but not limited to: direct pressure, pressure dressing, and tourniquet application.
12-6.10	Differentiate between the types of injuries requiring the use of an occlusive versus non- occlusive dressing.	12-6.10	Differentiate between the types of injuries requiring the use of an occlusive versus non- occlusive dressing.
12-6.11	Discuss the possible complications of an improperly applied dressing, bandage, or tourniquet.	12-6.11	Discuss the possible complications of an improperly applied dressing, bandage, or tourniquet.
12-6.12	Identify types of burn injuries, including a thermal burn, an inhalation burn, a chemical burn, electrical burn, and radiation exposure.	12-6.12	Identify types of burn injuries, including a thermal burn, an inhalation burn, a chemical burn, electrical burn, and radiation exposure.
12-6.13	Describe the depth classifications of burn injuries, including a superficial burn, a partial-thickness burn, a full-thickness burn, and other depth classifications described by local protocol.	12-6.13	Describe the depth classifications of burn injuries, including a superficial burn, a partial-thickness burn, a full-thickness burn, and other depth classifications described by local protocol.
12-6.14	Describe methods for determining body surface area percentage of a burn injury including the "rules of nines," the "rules of palms," and other methods described by local protocol.	12-6.14	Describe methods for determining body surface area percentage of a burn injury including the "rules of nines," the "rules of palms," and other methods described by local protocol.
12-6.15	Describe the severity of a burn including a minor burn, a moderate burn, a severe burn, and other severity classifications described by local protocol.	12-6.15	Describe the severity of a burn including a minor burn, a moderate burn, a severe burn, and other severity classifications described by local protocol.
12-6.16	Describe the management of a burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological,	12-6.16	Describe the management of a burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological,

<p>transport considerations, psychological support/ communication strategies, and other management described by local protocol.</p>	<p>transport considerations, psychological support/ communication strategies, and other management described by local protocol.</p>
<p>12-6.17 Describe the management of an inhalation burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies.</p>	<p>12-6.17 Describe the management of an inhalation burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies.</p>
<p>12-6.18 Describe the management of a chemical burn injury and a chemical burn injury to the eye, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies.</p>	<p>12-6.18 Describe the management of a chemical burn injury and a chemical burn injury to the eye, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies.</p>
<p>12-6.19 Describe the management of an electrical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies.</p>	<p>12-6.19 Describe the management of an electrical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies.</p>
<p>12-6.20 Describe the depth classifications of a radiation exposure.</p>	<p>12-6.20 Develop a management plan based on the field impression for the patient with thermal, inhalation, chemical, and electrical burn injuries.</p>
<p>12-6.21 Describe the severity of a radiation exposure.</p>	<p>12-6.21 Discuss the assessment and management of high-pressure injection injuries.</p>
<p>12-6.22 Describe the management of a radiation exposure, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies.</p>	<p>12-6.22 Develop a management plan based on the field impression for the patient with thermal, inhalation, chemical, electrical, and radiation burn injuries.</p>
<p>12-6.23 Develop a management plan based on the field impression for the patient with thermal, inhalation, chemical, electrical, and radiation burn injuries.</p>	
<p><u>Affective Objectives</u></p>	<p><u>Affective Objectives</u></p>
<p>None</p>	<p>None</p>
<p><u>Psychomotor Objectives</u></p>	<p><u>Psychomotor Objectives</u></p>
<p>The student will be able to:</p>	<p>The student will be able to:</p>
<p>12-6.24 Demonstrate the assessment and management of a patient with signs and symptoms of soft tissue injury, including the following: contusion, hematoma, crushing, abrasion, laceration, avulsion, bites, amputation, impaled object, penetration/puncture</p>	<p>12-6.23 Demonstrate the assessment and management of a patient with signs and symptoms of soft tissue injury, including the following: contusion, hematoma, crushing, abrasion, laceration, avulsion, bites, amputation, impaled object, penetration/puncture</p>

- 12-6.25 Perform management of a thermal burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.
- 12-6.26 Perform management of an inhalation burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.
- 12-6.27 Perform management of a chemical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.
- 12-6.28 Perform management of an electrical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.
- 12-6.29 Perform management of a radiation exposure, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.

Lesson 12-7 Head, Facial, Neck, and Spine Trauma - At the completion of this lesson, the student will have a fundamental depth, foundational breadth of pathophysiology, assessment, and management of penetrating neck trauma, laryngotracheal injuries, spine trauma and a simple depth, simple breadth of facial fractures, skull fractures, foreign bodies in the eyes and dental trauma.

Cognitive Objectives

The student will be able to:

- 12-7.1 Discuss the pathophysiology of head, facial, neck and spine trauma.
- 12-7.2 Recognize and manage life threats due to head, neck and spine trauma.

- 12-6.24 Perform management of a thermal burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.
- 12-6.25 Perform management of an inhalation burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.
- 12-6.26 Perform management of a chemical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.
- 12-6.27 Perform management of an electrical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.
- 12-6.28 Perform management of a radiation exposure, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol.

12-7 Head, Face, Neck, and Spine— At the completion of this lesson, the student will have a fundamental depth, foundational breadth of pathophysiology, assessment, and management of unstable facial fractures, orbital fractures, perforated tympanic membrane, and a complex depth, comprehensive breadth of skull fractures, penetrating neck trauma, laryngotracheal injuries, spine trauma; including dislocations/subluxations, fractures and sprains/strains and mandibular fractures.

Cognitive Objectives

The student will be able to:

- 12-7.1 Discuss the pathophysiology of head, facial, neck and spine trauma.
- 12-7.2 Recognize and manage life threats due to head, neck and spine trauma.

12-7.3	Discuss the assessment findings and management of penetrating neck trauma.	12-7.3	Discuss the assessment findings and management of penetrating neck trauma.
12-7.4	Develop a management plan for a patient with a penetrating neck injury.	12.7.4	Develop a management plan for a patient with a penetrating neck injury.
12-7.5	Discuss the assessment findings and management of laryngotracheal injuries.	12-7.5	Discuss the assessment findings and management of laryngotracheal injuries.
12-7.6	Develop a management plan for a patient with a laryngotracheal injury.	12-7.6	Develop a management plan for a patient with a laryngotracheal injury.
12-7.7	Discuss the assessment findings and management of spine trauma including dislocations/subluxations, fractures, and sprains/strains.	12-7.7	Discuss the assessment findings and management of spine trauma including dislocations/subluxations, fractures, and sprains/strains.
12-7.8	Develop a management plan for a patient with spine trauma including dislocations/subluxations, fractures, and sprains/strains.	12-7.8	Develop a management plan for a patient with spine trauma including dislocations/subluxations, fractures, and sprains/strains.
12-7.9	Discuss the assessment findings and management of different types of skull fractures.	12-7.9	Discuss the assessment findings and management of different types of skull fractures.
12-7.10	Develop a management plan for a patient with various types of skull fractures.	12-7.10	Develop a management plan for a patient with various types of skull fractures.
12-7.11	Discuss the assessment findings and management of unstable facial fractures.	12-7.11	Discuss the assessment findings and management of a perforated tympanic membranes.
12-7.12	Develop a management plan for a patient with an unstable facial fracture.	12-7.12	Develop a management plan for a patient with a perforated t tympanic membrane.
12-7.13	Discuss the assessment findings and management of foreign bodies in the eyes.	12-7.13	Discuss the assessment findings and management of an orbital fracture.
12-7.14	Develop a management plan for a patient with foreign bodies in the eyes.	12-7.14	Develop a management plan for a patient with an orbital fracture.
12-7.15	Discuss the assessment findings and management of dental trauma.	12-7.15	Discuss the assessment findings and management of mandibular fractures.
12-7.16	Develop a management plan for a patient with dental trauma.	12-7.16	Develop a management plan for a patient with a mandibular fracture.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 12-7.17 Demonstrate the stabilization of a foreign object impaled in the eye.
- 12-7.18 Demonstrate irrigation of the eye using a nasal cannula, bottle or basin.
- 12-7.19 Demonstrate how to care for a penetrating injury to the eye.
- 17-7.20 Demonstrate how to control bleeding from the neck.
- 12-7.21 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected traumatic spinal injury.
- 12-7.22 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected nontraumatic spinal injury.
- 12-7.23 Demonstrate immobilization of the urgent and non-urgent patient with assessment findings of spinal injury from the following presentations: supine Prone, semi-prone, sitting, standing,
- 12-7.24 Demonstrate documentation of suspected spinal cord injury to include the following: general area of spinal cord involved, sensation, dermatomes, motor function, area(s) of weakness
- 12-7.25 Demonstrate documentation of assessment before, during and after spinal immobilization.
- 12-7.26 Demonstrate how to immobilize a patient found in the sitting, standing, supine and prone position.
- 12-7.27 Demonstrate how to perform rapid extrication technique.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 12-7.17 Demonstrate the stabilization of a foreign object impaled in the eye.
- 12-7.18 Demonstrate irrigation of the eye using a nasal cannula, bottle or basin.
- 12-7.19 Demonstrate how to care for a penetrating injury to the eye.
- 17-7.20 Demonstrate how to control bleeding from the neck.
- 12-7.21 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected traumatic spinal injury.
- 12-7.22 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected nontraumatic spinal injury.
- 12-7.23 Demonstrate immobilization of the urgent and non-urgent patient with assessment findings of spinal injury from the following presentations: supine Prone, semi-prone, sitting, standing,
- 12-7.24 Demonstrate documentation of suspected spinal cord injury to include the following: general area of spinal cord involved, sensation, dermatomes, motor function, area(s) of weakness
- 12-7.25 Demonstrate documentation of assessment before, during and after spinal immobilization.
- 12-7.26 Demonstrate how to immobilize a patient found in the sitting, standing, supine and prone position.
- 12-7.27 Demonstrate how to perform rapid extrication technique.

Lesson 12-8 Nervous System Trauma- At the completion of this lesson, the student will have a fundamental depth, foundational breadth of pathophysiology, assessment, and management of traumatic brain injury and spinal cord injury.

Cognitive Objectives

The student will be able to:

- 12-8.1 Discuss the pathophysiology, assessment and management of traumatic brain injury and spinal cord trauma.
- 12-8.2 Discuss the assessment findings and management of traumatic brain injury.
- 12-8.3 Develop a management plan for a patient with a traumatic brain injury.
- 12-8.4 Discuss the assessment findings and management of spinal cord trauma.
- 12-8.5 Develop a management plan for a patient with a spinal cord injury.

12-8 Nervous System Trauma - At the completion of this lesson, the student will have a fundamental depth, foundational breadth of pathophysiology, assessment, and management of Cauda equine syndrome, nerve root injury, peripheral nerve injury, and a complex depth, comprehensive breadth of traumatic brain injury, spinal cord injury and spinal shock.

Cognitive Objectives

The student will be able to:

- 12-8.1 Discuss the pathophysiology, assessment and management of traumatic brain injury and spinal cord trauma, cauda equine syndrome, nerve root injury, peripheral nerve injury and spinal shock.
- 12-8.2 Discuss the assessment findings and management of traumatic brain injury.
- 12-8.3 Develop a management plan for a patient with a traumatic brain injury.
- 12-8.4 Discuss the assessment findings and management of spinal cord trauma.
- 12-8.5 Develop a management plan for a patient with a spinal cord injury.
- 12-8.6 Discuss the assessment findings and management of spinal shock.
- 12-8.7 Develop a management plan for a patient with spinal shock.
- 12-8.8 Discuss the assessment findings and management of cauda equine syndrome.
- 12-8.9 Develop a management plan for a patient with cauda equine syndrome.
- 12-8.10 Discuss the assessment findings and management of a nerve root injury.
- 12-8.11 Develop a management plan for a patient with a nerve root injury.
- 12-8.12 Discuss the assessment findings and management of peripheral nerve injury.

Affective Objectives

The student will be able to:

- 12-8.6 Explain the rationale for immobilization of the entire spine when a cervical spine injury is suspected.
- 12-8.7 Explain the rationale for utilizing immobilization methods apart from the straps on the cots.
- 12-8.8 Explain the rationale for utilizing a short spine immobilization device when moving a patient from the sitting to the supine position.
- 12-8.9 Explain the rationale for utilizing rapid extrication approaches only when they indeed will make the difference between life and death.
- 12-8.10 Defend the reasons for leaving a helmet in place for transport of a patient.
- 12-8.11 Defend the reasons for removal of a helmet prior to transport of a patient.

Psychomotor Objectives

The student will be able to:

- 12-8.12 Demonstrate the assessment & management of a patient with a nervous system injury.
- 12-8.13 Demonstrate stabilization of the cervical spine.
- 12-8.14 Demonstrate the four person log roll for a patient with a suspected spinal cord injury.
- 12-8.15 Demonstrate how to log roll a patient with a suspected spinal cord injury using two people.

- 12-8.13 Develop a management plan for a patient with a peripheral nerve injury.

Affective Objectives

The student will be able to:

- 12-8.14 Explain the rationale for immobilization of the entire spine when a cervical spine injury is suspected.
- 12-8.15 Explain the rationale for utilizing immobilization methods apart from the straps on the cots.
- 12-8.16 Explain the rationale for utilizing a short spine immobilization device when moving a patient from the sitting to the supine position.
- 12-8.17 Explain the rationale for utilizing rapid extrication approaches only when they indeed will make the difference between life and death.
- 12-8.18 Defend the reasons for leaving a helmet in place for transport of a patient.
- 12-8.19 Defend the reasons for removal of a helmet prior to transport of a patient.

Psychomotor Objectives

The student will be able to:

- 12-8.20 Demonstrate the assessment & management of a patient with a nervous system injury.
- 12-8.21 Demonstrate stabilization of the cervical spine.
- 12-8.22 Demonstrate the four person log roll for a patient with a suspected spinal cord injury.
- 12-8.23 Demonstrate how to log roll a patient with a suspected spinal cord injury using two people.

- 12-8.16 Demonstrate securing a patient to a long spine board.
- 12-8.17 Demonstrate using the short board or vest type immobilization technique.
- 12-8.18 Demonstrate spinal immobilization for the standing patient
- 12-8.19 Demonstrate procedure for rapid extrication.
- 12-8.20 Demonstrate preferred methods for stabilization of a helmet.
- 12-8.21 Demonstrate helmet removal techniques.
- 12-8.22 Demonstrate alternative methods for stabilization of a helmet.

Lesson 12-9 Special Considerations in Trauma – At the completion of this lesson the student will have a fundamental depth, foundational breadth of pathophysiology, assessment and management of trauma in the pregnant patient, pediatric patient, geriatric patient and cognitively impaired patient.

Cognitive Objectives

The student will be able to:

- 12-9.1 Discuss the pathophysiology, assessment and management of trauma in the pregnant patient, pediatric patient, geriatric patient and cognitively impaired patient.
- 12-9.2 Determine a management plan for trauma patients with special considerations including:
 - a. pregnancy trauma
 - b. pediatrics trauma
 - c. geriatric trauma
 - d. cognitively impaired

Affective Objectives

None

- 12-8.24 Demonstrate securing a patient to a long spine board.
- 12-8.25 Demonstrate using the short board or vest type immobilization technique.
- 12-8.26 Demonstrate spinal immobilization for the standing patient
- 12-8.27 Demonstrate procedure for rapid extrication.
- 12-8.28 Demonstrate preferred methods for stabilization of a helmet.
- 12-8.29 Demonstrate helmet removal techniques.
- 12-8.30 Demonstrate alternative methods for stabilization of a helmet.

12-9 Special Considerations in Trauma At the completion of this lesson the student will have complex depth, comprehensive breadth of pathophysiology, assessment and management of trauma in the pregnant patient, pediatric patient, geriatric patient and cognitively impaired patient.

Cognitive Objectives

The student will be able to:

- 12-9.1 Discuss the pathophysiology, assessment and management of trauma in the pregnant patient, pediatric patient, geriatric patient and cognitively impaired patient.
- 12-9.1 Determine a management plan for trauma patients with special considerations including:
 - a. pregnancy trauma
 - b. pediatrics trauma
 - c. geriatric trauma
 - d. cognitively impaired

Affective Objectives

None

Psychomotor Objectives

- 12-9.3 Demonstrate unique injuries and conditions along with assessment & management for the pregnant patient involved in trauma.
- 12-9.4 Demonstrate unique assessment & management considerations for the pediatric trauma patient.
- 12-9.5 Demonstrate unique assessment & management considerations for the elderly trauma patient.
- 12-9.6 Demonstrate unique assessment & management considerations for the cognitively impaired trauma patient.

Lesson 12-10 Environmental Emergencies- At the completion of this lesson the student will have a fundamental depth, foundational breadth of pathophysiology, assessment and management of near-drowning, temperature-related illness, bites and envenomations, dysbarism such as high-altitude, diving injuries, electrical injury and radiation exposure.

Cognitive Objectives

The student will be able to:

- 12-10.1 Discuss the pathophysiology, assessment and management of near-drowning, temperature-related illness, bites and envenomations, dysbarism such as high-altitude, diving injuries, electrical injury and high altitude illness.
- 12-10.2 Define drowning and discuss its incidence, risk factors & prevention.
- 12-10.3 Describe submersion in salt and fresh water
- 12-10.4 Discuss & demonstrate assessment & management considerations for a patient of a submersion incident.
- 12-10.5 Describe the different types of diving emergencies and how they may occur.
- 12-10.6 Discuss assessment & management considerations for a patient of a dysbarism incident.

Psychomotor Objectives

- 12-9.3 Demonstrate unique injuries and conditions along with assessment & management for the pregnant patient involved in trauma.
- 12-9.4 Demonstrate unique assessment & management considerations for the pediatric trauma patient.
- 12-9.5 Demonstrate unique assessment & management considerations for the elderly trauma patient.
- 12-9.6 Demonstrate unique assessment & management considerations for the cognitively impaired trauma patient

12-10 Environmental Emergencies – At the completion of this lesson the student will have a complex depth, comprehensive breadth of pathophysiology, assessment and management of near-drowning, temperature-related illness, bites and envenomations, dysbarism such as high-altitude, diving injuries, electrical injury and high altitude illness.

Cognitive Objectives

The student will be able to:

- 12-10.1 Discuss the pathophysiology, assessment and management of near-drowning, temperature-related illness, bites and envenomations, dysbarism such as high-altitude, diving injuries, electrical injury and high altitude illness.
- 12-10.2 Define drowning and discuss its incidence, risk factors & prevention.
- 12-10.3 Describe submersion in salt and fresh water
- 12-10.4 Discuss & demonstrate assessment & management considerations for a patient of a submersion incident.
- 12-10.5 Describe the different types of diving emergencies and how they may occur.
- 12-10.6 Discuss assessment & management considerations for a patient of a dysbarism incident.

- 12-10.7 Discuss assessment & management considerations for a patient of a lightning incident
- 12-10.8 Discuss assessment & management considerations for a patient of a temperature related illness
- 12-10.9 Identify the species of insects, spiders & snakes in the US that may cause life threatening injuries.
- 12-10.10 Discuss assessment & management considerations for a patient of a bite or envenomation.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 12-10.11 Demonstrate the assessment and emergency medical care of a patient with exposure cold.
- 12-10.12 Demonstrate the assessment and emergency medical care of a patient with exposure to heat.
- 12-10.13 Demonstrate the assessment and emergency medical care of a submersion injury patient.
- 12-10.14 Demonstrate the assessment and emergency medical care of an insect/animal bite / envenomation injury.

Lesson 12-11 Multi-Systems Trauma -- At the completion of this lesson the student will have a fundamental depth, foundational breadth of the pathophysiology, assessment, and management of multi-system trauma and blast injuries.

- 12-10.7 Discuss assessment & management considerations for a patient of a lightning incident
- 12-10.8 Discuss assessment & management considerations for a patient of a temperature related illness
- 12-10.9 Identify the species of insects, spiders & snakes in the US that may cause life threatening injuries.
- 12-10.10 Discuss assessment & management considerations for a patient of a bite or envenomation.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 12-10.11 Demonstrate the assessment and emergency medical care of a patient with exposure cold.
- 12-10.12 Demonstrate the assessment and emergency medical care of a patient with exposure to heat.
- 12-10.13 Demonstrate the assessment and emergency medical care of a submersion injury patient.
- 12-10.14 Demonstrate the assessment and emergency medical care of an insect/animal bite / envenomation injury.

12-11 Multi-Systems Trauma – At the completion of this lesson the student will have a complex depth, comprehensive breadth of the pathophysiology, assessment, and management of multi-system trauma and blast injuries.

Cognitive Objectives

The student will be able to:

- 12-11.1 Discuss the pathophysiology, assessment, and management of multi-system trauma and blast injuries.
- 12-11.2 Describe and provide a general overview of multisystem trauma patient management.
- 12-11.3 Discuss the golden principle of out-of-hospital trauma care
- 12-11.4 Discuss & demonstrate assessment & management considerations for a patient of multi system injuries.
- 12-11.5 Discuss specific injuries related to multi-systems trauma including:
 - a. blast injuries

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 12-11.6 Perform and assessment and develop a treatment plan for a patient with multi-systems trauma.

Cognitive Objectives

The student will be able to:

- 12-11.1 Discuss the pathophysiology, assessment, and management of multi-system trauma and blast injuries.
- 12-11.2 Describe and provide a general overview of multisystem trauma patient management.
- 12-11.3 Discuss the golden principle of out-of-hospital trauma care
- 12-11.4 Discuss & demonstrate assessment & management considerations for a patient of multi system injuries.
- 12-11.5 Discuss specific injuries related to multi-systems trauma including:
 - a. blast injuries

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 12-11.6 Perform and assessment and develop a treatment plan for a patient with multi-systems trauma.

Module 13 Special Patient Populations – Applies a fundamental knowledge of growth, development, aging and assessment findings to provide basic emergency care and transportation for a patient with special needs. Includes EMR plus the following.

Module 13 Special Populations Integrates assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a filed impression and implement a comprehensive treatment/disposition plan for patients with special needs. Includes AEMT plus the following.

Lesson 13-1 Obstetrics At the completion of this lesson, the student will have a fundamental depth, foundational breadth of anatomy and physiology of normal pregnancy, pathophysiology of complications of pregnancy, assessment of the pregnant patient, management of normal delivery, abnormal delivery, such as nuchal cord, prolapsed cord, breech; third trimester bleeding such as placenta previa, abruption placenta, spontaneous abortion / miscarriage, ectopic pregnancy, preeclampsia and eclampsia.

Cognitive Objectives

The student will be able to:

- 13-1.1 Review the anatomic structures and physiology of the female system.
- 13-1.2 Identify the normal events of pregnancy.
- 13-1.3 Describe how to assess an obstetrical patient.
- 13-1.4 Identify the stages of labor and the rescuer's role in each stage.
- 13-1.5 Differentiate between normal and abnormal delivery.
- 13-1.6 Identify and describe complications associated with pregnancy and delivery.
- 13-1.7 State indications of an imminent delivery.
- 13-1.8 Differentiate the management of a patient with predelivery emergencies from a normal delivery.
- 13-1.9 State the steps in the pre-delivery preparation of the mother.
- 13-1.10 State the steps to assist in the delivery of a newborn.
- 13-1.11 Describe how to care for the newborn.

13-1 Obstetrics – At the completion of this lesson, the student will have a complex depth, comprehensive breadth of anatomy and physiology of pregnancy, pathophysiology of complications of pregnancy, assessment of the pregnant patient, psychosocial impact, presentations, prognosis, and management of normal delivery, abnormal delivery, such as nuchal cord, prolapsed cord, breech; spontaneous abortion / miscarriage, ectopic pregnancy, eclampsia, antepartum hemorrhage, pregnancy induced hypertension, third trimester bleeding such as placenta previa and abruption placenta, high risk pregnancy, complications of labor such as fetal distress, pre-term, premature rupture of membranes, rupture of uterus, complication of delivery and postpartum complications. The student will have foundational depth, foundational breadth of hyperemesis gravidarum and postpartum depression.

Cognitive Objectives

The student will be able to:

- 13-1.1 Review the anatomic structures and physiology of the female system.
- 13-1.2 Identify the normal events of pregnancy.
- 13-1.3 Describe how to assess an obstetrical patient.
- 13-1.4 Identify the stages of labor and the rescuer's role in each stage.
- 13-1.5 Differentiate between normal and abnormal delivery.
- 13-1.6 Identify and describe complications associated with pregnancy and delivery.
- 13-1.7 State indications of an imminent delivery.
- 13-1.8 Differentiate the management of a patient with predelivery emergencies from a normal delivery.
- 13-1.9 State the steps in the pre-delivery preparation of the mother.
- 13-1.10 State the steps to assist in the delivery of a newborn.
- 13-1.11 Describe how to care for the newborn.

- 13-1.12 Describe how and when to cut the umbilical cord.
- 13-1.13 Discuss the steps in the delivery of the placenta.
- 13-1.14 Describe the management of the mother post-delivery.
- 13-1.15 Describe the procedures for handling abnormal deliveries.
- 13-1.16 Describe the procedures for handling complications of pregnancy
- 13-1.17 Describe the procedures for handling maternal complications of labor.
- 13-1.18 Describe special considerations when meconium is present in amniotic fluid or during delivery.
- 13-1.19 Describe special considerations of a premature baby.

Affective Objectives

- 13-1.20 Explain the rationale for understanding the implications of treating two patients (mother and baby).

Psychomotor Objectives

The student will be able to:

- 13-1.21 Demonstrate how to listen to fetal heart tones.
- 13-1.22 Demonstrate the procedure to assist in a normal cephalic delivery.
- 13-1.23 Demonstrate care and procedures of the infant as the head Appears.
- 13-1.24 Demonstrate the steps to follow in post-delivery care of the infant.
- 13-1.25 Demonstrate how to cut and tie the umbilical cord
- 13-1.26 Demonstrate how to assist in the delivery of the placenta
- 13-1.27 Demonstrate the post-delivery care of the mother
- 13-1.28 Demonstrate how to assist with a breech delivery

- 13-1.12 Describe how and when to cut the umbilical cord.
- 13-1.13 Discuss the steps in the delivery of the placenta.
- 13-1.14 Describe the management of the mother post-delivery.
- 13-1.15 Describe the procedures for handling abnormal deliveries.
- 13-1.16 Describe the procedures for handling complications of pregnancy
- 13-1.17 Describe the procedures for handling maternal complications of labor.
- 13-1.18 Describe special considerations when meconium is present in amniotic fluid or during delivery.
- 13-1.19 Describe special considerations of a premature baby.

Affective Objectives

- 13-1.20 Explain the rationale for understanding the implications of treating two patients (mother and baby).

Psychomotor Objectives

The student will be able to:

- 13-1.21 Demonstrate how to listen to fetal heart tones.
- 13-1.22 Demonstrate the procedure to assist in a normal cephalic delivery.
- 13-1.23 Demonstrate care and procedures of the infant as the head Appears.
- 13-1.24 Demonstrate the steps to follow in post-delivery care of the infant.
- 13-1.25 Demonstrate how to cut and tie the umbilical cord
- 13-1.26 Demonstrate how to assist in the delivery of the placenta
- 13-1.27 Demonstrate the post-delivery care of the mother
- 13-1.28 Demonstrate how to assist with a breech delivery
- 13-1.29 Demonstrate how to assist with a limb presentation in the field.

- 13-1.29 Demonstrate how to assist with a limb presentation in the field.
- 13-1.30 Demonstrate the procedures for the following abnormal deliveries: vaginal bleeding, breech birth, prolapsed cord, limb presentation.
- 13-1.31 Demonstrate the steps in the emergency medical care of the mother with excessive bleeding.
- 13-1.32 Demonstrate the assessment and management of pregnancy induced hypertensive crisis.

Lesson 13-2 Neonatal Care At the completion of this lesson, the student will have a fundamental depth, foundational breadth of the newborn and neonatal resuscitation.

Cognitive Objectives

The student will be able to:

- 13-2.1 Define the term neonate.
- 13-2.2 Identify important antepartum factors that can affect childbirth.
- 13-2.4 Identify the factors that lead to premature birth and low birth weight newborns.
- 13-2.5 Calculate the APGAR score given various newborn situations.
- 13-2.6 Determine when ventilatory assistance is appropriate for a newborn.
- 13-2.7 Prepare appropriate ventilation equipment, adjuncts and technique for a newborn.
- 13-2.8 Determine when chest compressions are appropriate for a newborn.
- 13-2.9 Discuss appropriate chest compression techniques for a newborn.
- 13-2.10 Determine when blow-by oxygen delivery is appropriate for a newborn.

- 13-1.30 Demonstrate the procedures for the following abnormal deliveries: vaginal bleeding, breech birth, prolapsed cord, limb presentation.
- 13-1.31 Demonstrate the steps in the emergency medical care of the mother with excessive bleeding.
- 13-1.32 Demonstrate the assessment and management of pregnancy induced hypertensive crisis.

13-2 Neonatal Care At the completion of this lesson, the student will have a complex depth, comprehensive breadth of anatomy and physiology of neonatal circulation, assessment of the newborn, presentation of the newborn and neonatal resuscitation.

Cognitive Objectives

The student will be able to:

- 13-2.1 Define the term neonate.
- 13-2.2 Identify important antepartum factors that can affect childbirth.
- 13-2.4 Identify the factors that lead to premature birth and low birth weight newborns.
- 13-2.5 Calculate the APGAR score given various newborn situations.
- 13-2.6 Determine when ventilatory assistance is appropriate for a newborn.
- 13-2.7 Prepare appropriate ventilation equipment, adjuncts and technique for a newborn.
- 13-2.8 Determine when chest compressions are appropriate for a newborn.
- 13-2.9 Discuss appropriate chest compression techniques for a newborn.
- 13-2.10 Determine when blow-by oxygen delivery is appropriate for a newborn.

13-2.11	Discuss the signs of hypovolemia in a newborn.	13-2.11	Discuss the signs of hypovolemia in a newborn.
13-2.12	Discuss the initial steps in resuscitation of a newborn.	13-2.12	Discuss the initial steps in resuscitation of a newborn.
13-2.13	Discuss the effects maternal narcotic usage has on the newborn.	13-2.13	Discuss the effects maternal narcotic usage has on the newborn.
13-2.14	Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for meconium aspiration.	13-2.14	Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for meconium aspiration.
13-2.15	Discuss the management/treatment plan for meconium aspiration.	13-2.15	Discuss the management/treatment plan for meconium aspiration.
13-2.16	Discuss the pathophysiology of apnea in the neonate.	13-2.16	Discuss the pathophysiology of apnea in the neonate.
13-2.17	Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for bradycardia in the neonate.	13-2.17	Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for bradycardia in the neonate.
13-2.18	Discuss the assessment findings associated with bradycardia in the neonate.	13-2.18	Discuss the assessment findings associated with bradycardia in the neonate.
13-2.19	Discuss the management/ treatment plan for bradycardia in the neonate.	13-2.19	Discuss the management/ treatment plan for bradycardia in the neonate.
13-2.20	Discuss the pathophysiology of premature infants.	13-2.20	Discuss the pathophysiology of premature infants.
13-2.21	Discuss the pathophysiology of seizures in the neonate.	13-2.21	Discuss the pathophysiology of seizures in the neonate.
13-2.22	Discuss the pathophysiology of fever in the neonate.	13-2.22	Discuss the pathophysiology of fever in the neonate.
13-2.23	Discuss the management/treatment plan for fever in the neonate.	13-2.23	Discuss the management/treatment plan for fever in the neonate.
13-2.24	Discuss the management/treatment plan for hypoglycemia in the neonate.	13-2.24	Discuss the management/treatment plan for hypoglycemia in the neonate.
13-2.25	Discuss the management/treatment plan for vomiting in the neonate.	13-2.25	Discuss the management/treatment plan for vomiting in the neonate.
13-2.26	Discuss the pathophysiology of common birth injuries in the neonate.	13-2.26	Discuss the pathophysiology of common birth injuries in the neonate.
13-2.27	Discuss the assessment findings associated with common birth injuries in the neonate.	13-2.27	Discuss the assessment findings associated with common birth injuries in the neonate.
13-2.28	Discuss the management/treatment plan for common birth injuries in the neonate.	13-2.28	Discuss the management/treatment plan for common birth injuries in the neonate.

<p>13-2.29 Discuss the assessment and pathophysiology of cardiac arrest in the neonate.</p> <p>13-2.30 Discuss the management/treatment plan for cardiac arrest in the neonate.</p> <p>13-2.31 Discuss the pathophysiology of post arrest management of the neonate.</p> <p>13-2.32 Discuss the management/treatment plan to stabilize the post arrest neonate.</p>	<p>13-2.29 Discuss the assessment and pathophysiology of cardiac arrest in the neonate.</p> <p>13-2.30 Discuss the management/treatment plan for cardiac arrest in the neonate.</p> <p>13-2.31 Discuss the pathophysiology of post arrest management of the neonate.</p> <p>13-2.32 Discuss the management/treatment plan to stabilize the post arrest neonate.</p> <p>13-2.33 Determine when an orogastric tube should be inserted during positive-pressure ventilation.</p> <p>13-2.34 Determine when endotracheal intubation is appropriate for a newborn.</p> <p>13-2.35 Discuss appropriate endotracheal intubation techniques for a newborn.</p> <p>13-2.36 Identify complications related to endotracheal intubation for a newborn.</p> <p>13-2.37 Determine when vascular access is indicated for a newborn.</p> <p>13-2.38 Discuss the routes of medication administration for a newborn</p>
<p><u>Affective Objectives</u></p>	<p><u>Affective Objectives</u></p>
<p>None</p>	<p>None</p>
<p><u>Psychomotor Objectives</u></p>	<p><u>Psychomotor Objectives</u></p>
<p>13-2.33 Demonstrate preparation of a newborn resuscitation area.</p> <p>13-2.34 Demonstrate appropriate assessment technique for examining a newborn.</p> <p>13-2.35 Demonstrate appropriate assisted ventilations for a newborn.</p> <p>13-2.36 Demonstrate appropriate chest compression and ventilation technique for a newborn.</p>	<p>13-2.39 Demonstrate preparation of a newborn resuscitation area.</p> <p>13-2.40 Demonstrate appropriate assessment technique for examining a newborn.</p> <p>13-2.41 Demonstrate appropriate assisted ventilations for a newborn.</p> <p>13-2.42 Demonstrate appropriate chest compression and ventilation technique for a newborn.</p>

13-2.37 Demonstrate the initial steps in resuscitation of a newborn.

13-2.38 Demonstrate blow-by oxygen delivery for a newborn.

Lesson 13-3 Pediatrics At the completion of this lesson the student will have a fundamental depth, fundamental breadth of age related assessment findings, age related anatomic and physiologic variations, age related assessment and treatment modifications of the pediatric-specific major or common diseases and/or emergencies such as; upper airway obstruction, lower airway obstruction, respiratory distress/failure/arrest, shock, SIDS, gastrointestinal disease.

Cognitive Objectives

The student will be able to:

13-3.1 Identify key anatomical and physiological characteristics of infants and children and their implications.

13-3.2 Describe techniques for successful assessment of infants and children.

13-3.3 Identify "normal" age group related vital signs.

13-3.4 Determine appropriate airway adjuncts and ventilation devices for infants and children.

13-3.5 Discuss complications of improper utilization of airway adjuncts And ventilation devices with infants and children.

13-2.43 Demonstrate the initial steps in resuscitation of a newborn.

13-2.44 Demonstrate blow-by oxygen delivery for a newborn.

13-2.45 Demonstrate insertion of an orogastric tube

13-2.46 Demonstrate appropriate endotracheal intubation technique for a newborn.

13-2.47 Demonstrate vascular access cannulation techniques for a newborn except umbilical vein/artery access.

13-3 Pediatrics- At the completion of this lesson the student will have a complex depth, comprehensive breadth of age related assessment findings, age related anatomic and physiologic variations, age related assessment and treatment modifications of the pediatric-specific major or common diseases and/or emergencies such as; foreign body (upper and lower) airway obstruction, bacterial tracheitis, asthma, bronchiolitis including RSV, pneumonia, croup, epiglottitis, respiratory distress/failure/arrest, shock, seizures, SIDS, hyperglycemia and hypoglycemia. The student will have a fundamental depth, foundational breadth of pertussis, cystic fibrosis, broncho pulmonary dysplasia, congenital heart diseases, hydrocephalus and ventricular shunts.

Cognitive Objectives

The student will be able to:

13-3.1 Identify key anatomical and physiological characteristics of infants and children and their implications.

13-3.2 Describe techniques for successful assessment of infants and children.

13-3.3 Identify "normal" age group related vital signs.

13-3.4 Determine appropriate airway adjuncts and ventilation devices for infants and children.

13-3.5 Discuss complications of improper utilization of airway adjuncts And ventilation devices with infants and children.

13-3.6	Differentiate between upper airway obstruction and lower airway disease.	13-3.6	Differentiate between upper airway obstruction and lower airway disease.
13-3.7	Describe the general approach to the treatment of children with respiratory distress, failure, or arrest from upper airway obstruction or lower airway disease.	13-3.7	Describe the general approach to the treatment of children with respiratory distress, failure, or arrest from upper airway obstruction or lower airway disease.
13-3.8	Discuss the common causes of hypoperfusion in infants and children.	13-3.8	Discuss the common causes of hypoperfusion in infants and children.
13-3.9	Discuss the primary etiologies of cardiopulmonary arrest in infants and children.	13-3.9	Discuss the primary etiologies of cardiopulmonary arrest in infants and children.
13-3.10	Describe the primary etiologies of altered level of consciousness in infants and children.	13-3.10	Describe the primary etiologies of altered level of consciousness in infants and children.
13-3.11	Identify common lethal mechanisms of injury in infants and children.	13-3.11	Identify common lethal mechanisms of injury in infants and children.
13-3.12	Identify infant and child trauma patients who require spinal immobilization.	13-3.12	Identify infant and child trauma patients who require spinal immobilization.
13-3.13	Define child abuse / neglect	13-3.13	Define child abuse / neglect
13-3.14	Define sudden infant death syndrome (SIDS).	13-3.14	Define sudden infant death syndrome (SIDS).
13-3.15	Discuss the parent/caregiver responses to the death of an infant or child.	13-3.15	Discuss the parent/caregiver responses to the death of an infant or child.
13-3.16	Define children with special health care needs.	13-3.16	Define children with special health care needs.
13-3.17	Discuss basic cardiac life support (CPR) guidelines for infants and children.	13-3.17	Discuss basic cardiac life support (CPR) guidelines for infants and children.
13-3.18	Discuss the pathophysiology of respiratory distress/failure in infants and children.	13-3.18	Discuss the pathophysiology of respiratory distress/failure in infants and children.
13-3.19	Discuss the assessment and management/treatment plan for respiratory distress/failure in infants and children.	13-3.19	Discuss the assessment and management/treatment plan for respiratory distress/failure in infants and children.
13-3.20	Discuss the pathophysiology of hypo-perfusion in infants and children.	13-3.20	Discuss the pathophysiology of hypo-perfusion in infants and children.
13-3.21	Discuss the assessment and management/treatment plan for hypoperfusion in infants and children.	13-3.21	Discuss the assessment and management/treatment plan for hypoperfusion in infants and children.

13-3.22	Discuss the pathophysiology of neurological emergencies in infants and children.	13-3.22	Discuss the pathophysiology of neurological emergencies in infants and children.
13-3.23	Discuss the assessment and management/treatment plan for neurological emergencies in infants and children.	13-3.23	Discuss the assessment and management/treatment plan for neurological emergencies in infants and children.
13-3.24	Discuss the pathophysiology of trauma in infants and children.	13-3.24	Discuss the pathophysiology of trauma in infants and children.
13-3.25	Discuss the assessment and management/treatment plan for trauma in infants and children.	13-3.25	Discuss the assessment and management/treatment plan for trauma in infants and children.
13-3.26	Discuss the pathophysiology of abuse and neglect in infants and children.	13-3.26	Discuss the pathophysiology of abuse and neglect in infants and children.
13-3.27	Discuss the assessment and management/treatment plan for abuse and neglect in infants and children, including documentation and reporting.	13-3.27	Discuss the assessment and management/treatment plan for abuse and neglect in infants and children, including documentation and reporting.
13-3.28	Discuss the pathophysiology of children with special health care needs including technology assisted children.	13-3.28	Discuss the pathophysiology of children with special health care needs including technology assisted children.
13-3.29	Discuss the assessment management/treatment plan for children with special health care needs including technology assisted children.	13-3.29	Discuss the assessment management/treatment plan for children with special health care needs including technology assisted children.
13-3.30	Discuss the pathophysiology and assessment of SIDS in infants.	13-3.30	Discuss the pathophysiology and assessment of SIDS in infants.
13-3.31	Discuss the assessment and management/treatment plan for SIDS in infants.	13-3.31	Discuss the assessment and management/treatment plan for SIDS in infants.
		13-3.32	Identify complications of improper endotracheal intubation procedure in infants and children.
		13-3.33	Discuss the appropriate equipment for vascular access in infants and children.
		13-3.34	Identify complications of vascular access for infants and children.
		13-3.35	Determine when pain management and sedation are appropriate for infants and children.
		13-3.36	Integrate advanced life support skills with basic cardiac life support for infants and children.
		13-3.37	Discuss the indications, dosage, route of administration and

special considerations for medication administration in infants and children.

13-3.38 Discuss the pathophysiology of cardiac dysrhythmias in infants and children.

13-3.39 Discuss the assessment findings associated with cardiac dysrhythmias in infants and children.

13-3.40 Discuss the management/treatment plan for cardiac dysrhythmias in infants and children.

Affective Objectives

The student will be able to:

13-3.32 Explain the rationale for having knowledge and skills appropriate for dealing with the infant and child patient.

13-3.33 Attend to the feelings of the family when dealing with an ill or injured infant or child.

13-3.34 Understand the provider's own response (emotional) to caring for infants or children.

Psychomotor Objectives

The student will be able to:

13-3.44 Demonstrate appropriate intervention techniques with families of acutely ill or injured infants and children.

13-3.45 Demonstrate an appropriate assessment for different developmental age groups.

13-3.46 Demonstrate the appropriate approach for treating infants and children with respiratory distress, failure, and arrest.

13-3.47 Demonstrate proper technique for administering blow-by oxygen to infants and children.

13-3.48 Demonstrate proper technique for suctioning of infants and children.

Affective Objectives

The student will be able to:

13-3.41 Explain the rationale for having knowledge and skills appropriate for dealing with the infant and child patient.

13-3.42 Attend to the feelings of the family when dealing with an ill or injured infant or child.

13-3.43 Understand the provider's own response (emotional) to caring for infants or children.

Psychomotor Objectives

The student will be able to:

13-3.44 Demonstrate appropriate intervention techniques with families of acutely ill or injured infants and children.

13-3.45 Demonstrate an appropriate assessment for different developmental age groups.

13-3.46 Demonstrate the appropriate approach for treating infants and children with respiratory distress, failure, and arrest.

13-3.47 Demonstrate proper technique for administering blow-by oxygen to infants and children.

13-3.48 Demonstrate proper technique for suctioning of infants and children.

13-3.49	Demonstrate appropriate use of airway adjuncts with infants and children.	13-3.49	Demonstrate appropriate use of airway adjuncts with infants and children.
13-3.50	Demonstrate appropriate use of ventilation devices for infants and children.	13-3.50	Demonstrate appropriate use of ventilation devices for infants and children.
13-3.51	Demonstrate age appropriate basic airway clearing maneuvers for infants and children with a completely obstructed airway.	13-3.51	Demonstrate age appropriate basic airway clearing maneuvers for infants and children with a completely obstructed airway.
13-3.52	Demonstrate appropriate airway and breathing control maneuvers for infant and child trauma patients.	13-3.52	Demonstrate appropriate airway and breathing control maneuvers for infant and child trauma patients.
13-3.53	Demonstrate appropriate parent/caregiver interviewing techniques for infant and child death situations.	13-3.53	Demonstrate appropriate parent/caregiver interviewing techniques for infant and child death situations.
13-3.54	Demonstrate assessment & management considerations for Sudden Infant Death Syndrome (SIDS).	13-3.54	Demonstrate assessment & management considerations for Sudden Infant Death Syndrome (SIDS).
		13-3.55	Demonstrate proper techniques for performing infant and child defibrillation and synchronized cardioversion.
		13-3.56	Demonstrate endotracheal intubation procedures in infants and children.
		13-3.57	Demonstrate appropriate treatment/management of intubation complications for infants and children.
		13-3.58	Demonstrate appropriate needle cricothyroidotomy in infants and children.
		13-3.59	Demonstrate proper placement of a gastric tube in infants and children.
		13-3.60	Demonstrate an appropriate technique for insertion of peripheral intravenous catheters for infants and children.
		13-3.61	Demonstrate an appropriate technique for administration of intramuscular, inhalation, subcutaneous, rectal, endotracheal and oral medication for infants and children.
		13-3.62	Demonstrate an appropriate technique for insertion of an intraosseous line for infants and children.
		13-3.63	Demonstrate proper technique for direct laryngoscopy and

Lesson 13-4 Geriatrics At the completion of this lesson the student will have a fundamental depth, foundational breadth of changes associated with aging, psychosocial aspects of aging and age related assessment and treatment modifications for major or common geriatric diseases and/or emergencies such as cardiovascular diseases, respiratory diseases, neurological diseases, endocrine diseases, Alzheimer's, and dementia.

Cognitive Objectives

The student will be able to:

- 13-4.1 Define and discuss the term "geriatrics."
- 13-4.2 List the anatomy, physiology & pathophysiology of the Geriatric patient.
- 13-4.3 Discuss common emotional and psychological reactions to aging to include causes and manifestations.
- 13-4.4 Discuss the problems with mobility in the elderly and develop strategies to prevent falls.
- 13-4.5 Discuss factors that may complicate the assessment of the elderly patient.
- 13-4.6 Describe principles that should be employed when assessing and communicating with the elderly.
- 13-4.7 Discuss common complaints of elderly patients.
- 13-4.8 Discuss the assessment and management of the elderly patient with pulmonary complaints, including pneumonia, chronic obstructive pulmonary diseases, and pulmonary embolism.

foreign body retrieval in infants and children with a completely obstructed airway.

- 13-3.64 Demonstrate the use of a length-based resuscitation device for determining equipment sizes, drug doses and other pertinent information for a pediatric patient.

13-4 Geriatrics - At the completion of this lesson the student will have a complex depth, comprehensive breadth of normal and abnormal changes associated with aging, pharmacokinetic changes, psychosocial and economic aspects of aging, polypharmacy and age related assessment and treatment modifications for major or common geriatric diseases and / or emergencies such as cardiovascular diseases, respiratory diseases, neurological diseases, endocrine diseases, Alzheimer's, dementia, delirium such as acute confusion. The student will have a fundamental depth, foundational breadth of herpes zoster and inflammatory arthritis.

Cognitive Objectives

The student will be able to:

- 13-4.1 Define and discuss the term "geriatrics."
- 13-4.2 List the anatomy, physiology & pathophysiology of the Geriatric patient.
- 13-4.3 Discuss common emotional and psychological reactions to aging to include causes and manifestations.
- 13-4.4 Discuss the problems with mobility in the elderly and develop strategies to prevent falls.
- 13-4.5 Discuss factors that may complicate the assessment of the elderly patient.
- 13-4.6 Describe principles that should be employed when assessing and communicating with the elderly.
- 13-4.7 Discuss common complaints of elderly patients.
- 13-4.8 Discuss the assessment and management of the elderly patient with pulmonary complaints, including pneumonia, chronic obstructive pulmonary diseases, and pulmonary embolism.

13-4.9	Discuss the assessment and management of the elderly patient with complaints related to the cardiovascular system, including myocardial infarction, heart failure, dysrhythmias, aneurism, and hypertension.	13-4.9	Discuss the assessment and management of the elderly patient with complaints related to the cardiovascular system, including myocardial infarction, heart failure, dysrhythmias, aneurism, and hypertension.
13-4.10	Discuss the assessment and management of the elderly patient with complaints related to the nervous system, including cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease.	13-4.10	Discuss the assessment and management of the elderly patient with complaints related to the nervous system, including cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease.
13-4.11	Describe the epidemiology for endocrine diseases in the elderly, including incidence, morbidity/mortality, risk factors, and prevention strategies for patients with diabetes and thyroid diseases.	13-4.11	Describe the epidemiology for endocrine diseases in the elderly, including incidence, morbidity/mortality, risk factors, and prevention strategies for patients with diabetes and thyroid diseases.
13-4.12	Discuss the assessment and management of the elderly patient with complaints related to the endocrine system, including diabetes and thyroid diseases.	13-4.12	Discuss the assessment and management of the elderly patient with complaints related to the endocrine system, including diabetes and thyroid diseases.
13-4.13	Develop and execute a treatment and management plan of the elderly patient with gastrointestinal problems.	13-4.13	Develop and execute a treatment and management plan of the elderly patient with gastrointestinal problems.
13-4.14	Develop and execute a treatment and management plan of the elderly patient with toxicological problems.	13-4.14	Develop and execute a treatment and management plan of the elderly patient with toxicological problems.
13-4.15	Discuss the management/considerations when treating an elderly patient with drug and alcohol abuse.	13-4.15	Discuss the management/considerations when treating an elderly patient with drug and alcohol abuse.
13-4.16	Develop and execute a treatment and management plan of the elderly patient with environmental considerations.	13-4.16	Develop and execute a treatment and management plan of the elderly patient with environmental considerations.
13-4.17	Develop a treatment and management plan of the elderly psychiatric patient, including depression and suicide.	13-4.17	Develop a treatment and management plan of the elderly psychiatric patient, including depression and suicide.
13-4.18	Discuss the assessment findings common in elderly patients with traumatic injuries, including orthopedic injuries, burns and head injuries.	13-4.18	Discuss the assessment findings common in elderly patients with traumatic injuries, including orthopedic injuries, burns and head injuries.
13-4.19	Discuss the management/considerations when treating an elderly patient with traumatic injuries, including orthopedic injuries, burns and head injuries.	13-4.19	Discuss the management/considerations when treating an elderly patient with traumatic injuries, including orthopedic injuries, burns and head injuries.
13-4.20	Discuss the impact of polypharmacy and medication non-compliance on patient assessment and management.	13-4.20	Discuss the impact of polypharmacy and medication non-compliance on patient assessment and management.

13-4.21 Discuss medication issues of the elderly including polypharmacy, dosing errors and increased drug sensitivity.

13-4.22 Discuss the epidemiology of herpes zoster and inflammatory arthritis in the elderly

Affective Objectives

None

Psychomotor Objectives

13-4.23 Demonstrate the assessment and management of a geriatric patient with a major or common medical complaint.

Lesson 13-5 Patients with Special Challenges At the end of this lesson, the student will have a simple depth, simple breadth of healthcare implications of abuse, neglect, homelessness, poverty, bariatrics, technology dependent, hospice, terminally ill, tracheostomy care / dysfunction, homecare, sensory deficit/loss and developmental disability.

Cognitive Objectives

The student will be able to:

13-5.1 Discuss the incidence of abuse and assault.

13-5.2 Describe the categories of abuse.

13-5.3 Describe the characteristics associated with the profile of the typical abuser of a spouse, elder and child.

13-5.4 Describe the characteristics associated with the profile of the typical assailant of sexual assault.

13-5.5 Identify the profile of the "at-risk" spouse, elder and child.

13-5.6 Discuss the assessment and management of the abused patient.

13-5.7 Discuss the legal aspects associated with abuse situations.

13-4.21 Discuss medication issues of the elderly including polypharmacy, dosing errors and increased drug sensitivity.

13-4.22 Discuss the epidemiology of herpes zoster and inflammatory arthritis in the elderly

Affective Objectives

None

Psychomotor Objectives

13-4.23 Demonstrate the assessment and management of a geriatric patient with a major or common medical complaint.

13-5 Patients with Special Challenges - At the completion of this lesson the student will have a complex depth, comprehensive breadth of healthcare implications of abuse, neglect, poverty, bariatrics, technology dependent, hospice/terminally ill and tracheostomy care / dysfunction.

Cognitive Objectives

The student will be able to:

13-5.1 Discuss the incidence of abuse and assault.

13-5.2 Describe the categories of abuse.

13-5.3 Describe the characteristics associated with the profile of the typical abuser of a spouse, elder and child.

13-5.4 Describe the characteristics associated with the profile of the typical assailant of sexual assault.

13-5.5 Identify the profile of the "at-risk" spouse, elder and child.

13-5.6 Discuss the assessment and management of the abused patient.

13-5.7 Discuss the legal aspects associated with abuse situations.

13-5.8	Discuss the documentation associated with abused and assaulted patient.	13-5.8	Discuss the documentation associated with abused and assaulted patient.
13-5.9	Recognize the patient with a hearing impairment.	13-5.9	Recognize the patient with a hearing impairment.
13-5.10	Anticipate accommodations that may be needed in order to properly manage the patient with a hearing impairment.	13-5.10	Anticipate accommodations that may be needed in order to properly manage the patient with a hearing impairment.
13-5.11	Recognize the patient with a visual impairment.	13-5.11	Recognize the patient with a visual impairment.
13-5.12	Describe the various etiologies and types of speech impairments.	13-5.12	Describe the various etiologies and types of speech impairments.
13-5.13	Recognize the patient with a speech impairment.	13-5.13	Recognize the patient with a speech impairment.
13-5.14	Describe paraplegia/quadruplegia.	13-5.14	Describe paraplegia/quadruplegia.
13-5.15	Describe the various etiologies of mental illness.	13-5.15	Describe the various etiologies of mental illness.
13-5.16	Recognize the presenting signs of the various mental illnesses.	13-5.16	Recognize the presenting signs of the various mental illnesses.
13-5.17	Recognize the patient with a developmental disability.	13-5.17	Recognize the patient with a developmental disability.
13-5.18	Recognize the patient with Down's syndrome.	13-5.18	Recognize the patient with Down's syndrome.
13-5.19	Describe the various etiologies of emotional impairment.	13-5.19	Describe the various etiologies of emotional impairment.
13-5.20	Recognize the patient with an emotional impairment.	13-5.20	Recognize the patient with an emotional impairment.
13-5.21	Describe the following diseases/illnesses: Arthritis, Cancer, Cerebral palsy, Cystic fibrosis Multiple sclerosis, Muscular dystrophy, Myasthenia gravis, Poliomyelitis, Spina bifida, patients with a previous head injury	13-5.21	Describe the following diseases/illnesses: Arthritis, Cancer, Cerebral palsy, Cystic fibrosis Multiple sclerosis, Muscular dystrophy, Myasthenia gravis, Poliomyelitis, Spina bifida, patients with a previous head injury
13-5.22	Identify the possible presenting sign(s) for the following diseases/illnesses: Arthritis, Cancer, Cerebral palsy, Cystic fibrosis, Multiple sclerosis, Muscular dystrophy, Myasthenia gravis, Poliomyelitis, Spina bifida, and patients with a previous head injury.	13-5.22	Identify the possible presenting sign(s) for the following diseases/illnesses: Arthritis, Cancer, Cerebral palsy, Cystic fibrosis, Multiple sclerosis, Muscular dystrophy, Myasthenia gravis, Poliomyelitis, Spina bifida, and patients with a previous head injury.
13-5.23	Identify a patient that is terminally ill.	13-5.23	Identify a patient that is terminally ill.
13-5.24	Identify a patient with a communicable disease.	13-5.24	Identify a patient with a communicable disease.
13-5.25	Identify the importance of home health care medicine as related to the ALS level of care.	13-5.25	Identify the importance of home health care medicine as related to the ALS level of care.

13-5.26	Differentiate between the role of EMS provider and the role of the home care provider.	13-5.26	Differentiate between the role of EMS provider and the role of the home care provider.
13-5.27	Discuss the aspects of home care that result in enhanced quality of care for a given patient.	13-5.27	Discuss the aspects of home care that result in enhanced quality of care for a given patient.
13-5.28	Discuss the aspects of home care that have a potential to become a detriment to the quality of care for a given patient.	13-5.28	Discuss the aspects of home care that have a potential to become a detriment to the quality of care for a given patient.
13-5.29	List complications commonly seen in the home care patients, which result in their hospitalization.	13-5.29	List complications commonly seen in the home care patients, which result in their hospitalization.
13-5.30	Define hospice care, comfort care and DNR/DNAR as they relate to local practice, law and policy.	13-5.30	Define hospice care, comfort care and DNR/DNAR as they relate to local practice, law and policy.
13-5.31	List the stages of the grief process and relate them to an individual in hospice care.	13-5.31	List the stages of the grief process and relate them to an individual in hospice care.
13-5.32	Given a series of home care scenarios, determine which patients should receive follow-up home care and which should be transported to an emergency care facility.	13-5.32	Given a series of home care scenarios, determine which patients should receive follow-up home care and which should be transported to an emergency care facility.
13-5.33	Describe airway maintenance devices typically found in the home care environment.	13-5.33	Describe airway maintenance devices typically found in the home care environment.
13-5.34	Describe devices that provide or enhance alveolar ventilation in the home care setting.	13-5.34	Describe devices that provide or enhance alveolar ventilation in the home care setting.
13-5.35	Describe and access indwelling catheters, implanted central IV ports and central line monitoring.	13-5.35	Describe and access indwelling catheters, implanted central IV ports and central line monitoring.
13-5.36	Describe complications of assessing each of the airway, vascular access, and GI/GU devices described above.	13-5.36	Describe complications of assessing each of the airway, vascular access, and GI/GU devices described above.
13-5.37	Identify failure of GI/GU devices found in the home care setting.	13-5.37	Identify failure of GI/GU devices found in the home care setting.
13-5.38	Identify failure of ventilatory devices found in the home care setting.	13-5.38	Identify failure of ventilatory devices found in the home care setting.
13-5.39	Identify failure of vascular access devices found in the home care setting.	13-5.39	Identify failure of vascular access devices found in the home care setting.
13-5.40	Discuss assessment & management considerations of a patient with special needs to include child and elder abuse and neglect, homelessness/poverty, etc.	13-5.40	Discuss assessment & management considerations of a patient with special needs to include child and elder abuse and neglect, homelessness/poverty, etc.

Affective Objectives

The student will be able to:

13-5.41 Explain the rationale for understanding the unique considerations in dealing with patients with Special Challenges

Psychomotor Objectives

The student will be able to:

- 13-5.42 Demonstrate the ability to assess a spouse, elder or child abused patient.
- 13-5.43 Demonstrate the ability to assess a sexually assaulted patient.
- 13-5.44 Demonstrate proper tracheotomy care.
- 13-5.45 Demonstrate the assessment of a patient with a sensory deficit or developmental disability.

Affective Objectives

The student will be able to:

13-5.41 Explain the rationale for understanding the unique considerations in dealing with patients with Special Challenges

Psychomotor Objectives

The student will be able to:

- 13-5.42 Demonstrate the ability to assess a spouse, elder or child abused patient.
- 13-5.43 Demonstrate the ability to assess a sexually assaulted patient.
- 13-5.44 Demonstrate proper tracheotomy care.
- 13-5.45 Demonstrate the assessment of a patient with a sensory deficit or developmental disability.
- 13-5.46 Demonstrate the insertion of a new inner cannula and/or the use of an endotracheal tube to temporarily maintain an airway in a tracheostomy patient
- 13-5.47 Demonstrate how to replace an ostomy tube.
- 13-5.48 Demonstrate how to access an implantable venous access device.

Module 14 EMS Operations – Knowledge of operational roles and responsibilities to ensure patient, public, and personnel safety. Includes EMT plus the following.

Lesson 14-1 Principles of Safely Operating a Ground Ambulance- At the end of this lesson, the student will have a simple depth, foundational breadth of risks and responsibilities of transport.

Module 14 EMS Operations – Knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety. Includes AEMT plus the following.

Lesson 14-1 Principles of Safely Operating a Ground Ambulance – At the end of this lesson, the student will have a simple depth, foundational breadth of risks and responsibilities of transport.

Cognitive Objectives:

The student will be able to:

- 14-1.1 Discuss the importance of performing regular vehicle & equipment inspection.
- 14-1.2 Discuss the importance of completing an ambulance equipment/ supply checklist.
- 14-1.3 Describe the general provisions of Florida laws relating to the operation of the ambulance and privileges.
- 14-1.4 Discuss the lawful use of emergency lights and sirens.
- 14-1.5 Discuss "Due Regard for Safety of All Others" while operating an emergency vehicle.
- 14-1.6 Provide examples of some high risk situations and hazards that may affect the safety of the ambulance and its passengers during both pre-transport & transport.
- 14-1.7 Identify current local and state standards which influence ambulance design, equipment requirements and staffing of ambulances.
- 14-1.8 Demonstrate how to place a patient in, and remove a patient from an ambulance.
- 14-1.9 Discuss high-risk situations and hazards that may affect the safety of the ambulance and its passengers.
- 14-1.10 Discuss considerations that are required for ensuring scene safety, including personal safety, patient safety, and traffic control.
- 14-1.11 Identify the dangers to consider when operating an ambulance in the emergency mode.
- 14-1.12 Discuss the guidelines for operating an ambulance safety during emergency and non-emergency transportation.
- 14-1.13 Discuss the safety precautions required when using an escort.

Cognitive Objectives

The student will be able to:

- 14-1.1 Discuss the importance of performing regular vehicle & equipment inspection.
- 14-1.2 Discuss the importance of completing an ambulance equipment/ supply checklist.
- 14-1.3 Describe the general provisions of Florida laws relating to the operation of the ambulance and privileges.
- 14-1.4 Discuss the lawful use of emergency lights and sirens.
- 14-1.5 Discuss "Due Regard for Safety of All Others" while operating an emergency vehicle.
- 14-1.6 Provide examples of some high risk situations and hazards that may affect the safety of the ambulance and its passengers during both pre-transport & transport.
- 14-1.7 Identify current local and state standards which influence ambulance design, equipment requirements and staffing of ambulances.
- 14-1.8 Demonstrate how to place a patient in, and remove a patient from an ambulance.
- 14-1.9 Discuss high-risk situations and hazards that may affect the safety of the ambulance and its passengers.
- 14-1.10 Discuss considerations that are required for ensuring scene safety, including personal safety, patient safety, and traffic control.
- 14-1.11 Identify the dangers to consider when operating an ambulance in the emergency mode.
- 14-1.12 Discuss the guidelines for operating an ambulance safety during emergency and non-emergency transportation.
- 14-1.13 Discuss the safety precautions required when using an escort.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 14-1.14 Demonstrate how to perform a daily inspection of an ambulance.
- 14-1.15 Demonstrate how to clean and disinfect the ambulance and equipment.

Lesson 14-2 Incident Management - At the completion of this lesson, the student will have a fundamental depth, fundamental breadth of establishing and working within the incident management system

Cognitive Objectives

- 14-2.1 Explain the need for the incident management system (IMS)/incident command system (ICS) in managing emergency medical services incidents.
- 14.2.3 Define the term disaster management.
- 14.2.4 Discuss the importance of NIMS (National Incidence Management System).
- 14.2.7 Describe the functional components of the incident management system in terms of the following: command, finance, logistics, operations and planning.
- 14.2.8 Differentiate between singular and unified command and when each is most applicable.
- 14.2.9 Describe the role of command.
- 14.2.10 Describe the need for transfer of command and procedures for transferring it.
- 14.2.11 List and describe the functions of the following groups and leaders in ICS as it pertains to EMS incidents: safety, logistics,

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 14-1.14 Demonstrate how to perform a daily inspection of an ambulance.
- 14-1.15 Demonstrate how to clean and disinfect the ambulance and equipment.

14-2 Incident Management - At the completion of this lesson, the student will have a complex depth, comprehensive breadth of establishing and working within the incident management system.

Cognitive Objectives

- 14-2.1 Explain the need for the incident management system (IMS)/incident command system (ICS) in managing emergency medical services incidents.
- 14.2.3 Define the term disaster management.
- 14.2.4 Discuss the importance of NIMS (National Incidence Management System).
- 14.2.7 Describe the functional components of the incident management system in terms of the following: command, finance, logistics, operations and planning.
- 14.2.8 Differentiate between singular and unified command and when each is most applicable.
- 14.2.9 Describe the role of command.
- 14.2.10 Describe the need for transfer of command and procedures for transferring it.
- 14.2.11 List and describe the functions of the following groups and leaders in ICS as it pertains to EMS incidents: safety, logistics, rehabilitation, staging, treatment, triage, transportation,

rehabilitation, staging, treatment, triage, transportation, extrication/rescue, morgue, and communications.

- 14.2.16 Describe techniques used to allocate patients to hospitals and track them.
- 14.2.18 List the physical and psychological signs of critical incident stress.
- 14.2.20 Explain the organizational benefits for having standard operating procedures (SOPs) for using the incident management system or incident command system.

Affective Objectives

None

Psychomotor Objectives

None

Lesson 14-3 Multiple Casualty Incidents- At the completion of this lesson, the student will have a simple depth, foundational breadth of performing triage, re-triage, destination decisions and post traumatic and cumulative stress.

Cognitive Objectives

The student will be able to:

- 14-3.1 Define the term multiple casualty incident (MCI).
- 14-3.2 Describe essential elements of scene size-up when arriving at a potential MCI.
- 14-3.3 Describe the role of the rescuers and EMS systems in planning for MCIs and disasters.
- 14-3.4 Describe the role of the physician at multiple casualty incidents.
- 14-3.5 Define triage and describe the principles of triage.
- 14-3.6 Describe the START (simple triage and rapid treatment) method of

extrication/rescue, morgue, and communications.

- 14.2.16 Describe techniques used to allocate patients to hospitals and track them.
- 14.2.18 List the physical and psychological signs of critical incident stress.
- 14.2.20 Explain the organizational benefits for having standard operating procedures (SOPs) for using the incident management system or incident command system.

Affective Objectives

None

Psychomotor Objectives

None

14-3 Multiple Casualty Incidents At the completion of this lesson, the student will have a simple depth, foundational breadth of performing triage, re-triage, destination decisions and post traumatic and cumulative stress.

Cognitive Objectives

The student will be able to:

- 14-3.1 Define the term multiple casualty incident (MCI).
- 14-3.2 Describe essential elements of scene size-up when arriving at a potential MCI.
- 14-3.3 Describe the role of the rescuers and EMS systems in planning for MCIs and disasters.
- 14-3.4 Describe the role of the physician at multiple casualty incidents.
- 14-3.5 Define triage and describe the principles of triage.
- 14-3.6 Describe the START (simple triage and rapid treatment) method of initial triage.

initial triage.

- 14-3.7 Define primary and secondary triage.
- 14-3.8 Describe techniques used to allocate patients to hospitals and track them.
- 14-3.9 List and describe the essential equipment to provide logistical support to MCI operations, including but not limited to: Airway, respiratory and hemorrhage control, Burn management, and Patient packaging/immobilization.
- 14-3.10 List the physical and psychological signs of critical incident stress.
- 14-3.11 Describe the role of critical incident stress management sessions in MCIs.
- 14-3.12 Explain the organizational benefits for having standard operating procedures (SOPs) for using the incident management system or incident command system.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 14-3.13 Demonstrate the use of local/regional triage tagging system used for primary and secondary triage.
- 14-3.14 Demonstrate how to perform a triage based scenario that involves MCI
- 14-3.15 Given a classroom simulation of a MCI with 5-10 patients, fulfill the role of triage group leader.

- 14-3.7 Define primary and secondary triage.
- 14-3.8 Describe techniques used to allocate patients to hospitals and track them.
- 14-3.9 List and describe the essential equipment to provide logistical support to MCI operations, including but not limited to: Airway, respiratory and hemorrhage control, Burn management, and Patient packaging/immobilization.
- 14-3.10 List the physical and psychological signs of critical incident stress.
- 14-3.11 Describe the role of critical incident stress management sessions in MCIs.
- 14-3.12 Explain the organizational benefits for having standard operating procedures (SOPs) for using the incident management system or incident command system.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

- 14-3.13 Demonstrate the use of local/regional triage tagging system used for primary and secondary triage.
- 14-3.14 Demonstrate how to perform a triage based scenario that involves MCI
- 14-3.15 Given a classroom simulation of a MCI with 5-10 patients, fulfill the role of triage group leader.

Lesson 14-4 Air Medical At the completion of this lesson, the student will have a simple depth, simple breadth of safe air medical operations and criteria for utilizing air medical response.

Cognitive Objectives

The student will be able to:

- 14-4.1 Describe the capabilities, protocols, and methods for accessing air medical transport.
- 14-4.2 Describe the advantages and disadvantages of air medical transport.
- 14-4.3 Identify the conditions/situations in which air medical transport should be considered.
- 14-4.4 Assess personal practices relative to air medical operations which may affect the safety of the crew, the patient and bystanders.
- 14-4.5 List the safety concerns when operating a landing zone for an air medical helicopter.

Affective Objectives

None

Psychomotor Objectives

- 14-4.6 Perform setting up an air medical helicopter landing zone.

Lesson 14-5 Vehicle Extrication At the completion of this lesson, the student will have simple depth, simple breadth for safe vehicle extrication and use of simple hand tools.

Cognitive Objectives

- 14-5.1 Describe the role of the rescuer in patient rescue & vehicle extrication

14-4 Air Medical At the completion of this lesson the student will have a complex depth, comprehensive breadth of Air Medical transport risks, needs and advantages.

Cognitive Objectives

The student will be able to:

- 14-4.1 Describe the capabilities, protocols, and methods for accessing air medical transport.
- 14-4.2 Describe the advantages and disadvantages of air medical transport.
- 14-4.3 Identify the conditions/situations in which air medical transport should be considered.
- 14-4.4 Assess personal practices relative to air medical operations which may affect the safety of the crew, the patient and bystanders.
- 14-4.5 List the safety concerns when operating a landing zone for an air medical helicopter.

Affective Objectives

None

Psychomotor Objectives

- 14-4.6 Perform setting up an air medical helicopter landing zone.

14-5 Vehicle Extrication – At the completion of this lesson, the student will have simple depth, simple breadth for safe vehicle extrication and use of simple hand tools.

Cognitive Objectives

- 14-5.1 Describe the role of the rescuer in patient rescue & vehicle extrication

14-5.2	Describe personal and patient safety during vehicle extrication.	14-5.2	Describe personal and patient safety during vehicle extrication.
14-5.3	Discuss the factors related to ensuring situational safety at the site of a vehicle extrication	14-5.3	Discuss the factors related to ensuring situational safety at the site of a vehicle extrication
14-5.4	Explain the difference between simple access and complex access in vehicle extrication	14-5.4	Explain the difference between simple access and complex access in vehicle extrication
14-5.5	Discuss patient care consideration related to assisting with rapid extrication, providing emergency care to the trapped patient and removing and transferring a patient.	14-5.5	Discuss patient care consideration related to assisting with rapid extrication, providing emergency care to the trapped patient and removing and transferring a patient.
14-5.6	Discuss the use of simple hand tools used for vehicle extrication	14-5.6	Discuss the use of simple hand tools used for vehicle extrication
14-5.7	Describe the effects of traffic flow on the highway rescue incident including limited access superhighways and regular access highways.	14-5.7	Describe the effects of traffic flow on the highway rescue incident including limited access superhighways and regular access highways.
14-5.8	List and describe the hazards associated with the following auto/truck components: energy absorbing bumpers, air bag/supplemental restraint systems, catalytic converters and conventional fuel systems, stored energy, and alternate fuel systems.	14-5.8	List and describe the hazards associated with the following auto/truck components: energy absorbing bumpers, air bag/supplemental restraint systems, catalytic converters and conventional fuel systems, stored energy, and alternate fuel systems.
14-5.9	Describe methods for emergency stabilization using rope, cribbing, jacks, spare tire, and come-a-longs for vehicles found on their:	14-5.9	Describe methods for emergency stabilization using rope, cribbing, jacks, spare tire, and come-a-longs for vehicles found on their:
14-5.10	Describe the electrical hazards commonly found at highway incidents (above and below ground).	14-5.10	Describe the electrical hazards commonly found at highway incidents (above and below ground).
14-5.11	Explain the difference between tempered and safety glass, identify its locations on a vehicle and how to break it safely.	14-5.11	Explain the difference between tempered and safety glass, identify its locations on a vehicle and how to break it safely.
14-5.12	Explain typical door anatomy and methods to access through stuck doors.	14-5.12	Explain typical door anatomy and methods to access through stuck doors.
14-5.13	Explain SRS or "air bag" systems and methods to neutralize them.	14-5.13	Explain SRS or "air bag" systems and methods to neutralize them.
<u>Affective Objectives</u>		<u>Affective Objectives</u>	
None		None	

Psychomotor Objectives

The student will be able to:

- 14-5.14 Demonstrate the use of wood cribbing to stabilize a vehicle.
- 14-5.15 Demonstrate how to gain access to a patient by using a spring-loaded center punch.

Lesson 14-6 Hazardous Materials Awareness- At the completion of this lesson, the student will have a simple depth, simple breadth of risks and responsibilities of operating in a cold zone at a hazardous material or other special incident.

Cognitive Objectives

The student will be able to:

- 14-6.1 Identify resources for substance identification, decontamination and treatment information, including but not limited to the following: poison control center, medical control, material safety data sheets (MSDS), reference textbooks, computer databases (CAMEO), CHEMTREC, technical specialists and agency for toxic substances and disease registry.
- 14-6.2 Explain primary and secondary contamination risk.
- 14-6.3 List and describe the following routes of exposure: topical, respiratory, gastrointestinal, and parenteral.
- 14-6.4 Explain how the substance and route of contamination alters triage and decontamination methods.
- 14-6.5 List and explain the common signs, symptoms and treatment for the following substances: corrosives (acids/alkalis), pesticides (carbamates / organophosphates), chemical asphyxiants (cyanide/carbon monoxide), and hydrocarbon solvents (xylene, methylene chloride).
- 14-6.6 Identify local facilities and resources capable of treating patients exposed to hazardous materials.

Psychomotor Objectives

The student will be able to:

- 14-5.14 Demonstrate the use of wood cribbing to stabilize a vehicle.
- 14-5.15 Demonstrate how to gain access to a patient by using a spring-loaded center punch.

14-6 Hazardous Materials Awareness – At the completion of this lesson, the student will have a simple depth, simple breadth of risks and responsibilities of operating in a cold zone at a hazardous material or other special incident.

Cognitive Objectives

The student will be able to:

- 14-6.1 Identify resources for substance identification, decontamination and treatment information, including but not limited to the following: poison control center, medical control, material safety data sheets (MSDS), reference textbooks, computer databases (CAMEO), CHEMTREC, technical specialists and agency for toxic substances and disease registry.
- 14-6.2 Explain primary and secondary contamination risk.
- 14-6.3 List and describe the following routes of exposure: topical, respiratory, gastrointestinal, and parenteral.
- 14-6.4 Explain how the substance and route of contamination alters triage and decontamination methods.
- 14-6.5 List and explain the common signs, symptoms and treatment for the following substances: corrosives (acids/alkalis), pesticides (carbamates/organophosphates), chemical asphyxiants (cyanide/carbon monoxide), and hydrocarbon solvents (xylene, methylene chloride).
- 14-6.6 Identify local facilities and resources capable of treating patients exposed to hazardous materials.

14-6.7 Determine the appropriate level of PPE to include: types, application, use and limitations, and use of chemical compatibility chart.

14-6.8 Explain specific decontamination procedures.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

14-6.9 Demonstrate the donning and doffing of appropriate PPE.

14-6.10 Set up and demonstrate an emergency two-step decontamination process.

14-6.11 Identify DOT Labels, placards and markings that are used to designate HAZMAT materials

14-6.12 Demonstrate the ability to use a variety of reference materials to identify a HAZMAT material

Lesson 14-7 Mass Casualty Incidents Due to Terrorism and Disaster

At the completion of this lesson, the student will have a simple depth, simple breadth of risks and responsibilities of operating on the scene of a natural or man-made disaster

Cognitive Objectives:

The student will be able to:

14-7.1 Define different types of terrorism.

14-7.2 Discuss the National Terrorism Advisory System

14-7.3 Discuss factors to consider when responding to a terrorist situation.

14-6.7 Determine the appropriate level of PPE to include: types, application, use and limitations, and use of chemical compatibility chart.

14-6.8 Explain specific decontamination procedures.

Affective Objectives

None

Psychomotor Objectives

The student will be able to:

14-6.9 Demonstrate the donning and doffing of appropriate PPE.

14-6.10 Set up and demonstrate an emergency two-step decontamination process.

14-6.11 Identify DOT Labels, placards and markings that are used to designate HAZMAT materials

14-6.12 Demonstrate the ability to use a variety of reference materials to identify a HAZMAT material

14-7 Mass Casualty Incidents due to Terrorism and Disasters - At the completion of this lesson, the student will have a simple depth, simple breadth of risks and responsibilities of operating on the scene of a natural or man-made disaster

Cognitive Objectives

The student will be able to:

14-7.1 Define different types of terrorism.

14-7.2 Discuss the National Terrorism Advisory System

14-7.3 Discuss factors to consider when responding to a terrorist situation.

<p>14-7.4 Discuss important actions to take at the scene of a terrorist event such as: a. scene safety b. personal protection c. notification procedures d. available resources e. working with in the command system</p> <p>14-7.5 List the main categories of weapons of mass destruction</p> <p>14-7.6 Discuss the different types of chemical agents and their signs and Symptoms</p> <p>14-7.7 Discuss the treatment and management of patients exposed to various types of chemical agents.</p> <p>14-7.7 Define the different types of radiations and their effect on the human body.</p> <p>14-7.8 Discuss a radiologic dispersal device and dirty bomb.</p> <p>14-7.9 Discuss medical treatment and management of a patient who was exposed to radiation.</p>	<p>14-7.4 Discuss important actions to take at the scene of a terrorist event such as: a. scene safety b. personal protection c. notification procedures d. available resources e. working with in the command system</p> <p>14-7.5 List the main categories of weapons of mass destruction</p> <p>14-7.6 Discuss the different types of chemical agents and their signs and Symptoms</p> <p>14-7.7 Discuss the treatment and management of patients exposed to various types of chemical agents.</p> <p>14-7.7 Define the different types of radiations and their effect on the human body.</p> <p>14-7.8 Discuss a radiologic dispersal device and dirty bomb.</p> <p>14-7.9 Discuss medical treatment and management of a patient who was exposed to radiation.</p>
<p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>The student will be able to:</p> <p>14-7.10 Demonstrate the use of a nerve agent antidote kit.</p>	<p><u>Affective Objectives</u></p> <p>None</p> <p><u>Psychomotor Objectives</u></p> <p>The student will be able to:</p> <p>14-7.10 Demonstrate the use of a nerve agent antidote kit.</p>