Florida Department of Education
Curriculum Framework

Program Title: **Emergency Medical Technician**
Program Type: **ATD (Applied Technology Diploma)**
Career Cluster: **Health Science**

	College Credit	Clock Hour
Program Number	N/A	W170212
CIP Number	0351090408	0351090413
Grade Level	Applied Technology Diploma (ATD)	30, 31
Program Length	12 credit hours	300 clock hours
CTSO	HOSA	HOSA
SOC Codes (all applicable)	Please see the CIP to SOC Crosswalk located at the link below.	
CTE Program Resources	http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml	
Basic Skills Level:	N/A	N/A

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Health Science career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of Health Science career cluster.

This is an instructional program that prepares students for employment as emergency medical technicians (Emergency Medical Technicians and Paramedics) to function at the basic pre-hospital emergency medical technician level and treat various medical/trauma conditions using appropriate equipment and materials. The program prepares students for certification as EMT's in accordance with Chapter 64J of the Florida Administrative Code. The program must be approved by the Department of Health, Office of Emergency Medical Services, and the curriculum must adhere to the US Department of Transportation (DOT) National EMS Education Standards for EMT. This is the initial level for a career in emergency medical services and the primary prerequisite for paramedic training and certification.

The content includes but is not limited to patient assessment, airway management, cardiac arrest, external and internal bleeding and shock, traumatic injuries, fractures, dislocations, sprains, poisoning, heart attack, stroke, diabetes, acute abdomen, communicable diseases, patients with

abnormal behavior, alcohol and drug abuse, the unconscious state, emergency childbirth, burns, environmental hazards, communications, reporting, extrication and transportation of patient. The student must be proficient in patient assessment and evaluation, the use of suctioning devices, oral and nasal airways, resuscitation devices, oxygen equipment, sphygmomanometer and stethoscope, splints of all types, pneumatic anti-shock garments, extrication tools, dressings and bandages, stretchers and patient carrying devices.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Program Structure

This program is an Applied Technology Diploma (ATD) program that is part of a technical degree program, is less than 60 credit hours, and leads to employment in a specific occupation. An ATD program may consist of either technical credit or college credit. A public school district may offer an ATD program only as clock hour credit, with college credit awarded to a student upon articulation to a state college.

Clock Hour Program

When offered at the district level, this program is a planned sequence of instruction consisting of 1 occupational completion point and the courses as shown below.

OCP	Course Number	Course Title	Length
A	EMS0110	Emergency Medical Technician	300 hours

College Credit Program

When offered at the college credit level, this ATD program is part of the Emergency Medical Services AS program (1351090402) and has a length of 12 credits.

Regulated Programs

This program meets the Department of Health trauma score card methodologies and Sudden Unexpected Infant Death Syndrome (SUIDS) training education requirements. Upon completion of this program, the instructor will provide a certificate to the student verifying that these requirements have been met. This program also meets the Department of Health's education requirements for HIV/AIDS, Domestic Violence and Prevention of Medical Errors. Although not a requirement for initial licensure, it is a requirement for renewal, therefore the instructor **may** provide a certificate for renewal purposes to the student verifying these requirements have been met.

Please refer to chapter 401, F.S. for more information on disqualification for the EMT license through the Office of Emergency Medical Services (EMS), Department of Health.

An EMT program must be taught by an instructor meeting the qualifications as set forth in 64J-1.0201, FAC.

Students must complete this program, or demonstrate the mastery of skills standards contained in this program, before advancing in either of the other programs in this cluster. Completion of this program should prepare the student for the certification examination approved for the state of Florida.

An American Heart Association or Red Cross certification or equivalent in "professional" BLS is required of all candidates for entrance into an EMT program.

The Student Performance Standards for Emergency Medical Technology-EMT were adapted from the US Department of Transportation (DOT) National EMS Educational Standards for EMT.

Once students have successfully completed the EMT Program, they may be given a certificate stating they have met all Emergency Medical Responder competency requirements.

Florida Statute 401.2701, requires that the instructor-student ratio should not exceed 1:6. Hospital activity shall include a minimum of 20 hours of supervised clinical supervision, including 10 hours in a hospital emergency department. Clinical activity shall include appropriate patient assessment skills, intervention and documentation relevant to each clinical rotation.

Field internship shall include a competency based program to assure appropriate pre-hospital assessment and management of medical and trauma patients, as well as associated manual skills. The field internship activity shall include a minimum of 5 emergency runs resulting in patient care and transport appropriate for the EMT. In addition, the patient care component should include minimum competencies in patient assessment, airway management and ventilation, trauma and medical emergencies.

"All EMT/Paramedic students are required to complete the 4-hour Traffic Incident Management Safety (TIMS) course at least once. This requirement can be fulfilled either as a prerequisite or as part of the curriculum, at the discretion of the EMS education program."

“It is highly recommended, though not mandatory, that courses in medical terminology, anatomy, and pharmacology be completed before enrolling in EMT and Paramedic training.”

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate a simple depth, foundational breadth of knowledge of EMS systems.
02.0 Demonstrate a simple depth, simple breadth of knowledge of research and evidence-based decision making.
03.0 Demonstrate a fundamental depth, foundational breadth of knowledge of workforce safety and wellness.
04.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the principles of medical documentation and report writing.
05.0 Demonstrate a simple depth, simple breadth of knowledge of the EMS communication system, communication with other health care professionals, and team communication.
06.0 Demonstrate a simple depth, simple breadth of knowledge of the principles of therapeutic communication.
07.0 Demonstrate a fundamental depth, foundational breadth of knowledge of medical legality and ethics.
08.0 Demonstrate a fundamental knowledge of the anatomy and function of all human systems to the practice of EMS.
09.0 Demonstrate a fundamental knowledge in the use of medical terminology.
10.0 Demonstrate a fundamental knowledge of the causes and pathophysiology of shock and the components of resuscitation.
11.0 Demonstrate a fundamental knowledge of life span development to patient assessment and management.
12.0 Demonstrate a simple knowledge of the principles of illness and injury prevention in emergency care.
13.0 Demonstrate a simple depth, simple breadth of knowledge of pharmacology, medication safety, and medication types used during an emergency.
14.0 Demonstrate a fundamental depth, simple breadth of knowledge of emergency medications within the scope of practice of the EMT.
15.0 Demonstrate a foundational depth, fundamental breadth of knowledge of airway management patients of all ages within the scope of practice of the EMT.
16.0 Demonstrate a fundamental depth, foundational breadth of knowledge of respiration.
17.0 Demonstrate a fundamental depth, foundational breadth of knowledge of assessment and management utilizing ventilation patients of all ages.
18.0 Demonstrate a fundamental depth, foundational breadth of knowledge of scene management and multiple patient situations.
19.0 Demonstrate a fundamental depth, simple breadth of knowledge of the primary assessment for all patient situations.
20.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the components of history taking.
21.0 Demonstrate a fundamental depth, foundational breadth of knowledge of techniques used for a secondary assessment.
22.0 Demonstrate a simple depth, simple breath of knowledge of monitoring devices within the scope of practice of the EMT.
23.0 Demonstrate a fundamental depth, foundational breadth of knowledge of how and when to perform a reassessment for all patient situations.
24.0 Demonstrate a simple depth, foundation breadth of knowledge of pathophysiology, assessment and management of medical complaints.
25.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of neurologic disorders/emergencies patients of all ages.
26.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of abdominal and gastrointestinal disorders/emergencies patients of all ages.
27.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of immunology disorders/emergencies patients of all ages.
28.0 Demonstrate a simple depth, simple breadth of knowledge of the assessment and management of a patient who may have an infectious disease patient of all ages.

29.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of endocrine disorders/emergencies patients of all ages.
30.0 Demonstrate a fundamental depth, foundational breadth of knowledge regarding the assessment and management of psychiatric emergencies patients of all ages.
31.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of cardiovascular emergencies patients of all ages.
32.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of toxicological (poisoning and overdose) emergencies patients of all ages.
33.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of respiratory disorders/emergencies patients of all ages.
34.0 Demonstrate a simple depth, simple breadth of knowledge of the assessment, and management of hematology disorders patients of all ages.
35.0 Demonstrate a simple depth, simple breath of knowledge of the assessment and management of genitourinary/ renal emergencies patients of all ages.
36.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of gynecologic emergencies patients of all ages.
37.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of non-traumatic fractures patients of all ages.
38.0 Demonstrate a simple depth, simple breadth of knowledge of assessment and management of diseases of the Eyes, Ears, Nose, and Throat patients of all ages.
39.0 Demonstrate a fundamental knowledge of the causes, pathophysiology, and management of shock and respiratory failure patients of all ages.
40.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of the trauma patient patients of all ages.
41.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of bleeding patients of all ages.
42.0 Demonstrate a fundamental depth, simple breadth of knowledge of pathophysiology, assessment, and management of chest trauma patients of all ages.
43.0 Demonstrate a fundamental depth, simple breadth of knowledge of pathophysiology, assessment, and management of abdominal and genitourinary trauma patients of all ages.
44.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of orthopedic trauma patients of all ages.
45.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of soft tissue trauma patients of all ages.
46.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of head, facial, neck, and spine trauma patients of all ages.
47.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of nervous system trauma patients of all ages.
48.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of trauma patients with special considerations patients of all ages.

49.0 Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of environmental emergencies patients of all ages.
50.0 Demonstrate a fundamental depth, foundational breadth of knowledge of the pathophysiology, assessment, and management of multi-system trauma and blast injuries patients of all ages.
51.0 Demonstrate a fundamental depth, foundational breadth of knowledge of management of the obstetric patient within the scope of practice of the EMT.
52.0 Demonstrate a fundamental depth, foundational breadth of knowledge of management of the newborn and neonatal patient within the scope of practice of the EMT.
53.0 Demonstrate a fundamental depth, fundamental breath of knowledge of the management of the pediatric patient within the scope of practice of the EMT.
54.0 Demonstrate a fundamental depth, foundational breadth of knowledge of management of the geriatric patient within the scope of practice of the EMT.
55.0 Demonstrate a simple depth, simple breadth of knowledge of management of the patient with special challenges patients of all ages.
56.0 Demonstrate a simple depth, foundational breadth of knowledge of risks and responsibilities of transport.
57.0 Demonstrate a fundamental depth, fundamental breadth of knowledge of establishing and working within the incident management system.
58.0 Demonstrate a simple depth, foundational breadth of knowledge of responding to an emergency during a multiple casualty incident.
59.0 Demonstrate a simple depth, simple breadth of knowledge of safe air medical operations and criteria for utilizing air medical response.
60.0 Demonstrate a simple depth, simple breadth of knowledge for safe vehicle extrication and use of simple hand tools.
61.0 Demonstrate a simple depth, simple breadth of knowledge of risks and responsibilities of operating in a cold zone at a hazardous material or other special incident.
62.0 Demonstrate a simple depth, simple breadth of knowledge of risks and responsibilities of operating on the scene of a natural or man-made disaster.

Florida Department of Education
Student Performance Standards

Program Title: Emergency Medical Technician –ATD
Clock Hour Program Number: W170212

Course Number: EMS0110 **Occupational Completion Point: A** **Emergency Medical Technician – 300 Hours**	
01.0	**EMS Systems:** Demonstrate a simple depth, foundational breadth of knowledge of EMS systems. The student will be able to:
01.01	Define Emergency Medical Services (EMS) systems.
01.02	Discuss the historical background of the development of the EMS system.
01.03	Identify the four levels of national EMS providers (EMR, EMT, AEMT and PM) as well as the three levels (EMR, EMT, and PM) in the State of Florida.
01.04	Discuss the specific statutes and regulations regarding the EMS system in Florida.
01.05	Discuss vehicle and equipment readiness.
01.06	Characterize the EMS system's role in prevention and public education.
01.07	Systems of care, e.g., Stroke, STEMI, Trauma, Pediatrics (S, F).
01.08	MIH/CP and other EMS-related specialty roles (S, S).
01.09	Discuss the roles and responsibilities of the EMT related to personal safety of the crew, patient and by standers.
01.10	Discuss the roles and responsibilities of the EMT to operate emergency vehicles, provide scene leadership and perform patient assessment and administer emergency care.
01.11	Discuss the maintenance of and differences between certification and licensure for the EMS professional in the State of Florida and NREMT.
01.12	Define quality improvement and discuss the EMT's role in the process.
01.13	Quality improvement vs. quality assurance (S, F).
01.14	Role of medical oversight (S, S).
01.15	Culture of safety.
01.16	Patient safety (SF)
01.17	Identify the basics of common methods of payment for healthcare services.

01.18	Analyze attributes and attitudes of an effective leader.
01.19	Demonstrate effective techniques for managing team conflict.
01.20	Describe factors that influence the current delivery system of healthcare.
01.21	Discuss the importance of continuing medical education and skills retention.
01.22	Continuum of care (S, F).
01.23	Assess personal attitudes and demeanor that may distract from professionalism.
01.24	Serve as a role model and exhibit professional behaviors in the following areas: • Integrity • Empathy • Self-motivation • Appearance and personal hygiene • Self-confidence • Communications (including phone, email and social media etiquette) • Time management • Teamwork and diplomacy • Respect • Patient advocacy (inclusive of those with special needs, alternate lifestyles and cultural diversity) • Careful delivery of service
02.0	**Research:** Demonstrate a simple depth, simple breadth of knowledge of research and evidence-based decision making. The student will be able to:
02.01	Discuss EMS research and evidence-based decision making • Conduct scientific literature searches • Read, interpret, and extract information from journal articles relevant to a project
02.02	Explain the importance of assessing and treating patients based on evidence-based decision-making.
02.03	Interpret graphs, charts, and tables.
02.04	Measure time, temperature, distance, capacity, and mass/weight.
02.05	Convert and use traditional and metric units.
02.06	Make estimations, approximations and judge the reasonableness of the result.
02.07	Convert time from a 12-hour format to a 24-hour format
02.08	Demonstrate ability to evaluate and draw conclusions.

	02.09 Calculate ratios.
	02.10 Explain the rationale for the EMS system gathering data.
	02.11 Impact of research on EMT care (S, S).
	02.12 Data collection (S, S).
	02.13 Evidence-based decision making (S,S).
03.0	**Workforce Safety and Wellness:** Demonstrate a fundamental depth, foundational breadth of knowledge of workforce safety and wellness. The student will be able to:
	03.01 Explain the need to determine scene safety.
	03.02 Discuss the importance of body substance isolation (BSI).
	03.03 Describe the steps and equipment the EMT should take for personal protection from airborne and blood borne pathogens and communicable disease.
	03.04 List possible emotional reactions that an individual (EMT and EMT family, Patient and Patient family) may experience when faced with trauma, illness, death and dying.
	03.05 Discuss the steps the EMT should take when approaching a family confronted with death and dying.
	03.06 Recognize the warning signs of personal stress and discuss the strategies and resources available for EMTs to utilize.
	03.07 Demonstrate good body mechanics while using a stretcher and other patient moving devices.
	03.08 Discuss the guidelines and safety precautions to be followed when lifting and moving patients and equipment.
	03.09 Discuss patient positioning in common emergency situations.
	03.10 Discuss situation that may require the use of medical restraints on the patient and explain guidelines and safety consideration for their use.
	03.11 Define “infectious disease” and “communicable disease.”
	03.12 Disease transmission (F, F).
	03.13 Describe the routes of transmission and associated risks for infectious disease.
	03.14 Explain the mode of transmission and the steps to prevent/deal with an exposure of hepatitis, meningitis, tuberculosis and HIV.
	03.15 Explain how immunity to infectious diseases is acquired.
	03.16 Explain post exposure management of exposure to patient blood or body fluids, including proper notification documentation.

	03.17 Describe the components of physical fitness and mental wellbeing.
	03.18 Identify personal health practices and environmental factors which affect physical, mental, and emotional wellbeing.
	03.19 Prevention of work-related injuries and illnesses (F, F).
	03.20 Responder mental health, resilience and suicide prevention (F, F).
	03.21 Wellness principles (F, F).
	03.22 Discuss complementary and alternative health practices.
	03.23 Explain the basic concepts of positive self-image, wellness and stress.
	03.24 Discuss the need for a wellness and stress control plan that can be used in personal and professional life.
	03.25 Explore the importance of adequate nutrition (i.e. U.S. Department of Agriculture's MyPlate food guide (www.choosemyplate.gov)).
	03.26 Demonstrate safe behaviors in the proper use of medical equipment.
	03.27 Explain the theory of root- cause analysis.
	03.28 Identify and describe methods in medical error reduction and prevention in the various healthcare settings.
	03.29 Identify and practice security procedures for medical supplies and equipment in various healthcare settings.
	03.30 Describe fire, safety, disaster and evacuation procedures in the various healthcare settings.
	03.31 Discuss applicable accrediting and regulatory agency patient safety guidelines.
04.0	**Documentation:** Demonstrate a fundamental depth, foundational breadth of knowledge of the principles of medical documentation and report writing. The student will be able to:
	04.01 Discuss applications of technology in healthcare.
	04.02 Demonstrate basic computer skills.
	04.03 Interpret and utilize information from electronic health records.
	04.04 Identify methods of electronic communication to access and distribute data.
	04.05 Describe the use and importance of properly written communication and patient care documentation.
	04.06 Explain the legal implication of the patient care report.
	04.07 Supporting medical necessity (S,S).

	04.08 Identify the minimum dataset reference patient information and administrative information on the patient care report.
	04.09 Understand how to document refusal of care, including legal implications.
	04.10 Discuss the implications of the Health Insurance Portability and Accountability Act of 1996 on confidential documentation.
	04.11 Describe the special considerations concerning mass casualty incident documentation.
	04.12 Demonstrate completion of a patient care report for a medical and trauma patient.
05.0	**EMS System Communication:** Demonstrate a simple depth, simple breadth of knowledge of the EMS communication system, communication with other health care professionals, and team communication. – The student will be able to:
	05.01 Understand the basic principles of the various types of communications equipment used in EMS.
	05.02 Describe the use of radio communication and correct radio procedures, including the proper methods of initiating and terminating the radio call/transmission.
	05.03 Explain the rationale for providing efficient and effective radio communications and patient reports.
	05.04 Identify the essential components of the verbal report and legal aspects that need to be considered.
	05.05 Perform an organized and concise radio transmission.
	05.06 Team communication and dynamics (S,S).
	05.07 Perform an organized, concise verbal patient report that would be given to the staff at a receiving facility.
	05.08 Perform a brief, organized verbal report that would be given during transfer of care at an incident scene.
06.0	**Therapeutic Communication:** Demonstrate a simple depth, simple breadth of knowledge of the principles of therapeutic communication. The student will be able to:
	06.01 Describe principles of therapeutic and effective communication with patients.
	06.02 Health care literacy (S, S).
	06.03 Non-discriminatory communication that addresses inherent or unconscious bias, is culturally aware and sensitive, and intended to improve patient outcome (S, S).
	06.04 Discuss basic speaking and active listening skills.
	06.05 Recognize the importance of patient/client education regarding healthcare.
	06.06 Discuss the adjustment of communication strategies to effectively communicate with patients with: • Differing age groups • Differing developmental stages • Special needs

	• Differing cultures, including language barriers
06.07	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.
06.08	Discuss the strategies for interviewing persons in special situations.
06.09	Distinguish between and respond to verbal and non-verbal cues.
06.10	Analyze elements of communication using a sender-receiver/close loop model.
06.11	Exhibit positive non-verbal behaviors.
06.12	Establish proper patient rapport.
07.0	**Medical/Legal and Ethics:** Demonstrate a fundamental depth, foundational breadth of knowledge of medical legality and ethics. The student will be able to:
07.01	Discuss the rational, importance, and limitations of patient autonomy.
07.02	Differentiate between expressed, implied and involuntary consent.
07.03	Discuss the methods of obtaining consent and procedures for minors.
07.04	Discuss the issues of abandonment, negligence, false imprisonment and battery and their implications to the EMT.
07.05	Discuss the implications for the EMT in patient refusal of care and/or transport.
07.06	Explain the importance, necessity and legality of patient confidentiality.
07.07	Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or Florida provisions regarding EMS application.
07.08	Patient rights/advocacy (S, S).
07.09	Discuss State of Florida and Federal special reporting situations including: • Abuse • Sexual assault • Gunshot and knife wounds • Communicable disease • Animal Bites
07.10	Differentiate between civil tort and criminal actions.
07.11	Discuss the elements of negligence and defenses/protections from liability.
07.12	Discuss the role of the EMT at crime scenes and preservation of evidence.

	07.13 Define ethics and morality and discuss their implication for the EMT.
	07.14 Discuss Florida legislation such as: • Baker Act (FS 394.451) • Marchman Act (FS 397.601 and FS 397.675) • Emergency Examination and Treatment of Incapacitated Persons Act (FS 401.445)
	07.15 Differentiate between the scope of practice and the standard of care as applied to the EMT.
	07.16 Discuss the legal concepts and limitations of immunity, including Good Samaritan statutes and governmental immunity.
	07.17 Describe the appropriate patient management and care techniques in a refusal of care situation.
	07.18 Analyze the relationship between the law, morals and ethics in EMS and the premise that should under lie the EMTs ethical decisions.
	07.19 Describe the criteria necessary to honor an advance directive.
	07.20 Explain the rationale for the needs, benefits and varying degrees of advance directives.
08.0	**Anatomy and Physiology**: Demonstrate a fundamental knowledge of the anatomy and function of all human systems to the practice of EMS. The student will be able to:
	08.01 Identify the following topographic terms: • Medial • Lateral • Proximal • Distal • Superior • Inferior • Anterior • Posterior • Midline • Right and left • Mid-clavicular • Bilateral • Mid-axillary
	08.02 Describe the life support chain, aerobic metabolism, and anaerobic metabolism.
	08.03 Define anatomy, physiology, pathophysiology, and homeostasis.
	08.04 Identify and describe the anatomical structures and functions of the following: • Skeletal system • Muscular system

	• Respiratory System • Circulatory/ Cardiovascular system • Nervous System • Integumentary system • Digestive system • Endocrine system • Renal system • Reproductive system • Lymphatic System
08.05	Explain cellular anatomy and physiology.
08.06	Explain cellular respiration.
08.07	Discuss cell division.
08.08	Describe the different types of muscle tissues including skeletal, smooth and cardiac.
08.09	Name and identify the location of the bones of the axial and appendicular skeleton.
08.10	Describe the classification and types of joints.
08.11	Discuss the mechanisms of breathing including: • mechanical ventilation • pulmonary volumes • dead space • lung compliance
08.12	Explain the diffusion of gases in external and internal respiration.
08.13	Describe oxygen and carbon dioxide transport in the blood.
08.14	Describe nervous and chemical mechanisms that regulate respirations.
08.15	Discuss respiration and acid-base balance.
08.16	Discuss the hemodynamics of blood pressure.
08.17	Discuss the role of nutrition, metabolism and body temperature on body function.
08.18	Describe the causes, advantages, and disadvantages of a fever.
08.19	Discuss the hypothalamus functions as the thermostat in the body.

09.0	**Medical Terminology:** Demonstrate a fundamental knowledge in the use of medical terminology. The student will be able to:
	09.01 Identify medical terminology word parts such as: • Root words • Prefixes • Suffixes • Combining forms
	09.02 Correctly utilize medical terminology describing each of the following: • Body structures • Functions • Conditions and disorders • Body regions • Cavities • Areas • Landmarks
	09.03 Correctly use medical abbreviations and symbols.
	09.04 Read and understand basic medical documentation in medical records and medical reports.
	09.05 Communicate with healthcare professionals utilizing basic medical terminology.
	09.06 Explain the rationale for using accepted medical terminology correctly.
10.0	**Pathophysiology:** Demonstrate a fundamental knowledge of the causes and pathophysiology of shock and the components of resuscitation. The student will be able to:
	10.01 Discuss signs of irreversible death.
	10.02 Review the anatomy and physiology of the respiratory and cardiovascular systems.
	10.03 Discuss and identify the pathophysiology of respiratory failure and respiratory and cardiac arrest.
	10.04 Understand shock, including pathophysiology, causes, and the signs and symptoms associated with the various types of shock.
	10.05 Discuss the variations in the pathophysiology of shock patients of all ages.
11.0	**Life Span Development:** Demonstrate a fundamental knowledge of life span development to patient assessment and management. The student will be able to:
	11.01 Describe the major physiologic and psychosocial characteristics patients of all ages.
12.0	**Public Health:** Demonstrate a simple knowledge of the principles of illness and injury prevention in emergency care. The student will be able to:

	12.01 Define public health and explain the goal of the public health field.
	12.02 Identify the EMS role within the public health field.
	12.03 Discuss basic concepts of epidemiology.
	12.04 Discuss ways of EMS involvement in injury prevention.
	12.05 Identify areas of need for prevention programs in the community.
13.0	**Principles of Pharmacology:** Demonstrate a simple depth, simple breadth of knowledge of pharmacology, medication safety, and medication types used during an emergency. The student will be able to:
	13.01 Explain the “rights” of medication administration and describe how each one related to EMS.
	13.02 Discuss and differentiate the various medication forms and the appropriate routes of administration
	13.03 Describe the difference between a generic medication name and trade name and provide an example of each.
	13.04 Specific medication classes to be determined locally • Class names (S, S) • Class indications (S, S) • Class complications (S, S) • Class side effects (S, S) • Polypharmacy (S, S)
	13.05 Discuss the components and elements of a drug profile including: • Class • Actions • Contraindications • Side effects • Dose • Route • Adverse drug reactions (S, S) • Medication response relationships (F,F)
	13.06 Describe the role of medical direction in medication administration and explain the difference between direct orders (online) and standing orders (off-line).
14.0	**Pharmacology:** Demonstrate a fundamental depth, simple breadth of knowledge of emergency medications within the scope of practice of the EMT. The student will be able to:
	14.01 State the following for each medication that can be administered by an EMT as dictated by the State of Florida and local medical direction: • Medication safety • Medication legislation

- Naming
- Classifications
- Storage and security
- Medication interactions
- Adverse drug reactions
- Metabolism and excretion
- Mechanism of action
- Medication response relationships

14.02 State the following for each medication that can be administered by an EMT as dictated by the State of Florida and local medical direction (Acute Medications):

- Generic / Trade Names, Drug Classifications
- Effects
- Actions
- Indication
- Contraindications
- Complications
- Routes of administration
- Side effects
- Interactions
- Doses of medications

14.03 Demonstrate the steps in properly inspecting each type of medication. (Medication Administration)

- Use a Medication Cross Check procedure
- Use an autoinjector
- Use a unit-dose, premeasured intranasal device
- Administer medications to a patient
- Provide pain management, including ethical and safety considerations
- Routes of administration

14.04 Discuss the difference between administration versus assistance of patient medications. (Chronic or Maintenance Medications)

- Class names
- Class indications
- Class complications
- Class side effects
- Polypharmacy

15.0 **Respirations:** Demonstrate a fundamental depth, foundational breadth of knowledge of respiration. The student will be able to:

15.01 Anatomy of the Respiratory System and review the pulmonary ventilation process to include mechanics of ventilation and alveolar ventilation (tidal volumes, dead space, etc.):

- Control of respirations

	• Mechanics of respiration • Pulmonary ventilation • Oxygenation • Mechanical ventilation
15.02	Physiology and pathophysiology of respiration • Pulmonary ventilation • Oxygenation • Respiration • External • Internal • Cellular
15.03	Demonstrate the correct operation of oxygen tanks and regulators.
15.04	Describe the following regarding supplemental oxygen delivery devices: • Indications • Contraindications • Advantages • Disadvantages • Complications • Liter flow range • Concentration of delivered oxygen • Procedures • Purpose • Components
15.05	Demonstrate the use of low, medium, high, and variable concentration oxygen delivery devices for all age groups.
15.06	Describe assessment and management for adequate and inadequate respiration, including the use of pulse oximetry and capnography.
15.07	Explain the rationale for providing adequate oxygenation through high inspired oxygen concentrations to patients who, in the past, may have received low concentrations.
15.08	Discuss the use of an oxygen humidifier and the requirements needed for its use.
15.09	Discuss the differences between negative pressure and positive pressure ventilation.
16.0	**Airway Management:** Demonstrate a fundamental depth, foundational breadth of knowledge of airway management patients of all ages within the scope of practice of the EMT. The student will be able to:
16.01	Review the structures and functions of the Anatomy of the Airway and the Respiratory System (Include age- related variations in pediatric and geriatric patients). • Normal • Abnormal

	• Special Considerations (MDI, In-Line Neb, Simple Face Mask, Venturi, CPAP/BiPAP)
16.02	Describe appropriate assessment of the airway and the management for a patient with or without adequate breathing (Include age-related variations in pediatric and geriatric patients).
16.03	Describe the Techniques of assuring a patent airway, indications for airway management, and demonstrate the steps in performing the head-tilt chin-lift and jaw thrust in all age groups (Include age- related variations in pediatric and geriatric patients). • Demonstrate the techniques of suctioning. • Demonstrate relief of FBAO. • Demonstrate how to insert an oral and nasal -airway adjunct. • Demonstrate how to insert both esophageal and supra-glottic airways.
17.0	**Artificial Ventilations:** Demonstrate a fundamental depth, foundational breadth of knowledge of assessment and management utilizing ventilation patients of all ages. The student will be able to:
17.01	Effect of ventilation on cardiac output • E.g., Bag Valve Mask, Ventilator, CPAP, Hyper Mechanical Inflation
17.02	Demonstrate how to ventilate a patient with a pocket mask.
17.03	Demonstrate the safe and effective ventilation for a patient with a BVM for one or two rescuers using oral-nasal adjuncts with appropriate airway positioning.
17.04	Discuss the signs of adequate and inadequate ventilation using the BVM.
17.05	Describe the steps involved in performing a comprehensive assessment of ventilations.
17.06	Demonstrate how to ventilate a patient with a stoma.
17.07	Demonstrate the use of various devices used in the assessment of supra-glottic airway placement.
17.08	Describe the following for a patient with an automatic transport ventilator (ATV): • Indications • Contraindications • Advantages • Disadvantages • Complications • Technique for ventilating
17.09	Describe the following for a patient with a CPAP: • Indications • Contraindications • Advantages • Disadvantages • Complications • Technique for ventilating

18.0	**Scene Size-Up:** Demonstrate a fundamental depth, foundational breadth of knowledge of scene management and multiple patient situations**.** The student will be able to:
18.01	Recognize and describe hazards/potential hazards at the scene.
18.02	Discuss common mechanisms of injury/nature of illness.
18.03	Discuss the priority considerations for multiple-patient situations.
18.04	Explain why it is important for the EMT to anticipate and determine the need of appropriate Scene management including but not limited to traffic incident management, additional resources, or specialty resources.
18.05	Discuss the importance of continuous scene assessment to ensure safety of the EMS Impact of the environment on team and the patient care.
18.06	Explain why it is important for the EMT to anticipate and determine the need for additional or specialized resources.
18.07	Discuss the importance of continuous scene assessment to ensure safety of the EMS team and the patient.
18.08	Discuss the minimum standard precautions that should be followed and PPE that should be worn as appropriate.
18.09	Discuss special considerations for dealing with a violent scene.
18.10	Explain the rationale for crew members to evaluate scene safety prior to entering.
18.11	Explain how patient situations affect your evaluation of mechanism of injury or illness.
19.0	**Primary Assessment:** Demonstrate a fundamental depth, simple breadth of knowledge of the primary assessment for all patient situations. The student will be able to:
19.01	Summarize the elements of a general impression of the patient.
19.02	Explain the reason for performing a primary assessment.
19.03	Discuss and demonstrate methods of assessing level of responsiveness using AVPU.
19.04	Discuss and demonstrate methods of assessing the airway and providing airway care patients of all ages.
19.05	Describe and demonstrate methods used for assessing if a patient is breathing patients of all ages.
19.06	Differentiate between a patient with adequate and inadequate breathing.
19.07	Describe and demonstrate the methods used to obtain a pulse patients of all ages.
19.08	Discuss and demonstrate assessing the patient for external bleeding.
19.09	Describe and demonstrate the assessment and interpretation of skin color, temperature, moisture and capillary refill patients of all ages.

	19.10 Explain the reasons prioritizing a patient for care and transport.
	19.11 Describe when it is appropriate to expose the patient completely.
	19.12 Differentiate between critical life-threatening, potentially life- threatening, and non-life-threatening patient presentations.
20.0	**History-Taking:** Demonstrate a fundamental depth, foundational breadth of knowledge of the components of history taking. The student will be able to:
	20.01 Determine and investigate the chief complaint (MOI/NOI).
	20.02 Describe components of the patient history.
	20.03 Explain the importance of obtaining a SAMPLE and OPQRST history.
	20.04 Acknowledge the feelings patients experience during assessment.
	20.05 Discuss the value of obtaining a family and social history.
	20.06 Describe examples of different techniques the EMT may use to obtain information from patients, family or bystanders during the history taking process.
21.0	**Secondary Assessment:** Demonstrate a fundamental depth, foundational breadth of knowledge of techniques used for a secondary assessment. The student will be able to:
	21.01 Discuss the components and techniques of the physical exam and skills involved.
	21.02 Discuss the indications for performing: • Rapid assessment • Focused exam • Head to toe exam
	21.03 Demonstrate: • Rapid exam • Focused exam • Head to toe exam
	21.04 Describe and demonstrate the techniques of inspection, palpation, percussion, and auscultation. • Respiratory system including breath sound quality • Cardiovascular system • Neurological system • Musculoskeletal system • Major anatomical regions
	21.05 Describe and demonstrate the importance of obtaining a baseline set of vital signs. • E.g., Non-Invasive Blood Pressure, Blood Glucose, Temperature …
	21.06 Discuss blood pressure ranges patients of all ages.

22.0	**Monitoring Devices:** Demonstrate a simple depth, simple breath of knowledge of monitoring devices within the scope of practice of the EMT. The student will be able to:
	22.01 Describe and demonstrate the purpose, indications, procedure, normal findings, and limitations of the following patient monitoring technologies. • Pulse oximetry • Glucometry • Capnography • Noninvasive BP monitoring • Thermometry • Telemetry • Cardiac monitoring – 12 lead ECG acquisition and transmission
	22.02 Demonstrate proper placement of a cardiac monitor and diagnostic ECG leads.
23.0	**Reassessment:** Demonstrate a fundamental depth, foundational breadth of knowledge of how and when to perform a reassessment for all patient situations. The student will be able to:
	23.01 Describe the components of reassessment and demonstrate the skills involved.
	23.02 Discuss the reasons for repeating the primary assessment as part of the reassessment.
	23.03 Explain trending assessment components and its value to other health professionals who assume care of the patient.
	23.04 Demonstrate the reassessment of patients of all ages.
24.0	**Medical Overview:** Demonstrate a simple depth, foundation breadth of knowledge of pathophysiology, assessment and management of medical complaints. The student will be able to:
	24.01 Pathophysiology, assessment, and management of a medical complaints to include • Identify factors that affect the patient Transport Decision and Medically Appropriate Destination • E.g., Scene Safety, Environmental Factors, Chief Complaint, Preconceptions.
	24.02 Discuss forming a field impression and utilizing available information to determine a differential diagnosis.
25.0	**Neurology:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of neurologic disorders/emergencies patients of all ages. The student will be able to:
	25.01 Review the anatomy and physiology of the nervous system.
	25.02 Describe the pathophysiology of the following neurologic disorders: • Altered mental status • Stroke • Transient ischemic attack • Headache • Seizures • Syncope

	• Dementia vs. delirium • Alzheimer's disease • Headache • Brief Resolved Unexplained Event (BRUE) • Other neurological disorders to be determined locally
25.03	Discuss and identify the causes, signs and symptoms of ischemic strokes, hemorrhagic strokes, and transient ischemic attacks and their similarities and differences.
25.04	Discuss and demonstrate how to use a stroke scoring system in the assessment of patients with suspected stroke.
25.05	Define and differentiate generalize seizure, partial seizure and status epilepticus and list their possible causes.
25.06	Define and differentiate migraine headache, sinus headache, tension headache and discuss how to distinguish harmless headaches from something more serious.
25.07	Define "altered mental status" and identify the possible causes.
25.08	Describe and demonstrate the assessment and management of the patient with various neurological emergencies in patients of all ages to include: • Strokes • Headaches • Seizures • Altered mental status
25.09	Discuss the transport of the stroke patient to the appropriate treatment center.
26.0	**Abdominal and Gastrointestinal Disorder:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of abdominal and gastrointestinal disorders/emergencies patients of all ages. The student will be able to:
26.01	Review the basic anatomy and physiology the gastrointestinal, genital and urinary systems.
26.02	Define and describe the pathophysiology of the following abdominal and gastrointestinal disorders: • Abdominal pain • Acute abdomen • Peritonitis • Appendicitis • Pancreatitis • Cholecystitis • Gastrointestinal bleeding • Esophageal varices • Gastroenteritis • Ulcers • Intestinal obstruction • Hernia

	• Abdominal aortic aneurysm
	26.03 Identify the signs and symptoms of common GI disorders.
	26.04 Describe and demonstrate the assessment and management of the patient with various gastrointestinal emergencies.
	26.05 Differentiate between hemorrhagic and non-hemorrhagic abdominal pain.
27.0	**Immunology:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of immunology disorders/emergencies patients of all ages. The student will be able to:
	27.01 Define and differentiate allergic reaction and anaphylaxis.
	27.02 Describe the pathophysiology of the following immunology disorders: • allergic reaction • anaphylaxis • anaphylactic shock
	27.03 Describe and demonstrate the assessment and management of the patient in patients of all ages experiencing an allergic or anaphylactic reaction.
	27.04 Review the following for the epinephrine auto-injector: • generic and trade names • medication forms • dose • administration • action • contraindications
	27.05 Demonstrate the use of epinephrine auto-injector.
	27.06 Review the anatomy and physiology of the organs and structures related to anaphylaxis.
	27.07 Describe the incidence, morbidity and mortality of anaphylaxis.
	27.08 Recognize the signs and symptoms related to anaphylaxis.
	27.09 Describe the risk factors for and prevention of anaphylaxis and appropriate patient education.
	27.10 Discuss common antigens most frequently associated with anaphylaxis.
	27.11 Explain the importance of separating the patient from the allergen when possible.
28.0	**Infectious Disease:** Demonstrate a simple depth, simple breadth of knowledge of the assessment and management of a patient who may have an infectious disease patients of all ages. The student will be able to:
	28.01 Discuss the causes of infectious diseases

	28.02 Describe the pathophysiology of infectious diseases of significant public health concern.
	28.03 Describe and demonstrate the assessment and management of the patient in patients of all ages experiencing an infectious disease.
	28.04 Discuss mandatory notification to state or federal agencies of various diseases.
	28.05 Identify patients with risk factors for infectious disease.
	28.06 Explain the principles and practices of infection control in prehospital care.
	28.07 Describe and discuss the rationale for the various types of PPE.
	28.08 Discuss the proper disposal of contaminated supplies (sharps, gauze sponges, tourniquets, etc.).
	28.09 Discuss decontamination of the ambulance and disinfection of patient care equipment, and areas in which care of the patient occurred.
	28.10 Describe the actions to take if the EMS provider is exposed to an infectious disease.
	28.11 Demonstrate the ability to comply with body substance isolation guidelines.
	28.12 Discuss the pathophysiology, risk factors, assessment, and prehospital management of sepsis/systemic inflammatory response syndrome (SIRS)
	28.13 Identify the signs and symptoms and discuss the assessment and prehospital management of a patient in septic shock.
	28.14 Describe the risk factors for and prevention of infectious disease and appropriate patient education (including but not limited to hand-washing, PPE use, and disposal of contaminated supplies).
29.0	**Endocrine Disorders:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of endocrine disorders/emergencies patients of all ages. The student will be able to:
	29.01 Review the anatomy and physiology of the endocrine system and its main function in the body.
	29.02 Describe the pathophysiology and signs and symptoms of the following endocrine disorders: • Insulin dependent Diabetes Mellitus • Non-insulin dependent Diabetes Mellitus • Hypoglycemia • Hyperglycemia • Diabetic Ketoacidosis (DKA) • Hyperglycemic Hyperosmolar Non-ketotic Syndrome (HHNS)
	29.03 Define and differentiate between Type I and Type II Diabetes.
	29.04 Identify and demonstrate the steps in the management of the patient taking diabetic medicine with an altered mental status and a history of diabetes, patients of all ages.
	29.05 Review the following for oral glucose:

	• Generic and trade names • Medication forms • Dose • Administration • Action • Contraindications
29.06	Demonstrate the steps of using a glucometer device and administering oral glucose.
29.07	Describe and demonstrate the assessment and the management of the patient experiencing an endocrinologic emergency to include hypo- and hyper-glycemia.
29.08	Discuss the general assessment findings associated with endocrinologic emergencies. Patients of all ages.
29.09	Describe the risk factors for and prevention of endocrine emergencies, including but not limited to healthy lifestyles and modifiable risk factors, the use of blood sugar monitoring devices and self-administration of prescribed medications.
30.0	**Psychiatric:** Demonstrate a fundamental depth, foundational breadth of knowledge regarding the assessment and management of psychiatric emergencies patients of all ages. The student will be able to:
30.01	Differentiate among behavior, psychiatric disorders and behavioral emergencies
30.02	Discuss common psychiatric disorders and behavioral emergencies.
30.03	Discuss the general factors that may cause an alteration in a patient's behavior.
30.04	Discuss patterns of violence, abuse, and neglect.
30.05	Discuss the risk factors/signs or symptoms of various psychiatric emergencies to include acute psychosis, suicide ideation, excited delirium, anxiety, depression, medical fear, substance use disorder, and PTSD.
30.06	Manage a behavioral emergency scenario applying knowledge of medical/legal Florida Statutes.
30.07	Describe and demonstrate the assessment and management of the patient experiencing a behavioral or psychiatric emergency.
30.08	Discuss the risk factors/signs or symptoms of various psychiatric emergencies to include acute psychosis, suicide ideation, excited delirium, anxiety, depression, medical fear, substance use disorder, and PTSD.
30.09	Demonstrate an understanding of appropriate and available mental health resources and provide patient education.
30.10	Describe and demonstrate the assessment and management of the patient experiencing a behavioral or psychiatric emergency, patients of all ages.
30.11	Describe the biological, psychosocial, and sociocultural influences on psychiatric disorders.
30.12	Describe the special considerations for the safety of the EMS provider and EMS crew, the patient and bystanders when dealing with behavioral and psychiatric emergencies.
30.13	Describe and demonstrate methods of restraint that may be used in the management of a patient with a behavioral emergency.

	30.14 Explain the importance of provider behavior and communication in the care of a patient with a behavioral emergency.
31.0	**Cardiovascular**: Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of cardiovascular emergencies patients of all ages. The student will be able to:
	31.01 Review the basic anatomy and physiology of the cardiovascular system.
	31.02 Describe the pathophysiology and signs and symptoms of the following cardiovascular disorders: • Acute coronary syndrome • Angina pectoris • Thromboembolism • Myocardial infarction • Hypertensive emergencies • Aortic aneurysm/dissection • Left and right sided heart failure • Cardiogenic shock • Cardiac arrest
	31.03 Describe and demonstrate the assessment and management of the patient experiencing a cardiac emergency.
	31.04 Discuss the indications and contraindications for automated external defibrillation (AED). (including automatic, manual and vest type).
	31.05 Explain the impact of age and weight on defibrillation.
	31.06 Discuss the position of comfort for patients with various cardiac emergencies.
	31.07 Explain the rationale for early defibrillation.
	31.08 Discuss and differentiate among various types of external defibrillators.
	31.09 Discuss and differentiate among the various types of implanted cardiac devices.
	31.10 Understand the importance of maintenance and operators check list for AED's.
	31.11 Demonstrate the ability to use an AED according to the latest American Heart Association (AHA) guidelines.
	31.12 Explain the role medical direction plays in the use of automated external defibrillation.
	31.13 Explain the rationale for administering nitroglycerin oxygen and ASA to a patient with chest pain or discomfort.
	31.14 Demonstrate the assessment and documentation of patient response to the automated external defibrillator.
	31.15 Demonstrate the assessment and documentation of patient response to nitroglycerin.
	31.16 Discuss the purpose and use of CPR assist devices.

	31.17 Describe the risk factors for and prevention of cardiac related diseases and provide appropriate patient education.
	31.18 Discuss the signs and symptoms of acute coronary syndrome and provide appropriate patient education to include self-administration of prescribed medications.
32.0	**Toxicology:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of toxicological (poisoning and overdose) emergencies patients of all ages. The student will be able to:
	32.01 Define and differentiate among toxicology, poisoning, and overdose.
	32.02 Describe the pathophysiology and signs and symptoms of the following toxicological emergencies, including but not limited to: • Food poisoning • Carbon monoxide poisoning • Cyanide poisoning • Exposure to acid or alkaline substances • Exposure to hydrocarbons • Methanol ingestion • Isopropanol ingestion • ethylene glycol ingestion • Exposure to poisonous plants • Drug withdrawal • Alcoholic syndrome • Withdrawal syndrome (including delirium tremens) • Illicit drug use • Medication overdose • Opioid overdose • Organa phosphate overdose • Nerve agents
	32.03 Discuss various ways that toxins enter the body. Including inhalation, ingestion, injection, and absorption.
	32.04 Discuss and demonstrate the assessment and management for the patient with a toxicological emergency.
	32.05 Discuss the role of the Poison Control Center with the nationwide contact number 800-222-1222 in the United States.
	32.06 Explain the rationale for contacting medical direction early in the prehospital management of a patient with a toxicological emergency.
	32.07 Review the following for Narcan (naloxone): • Generic and trade names • Medication forms • Dose • Administration • Action

	• Contraindications
32.08	Discuss the use of medication assisted treatments for substance misuse disorders including suboxone, methadone, and naltrexone and potential complications.
32.09	Discuss safe uses and practices with potentially toxic substances while providing appropriate patient education
33.0	**Respiratory:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of respiratory disorders/emergencies patients of all ages The student will be able to:
33.01	Review the basic anatomy and physiology of the respiratory system.
33.02	Describe the pathophysiology and signs and symptoms of the following respiratory disorders: • Chronic Obstructive Pulmonary Disease • Asthma • Bronchiolitis • Pulmonary Edema • Spontaneous Pneumothorax • Hyperventilation Syndrome • Cystic Fibrosis • Pulmonary Embolism • Pneumonia • Viral Respiratory Infections • Poisonous Exposures • Bacterial respiratory infections
33.03	Discuss signs of adequate air exchange.
33.04	Discuss the signs and symptoms of a patient across the continuum from respiratory distress to failure.
33.05	Describe and demonstrate the assessment and management of the patient with a respiratory emergency. Patients of all ages.
33.06	Review the following for the metered-dose inhalers and small volume nebulizers for medications within the scope of practice of the EMT: • Generic name • Medication forms • Dose • Administration • Action • Indications • Contraindications
33.07	Describe and demonstrate the steps in facilitating the use of an inhaler and a small volume nebulizer.

	33.08 Differentiate between upper and lower airway obstruction.
	33.09 Demonstrate assessment and interpretation of normal and abnormal lung and breath sounds. Patients of all ages.
	33.10 Discuss common respiratory disorders, self-administered medications, and equipment (including, but not limited to home oxygen, nebulizers, and CPAP) and provide appropriate patient education.
34.0	**Hematology:** Demonstrate a simple depth, simple breadth of knowledge of the assessment, and management of hematology disorders patients of all ages. The student will be able to:
	34.01 Review the compositions and functions of blood and plasma.
	34.02 Describe the pathophysiology of the following hematology disorders: • Anemia • Sickle Cell Anemia / Sickle Cell Crisis • Hemophilia/Clotting disorders
	34.03 Describe and demonstrate the assessment and the management of the patient with a hematological disorder. Patients of all ages.
	34.04 Discuss signs, symptoms, and potential complications of various hematological disorders and provide appropriate patient education
35.0	**Genitourinary /Renal:** Demonstrate a simple depth, simple breath of knowledge of the assessment and management of genitourinary/ renal emergency patients of all ages. The student will be able to:
	35.01 Review the basic anatomy and physiology of the genitourinary and renal systems.
	35.02 Describe the pathophysiology and signs and symptoms of the following genitourinary/ renal disorders: • Urinary tract infection • Kidney stones • Kidney failure
	35.03 Discuss the basic principles and complications of kidney dialysis.
	35.04 Discuss the recognition and complications of urinary catheters.
	35.05 Describe and demonstrate the assessment and management of the patient with a dialysis emergency. Patients of all ages.
	35.06 Discuss traumatic injuries to the genitourinary system, including, but not limited to: sexual assault (female and male).
36.0	**Gynecology:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of gynecologic emergencies patients of all ages. The student will be able to:
	36.01 Review the basic anatomy and physiology of the female reproductive system.
	36.02 Describe the pathophysiology and signs and symptoms of the following gynecologic disorders and emergencies, including but not limited to: • Sexual assault • Non-traumatic vaginal bleeding

		• Menstrual pain • Ovarian cyst • Endometritis • Endometriosis • Pelvic inflammatory disease • Sexually Transmitted Disease
	36.03	Describe and demonstrate the assessment and management of the patient experiencing a gynecologic emergency. Patients of all ages.
	36.04	Describe the assessment and management of a patient who has experienced a sexual assault including the psychosocial impact and assessment findings/presentations.
	36.05	Discuss the professional and psychological importance of maintaining a patient's modesty and privacy while still being able to obtain necessary information.
	36.06	Discuss the need to provide care for a patient of sexual assault, while still preventing destruction of crime scene information.
37.0	**Non-Traumatic Musculoskeletal Disorders:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of non-traumatic fractures patients of all ages. The student will be able to:	
	37.01	Review the basic anatomy and physiology of the musculoskeletal system.
	37.02	Describe and demonstrate the assessment and management of the patient in all age groups with a non-traumatic musculoskeletal emergency.
38.0	**Diseases of the Eyes, Ears, Nose, and Throat:** Demonstrate a simple depth, simple breadth of knowledge of assessment and management of diseases of the Eyes, Ears, Nose, and Throat patients of all ages The student will be able to:	
	38.01	Describe and demonstrate the assessment and management of the patient in all age groups with abnormal conditions affecting the eyes, ears, nose and throat, including epistaxis.
39.0	**Shock and Resuscitation:** Demonstrate a fundamental knowledge of the causes, pathophysiology, and management of shock and respiratory failure patients of all ages. The student will be able to:	
	39.01	Discuss and identify causes and pathophysiology of the categories of hemorrhage and shock.
	39.02	Review causes and pathophysiology of respiratory failure and arrest.
	39.03	Review causes and pathophysiology of cardiac failure or arrest.
	39.04	Discuss the various types and degrees of shock.
	39.05	Discuss post resuscitation management.
	39.06	Explain the system components of CPR, the links in the AHA chain of survival and how each relates to patient survival.
	39.07	Define and differentiate between compensated and decompensated shock.
	39.08	Discuss the importance of teamwork in the successful management of the critical patient.

	39.09 Demonstrate how to perform one and two rescuer CPR, adult, child, and infant.
	39.10 Demonstrate how to perform rescuer level appropriate defibrillation in an adult, child, and infant patient.
	39.11 Demonstrate rapid decision making based on differential field diagnosis of the critical patient with a ***special arrest*** peri-arrest condition.
	39.12 Describe and demonstrate the assessment and management of the patient with hemorrhage and shock.
	39.13 Discuss ethical issues in resuscitation.
	39.14 Discuss options for termination resuscitation.
40.0	**Trauma Overview:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment and management of the trauma patient patients of all ages. The student will be able to:
	40.01 Discuss pathophysiology of the trauma patient.
	40.02 Discuss the components of a comprehensive trauma systems and levels of trauma centers.
	40.03 Describe the considerations for different transportation modes, ***transport and destination issues*** to a trauma center.
	40.04 Discuss the kinematics of blunt and penetrating trauma.
	40.05 Discuss and describe significant and non-significant Mechanism of Injury (MOI) and provide examples of each.
	40.06 Demonstrate the application of the State of Florida's trauma scorecard methodologies as required in Florida Statute and Florida Administrative Code (F.A.C.).
	40.07 Discuss the National Trauma Triage Protocol of injured Patients.
	40.08 Discuss forming a field impression and utilizing available information to determine a differential diagnosis.
	40.09 Identify the need for rapid intervention transport of the trauma patient.
41.0	**Bleeding:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of bleeding patients of all ages. The student will be able to:
	41.01 Review the anatomy and physiology of the circulatory system.
	41.02 Discuss the different types of bleeding and classes of hemorrhage.
	41.03 Review signs and symptoms of shock (hypo-perfusion).
	41.04 Demonstrate effective hemorrhage control to include application of a tourniquet.
	41.05 Review the pathophysiology of hemorrhagic shock.

	41.06 Recognize the need for rapid transport for patients that are bleeding and showing signs of shock (hypo-perfusion).
	41.07 Describe and demonstrate the assessment and management of a patient with hemorrhagic shock.
	41.08 Discuss the possible complications of an improperly applied dressing, bandage, tourniquet, and hemostatic agents.
42.0	**Chest Trauma:** Demonstrate a fundamental depth, simple breadth of knowledge of pathophysiology, assessment and management of chest trauma patients of all ages. The student will be able to:
	42.01 Review the anatomy and physiology of the thoracic/chest cavity and respiratory system.
	42.02 Differentiate between a pneumothorax (open, simple and tension) and hemothorax.
	42.03 Discuss the pathophysiology, signs and symptoms, and MOI of myocardial injuries, including the following: • Pericardial tamponade • Myocardial contusion • Myocardial rupture • Commotio cordis • Aortic sheerer
	42.04 Discuss the pathophysiology, signs and symptoms, and MOI of specific chest wall injuries, including the following: • Rib fracture • Flail segment • Sternal fracture • Open chest wound • Impaled object
	42.05 Describe and demonstrate the assessment and management of chest trauma ***to include blunt versus penetrating trauma.***
43.0	**Abdominal and Genitourinary Trauma:** Demonstrate a fundamental depth, simple breadth of knowledge of pathophysiology, assessment and management of abdominal and genitourinary trauma patients of all ages. The student will be able to:
	43.01 Review the anatomy and physiology of the abdominal cavity and genitourinary system.
	43.02 Discuss the pathophysiology, signs and symptoms, and MOI for abdominal trauma including *evisceration, impaled objects, blunt versus penetrating mechnaisms*, hollow and solid ***organ*** injuries.
	43.03 Describe and demonstrate the assessment and management of a patient with a suspected abdominal or genitourinary injury/trauma to include internal/external genitalia.
44.0	***Orthopedic Trauma:*** *Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of orthopedic trauma patients of all ages. The student will be able to:*
	44.01 Review the anatomy and physiology of the Musculo-skeletal system.
	44.02 Discuss pathophysiology, signs and symptoms, and MOI for orthopedic trauma including *evisceration, impaled objects, blunt versus penetrating mechanisms*, h***o***llow and solid ***organ*** injuries.
	44.03 Discuss the different types of orthopedic trauma including fracture classifications. To include:

	• Open fracture • Closed fracture • Dislocation • Upper and Lower extremity orthopedic trauma • Sprains and Strains Pelvic Fracture
44.04	Explain the rationale for stabilization of an injured extremity. To include: • Open fracture • Closed fracture • Dislocation • Upper and Lower extremity orthopedic trauma • Sprains and Strains • Pelvic Fracture
44.05	Describe and demonstrate the assessment and management of a patient with a suspected orthopedic trauma.
44.06	Discuss the following management techniques: • Heat therapy • Cold therapy • Splinting
44.07	List the six “P’s” of orthopedic injury assessment.
44.08	Discuss the need for assessment of distal pulses, motor, and sensation before and after splinting.
44.09	Review age-associated changes in the bones.
44.10	Discuss the proper procedures to package an amputated body part for replantation.
44.11	Explain the rationale for splinting at the scene versus load and go.
44.12	Demonstrate the proper use of various splinting materials and devices to include improvised and traction splints.
45.0	**Soft Tissue Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of soft tissue trauma patients of all ages. The student will be able to:
45.01	Review anatomy and physiology of the integumentary system to include the layers of the skin.
45.02	Describe the pathophysiology, signs and symptoms, and MOI of soft tissue trauma.
45.03	Describe and demonstrate the assessment and management of various soft tissue injuries. • Wounds (e.g., avulsion, bite, laceration, puncture, and incisions) • Crush and compartment syndrome • High pressure injection injury

	45.04 Identify types of burn injuries, including: • Thermal burn • Chemical burn • Electrical burn • Radiation exposure
	45.05 Describe the depth classifications of burn injuries, including: • Superficial burn • Partial-thickness burn • Full-thickness burn • Other depth classifications
	45.06 Describe and demonstrate methods for determining body surface area percentage of a burn injury including the “rule of nines," the "rule of palms," and other methods.
	45.07 Explain how the seriousness of a burn is related to its depth and percent of body surface area (BSA) involved.
	45.08 Review the various management techniques for hemorrhage control.
	45.09 Differentiate among the types of injuries requiring the use of an occlusive versus non- occlusive dressing.
	45.10 Demonstrate the assessment and management of specific burn injuries including: • Thermal • Inhalation • Chemical ***(in the eye and on the skin)*** • Electrical • Radiation
46.0	**Head, Facial, Neck, and Spine Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of head, facial, neck and spine trauma patients of all ages. The student will be able to:
	46.01 Review the anatomy and physiology of the head, face, neck and spine.
	46.02 Describe the pathophysiology, signs and symptoms, and MOI for head, face, neck, and spine trauma.
	46.03 Describe and demonstrate the assessment and management of a patient with the following traumas to the head, face, neck, and spine: • Penetrating neck trauma • Laryngotracheal injury • Skull fracture • Facial fracture • Eye injury (foreign body) *eyes, globe rupture*) • Dental trauma • Shaken Baby Syndrome • Severe epistaxsis

	46.04 Recognize and manage life threats due to face, head, neck, and spine trauma.
	46.05 Discuss and demonstrate the utilization of the Glasgow Coma Scale.
47.0	**Nervous System Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of nervous system trauma patients of all ages. The student will be able to:
	47.01 Review the anatomy and physiology of the nervous system.
	47.02 Discuss the pathophysiology, signs and symptoms, and MOI for ***traumatic*** brain ***injury (TBI)*** and spinal cord trauma.
	47.03 Describe and demonstrate the assessment and management of a patient with a ***traumatic*** brain ***injury (TBI)*** and/or spinal cord trauma.
	47.04 Discuss the rationale and potential complications of spinal motion restriction of the entire spine when a cervical spine injury is suspected.
	47.05 Given a scenario, discuss whether or not to remove a helmet prior to transport of a patient.
	47.06 Demonstrate various methods for stabilization and removal of a helmet.
	47.07 Discuss documentation of assessment before, during, and after spinal motion restriction.
48.0	**Special Considerations in Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment and management of trauma patients with special considerations patients of all ages. The student will be able to:
	48.01 Review the anatomy and physiology for the following trauma patients: • Pregnant • Pediatric • Geriatric
	48.02 Discuss the pathophysiology, signs and symptoms, and MOI of trauma in the following patients: • Pregnant • Pediatric • Geriatric
	48.03 Discuss and demonstrate unique assessment and management considerations for the following trauma patients: • Pregnant • Pediatric • Geriatric • Cognitively impaired
49.0	**Environmental Emergencies:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment and management of environmental emergencies, patients of all ages. The student will be able to:
	49.01 Define drowning and discuss its incidence, rick factors and prevention.
	49.02 Discuss the pathophysiology, signs and symptoms, and MOI of the following: • Drowning and water related incidents

	• Temperature-related illness • Bites and envenomation • Dysbarism such as high-altitude injuries • Diving injuries • Lightning (electrical) injury • High altitude illness • Radiation exposure • Other environmental emergencies
	49.03 Describes and demonstrate the assessment and management for a patient with the following: • Drowning and water related incidents • Temperature-related illness • Bites and envenomation • Dysbarism such as high-altitude injuries • Diving injuries • Lightning (electrical) injury • High altitude illness • Radiation exposure • Other environmental emergencies
	49.04 Discuss the fundamental principles of the gas laws including Boyle's, Dalton, Henry and Charles.
	49.05 Discuss scene management and provider safety considerations for a variety of environmental emergencies.
	49.06 Explain the five ways a body can lose heat.
	49.07 Discuss potentially life-threatening venomous species of insects, spiders and snakes in the U.S.
50.0	**Multi-Systems Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of the pathophysiology, assessment, and management of multi-system trauma and blast injuries, patients of all ages. The student will be able to:
	50.01 Discuss the pathophysiology, signs and symptoms, and MOI of multi-system trauma and blast injuries.
	50.02 Describe and demonstrate assessment and management considerations for a patient of multi system trauma and blast injuries.
51.0	**Obstetrics:** Demonstrate a fundamental depth, foundational breadth of management of the obstetric patient within the scope of practice of the EMT. The student will be able to:
	51.01 Identify and describe the anatomical and the physiological changes during pregnancy.
	51.02 Define the stages of labor and discuss how to assess them.
	51.03 Differentiate between cephalic and abnormal delivery.
	51.04 Describe the management of a patient with pre-delivery emergencies.

	51.05 Discuss and demonstrate the patient care measures for all stages of labor in a cephalic delivery for the mother and the newborn.
	51.06 Describe the management of the mother post-delivery.
	51.07 Discuss and demonstrate the patient care measures for all stages of labor in abnormal deliveries for the mother and the newborn.
	51.08 Describe the procedures for handling complications of delivery.
	51.09 Describe special considerations when meconium is present in amniotic fluid or during delivery.
	51.10 Identify the factors that lead to premature birth and low birth weight newborns.
	51.11 Demonstrate the procedures for handling complications of pregnancy including pre-eclampsia, eclampsia, and high risk.
52.0	**Neonatal Care:** Demonstrate a fundamental depth, foundational breadth of knowledge of management of the newborn and neonatal patient within the scope of practice of the EMT. The student will be able to:
	52.01 Discuss and demonstrate assessment and management considerations of a neonate.
	52.02 Define the term neonate.
	52.03 Describe special patient care considerations of a premature baby.
	52.04 Calculate the Apgar score given various newborn situations.
	52.05 Discuss the common signs when ventilarory assistance is appropriate for a neonate.
	52.06 Discuss and demonstrate the steps in resuscitation of a neonate.
	52.07 Review the signs of hypovolemia in a newborn.
	52.08 Discuss the effects maternal narcotic usage has on the newborn.
	52.09 Discuss the management/treatment plan for vomiting in the neonate.
	52.10 Discuss the assessment findings associated with common birth injuries in the neonate.
53.0	**Pediatrics:** Demonstrate a fundamental depth, fundamental breath of knowledge of management of the pediatric patient within the scope of practice of the EMT. The student will be able to:
	53.01 Review the anatomy, physiology and pathophysiology differences of patients.
	53.02 Discuss the differences in approaching and assessing patients.
	53.03 Discuss and demonstrate assessment and management considerations for Sudden Unexplained Infant Death Syndrome (SUIDS).

	53.04 Describe the selection of appropriate airway adjuncts and ventilation devices.
	53.05 Discuss complications of improper utilization of airway adjuncts and ventilation devices.
	53.06 Describe the common causes, assessment and management of respiratory distress, failure, or arrest.
	53.07 Discuss the common causes, assessment and management of hypo-perfusion.
	53.08 Discuss the common causes, assessment and management of cardiopulmonary arrest.
	53.09 Describe the common causes, assessment and management of altered level of consciousness.
	53.10 Describe the common causes, assessment and management of trauma.
	53.11 Describe the common causes, assessment and management of neurological emergencies.
	53.12 Demonstrate proper technique for administering blow-by oxygen.
	53.13 Review proper technique for suctioning.
	53.14 Review appropriate use of airway adjuncts and ventilation devices.
	53.15 Review age-appropriate basic airway clearing maneuvers for a completely obstructed airway.
54.0	**Geriatrics:** Demonstrate a fundamental depth, foundational breadth of knowledge of management of the geriatric patient within the scope of practice of the EMT. The student will be able to:
	54.01 Define and discuss the term geriatrics.
	54.02 Review the anatomy, physiology and pathophysiology of the geriatric patient.
	54.03 Discuss common emotional and psychological concerns and conditions of the geriatric patient.
	54.04 Discuss the importance of fall prevention with the geriatric patient.
	54.05 Describe principles that should be employed when assessing and communicating with the geriatric patient.
	54.06 Describe the common causes, assessment, and management of the geriatric patient with a medical, trauma, or psychosocial complaint.
55.0	**Patients with Special Challenges:** Demonstrate a simple depth, simple breadth of knowledge of the management of the patient with special challenges patients of all ages. The student will be able to:
	55.01 Discuss the special considerations required when providing emergency care to patients with: • Abuse/neglect of vulnerable populations • Homelessness • Poverty

	• Bariatrics • Tech dependent • Hospice/terminally ill • Tracheostomy • Home care • Sensory deficit/loss • Developmental disability
	55.02 Discuss special considerations regarding common medical devices used in the home care of patients with special challenges including: • Respiratory devices • Cardiac devices • Gastro-urinary devices • Central & peripheral IV catheters
	55.03 Describe home care and the types of patients it serves and the services it encompasses.
	55.04 Differentiate between hospice/palliative care and curative care.
	55.05 Discuss the role of the EMT as a patient advocate for vulnerable populations.
56.0	**Principles of Safely Operating a Ground Ambulance:** Demonstrate a simple depth, foundational breadth of knowledge of risks and responsibilities of transport. The student will be able to:
	56.01 Discuss the importance of performing regular vehicle and equipment inspection.
	56.02 Demonstrate how to perform a daily inspection of an ambulance.
	56.03 Review the general provisions of Florida laws relating to the operation of the ambulance.
	56.04 Discuss the guidelines for operating an ambulance safety during emergency and non-emergency situation/incident.
	56.05 Review considerations that are required for ensuring scene safety, including personal safety, patient safety, and traffic control.
	56.06 Review how to clean and disinfect the ambulance and equipment.
57.0	**Incident Management:** Demonstrate a fundamental depth, fundamental breadth of knowledge of establishing and working within the incident management system. The student will be able to:
	57.01 Discuss the importance of NIMS (National Incidence Management System) and its functional components.
	57.02 Discuss unified command and when it is applicable.
	57.03 Describe the role of command and the procedures for transfer of command.
	57.04 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 • Extrication/rescue • Morgue • Communications
	57.05 Discuss the physical and psychological signs of critical incident stress.
58.0	**Multiple Casualty Incidents:** Demonstrate a simple depth, foundational breadth of knowledge of responding to an emergency during a multiple casualty incident. The student will be able to:
	58.01 Review essential elements of scene size-up when arriving at a potential MCI.
	58.02 Describe the role of the rescuers and EMS systems in planning for MCIs and disasters.
	58.03 Describe the role of the physician at multiple casualty incidents.
	58.04 Define triage and describe the principles of triage.
	58.05 Describe the START (simple triage and rapid treatment) and JUMP START method of initial triage.
	58.06 Describe techniques used to allocate patients to hospitals and track them.
	58.07 Discuss and describe the essential equipment to provide logistical support to MCI operations.
	58.08 Describe the role of critical incident stress management during and after MCIs.
	58.09 Demonstrate the use of local/regional triage tagging system.
59.0	**Air Medical:** Demonstrate a simple depth, simple breadth of knowledge of safe air medical operations and criteria for utilizing air medical response. The student will be able to:
	59.01 Describe key scene safety considerations when preparing for a helicopter medivac, including establishing a landing zone and approaching the aircraft.
	59.02 Describe the capabilities, protocols, and methods for accessing air medical transport.
	59.03 Review the advantages and disadvantages of air medical transport.
	59.04 Review the conditions/situations in which air medical transport should be considered.

60.0	**Vehicle Extrication:** Demonstrate a simple depth, simple breadth of knowledge for safe vehicle extrication and use of simple hand tools. The student will be able to:
60.01	Describe the role of the EMT in patient rescue and vehicle extrication
60.02	Describe personal and patient safety during vehicle extrication.
60.03	Explain the difference between simple access and complex access in vehicle extrication.
60.04	Discuss patient care considerations related to assisting with rapid extrication, providing emergency care to the trapped patient and removing and transferring a patient.
60.05	Discuss the use of simple hand tools used for vehicle extrication.
60.06	Discuss and describe the hazards and safe practices associated with the following vehicle components: • Energy absorbing bumpers • Air bag/supplemental restraint systems • Catalytic converters and conventional fuel systems • Stored energy • Hybrid-electric vehicles
60.07	Describe methods for emergency stabilization using rope, cribbing, jacks, spare tire, and come-a-longs for vehicles.
60.08	Describe the electrical hazards commonly found at highway incidents (above and below ground).
60.09	Explain the difference between tempered and safety glass, identify its locations on a vehicle and how to break it safely.
60.10	Explain typical door anatomy and methods to gain access to the patient.
61.0	**Hazardous Materials Awareness:** Demonstrate a simple depth, simple breadth of knowledge of risks and responsibilities of operating in a cold zone at a hazardous material or other special incident. The student will be able to:
61.01	Identify and describe 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 • Computer-Aided Management of Emergency Operations (CAMEO) • CHEMTREC • Technical specialists • Agency for toxic substances and disease registry
61.02	Explain primary and secondary contamination risk.

61.03	Review routes of exposure.
61.04	Discuss how the substance and route of contamination alters triage and decontamination methods.
61.05	Explain the common signs, symptoms, and treatment for the following substances: • Corrosives • Pesticides • Chemical asphyxiants • Hydrocarbon solvents
61.06	Identify local facilities and resources capable of treating patients exposed to hazardous materials.
61.07	Determine the appropriate level of PPE by considering the following: • Types • Application • Use and limitations • Use of chemical compatibility chart
61.08	Explain specific decontamination procedures.
61.09	Discuss the designated HAZMAT control zones (HOT, WARM, and COLD).
61.10	Discuss an emergency two-step decontamination process.
61.11	Identify DOT Labels, placards and markings that are used to designate HAZMAT materials.
61.12	Demonstrate the ability to use a variety of reference materials to identify a HAZMAT material.
62.0	**Mass Casualty Incidents Due to Terrorism and Disaster:** Demonstrate a simple depth, simple breadth of knowledge of risks and responsibilities of operating on the scene of a natural or man-made disaster. The student will be able to:
62.01	Describe the role of the EMT on the scene of a natural or man-made disaster.
62.02	Define the different types of terrorism and provide examples of incidents of each.
62.03	Describe the factors related to ensuring situational safety at the site of a disaster and the procedures required.
62.04	Discuss the National Terrorism Advisory System.
62.05	Discuss factors to consider when responding to a terrorist situation.
62.06	Review important actions to take at the scene of a terrorist event such as: • Scene safety • Personal protection • Notification procedures • Available resources

	• Working with in the command system
62.07	List and describe the main categories of weapons of mass destruction.
62.08	Discuss the different types of chemical agents and their signs and symptoms.
62.09	Review the treatment and management of patients exposed to various types of chemical agents and radiation.
62.10	Review the different types of radiations and their effect on the human body.
62.11	Discuss the use of a nerve agent antidote kit.

Florida Department of Education
Student Performance Standards

Program Title: **Emergency Medical Technician –ATD**
ATD CIP Number: **0351090408**
SOC Code(s):

When this program is offered at the college level, the following standards and benchmarks apply:

01.0	**EMS Systems:** Demonstrate a simple depth, foundational breadth of knowledge of EMS systems. The student will be able to:
01.01	Define Emergency Medical Services (EMS) systems.
01.02	Discuss the historical background of the development of the EMS system.
01.03	Identify the four levels of national EMS providers (EMR, EMT, AEMT and PM) as well as the three levels (EMR, EMT, and PM) in the State of Florida.
01.04	Discuss the specific statutes and regulations regarding the EMS system in Florida.
01.05	Discuss vehicle and equipment readiness.
01.06	Characterize the EMS system's role in prevention and public education.
01.07	Systems of care, e.g., Stroke, STEMI, Trauma, Pediatrics (S, F).
01.08	MIH/CP and other EMS-related specialty roles (S, S).
01.09	Discuss the roles and responsibilities of the EMT related to personal safety of the crew, patient and by standers.
01.10	Discuss the roles and responsibilities of the EMT to operate emergency vehicles, provide scene leadership and perform patient assessment and administer emergency care.
01.11	Discuss the maintenance of and differences between certification and licensure for the EMS professional in the State of Florida and NREMT.
01.12	Define quality improvement and discuss the EMT's role in the process.
01.13	Quality improvement vs. quality assurance (S, F).
01.14	Role of medical oversight (S, S).
01.15	Culture of safety.
01.16	Patient safety (SF)

01.17	Identify the basics of common methods of payment for healthcare services.
01.18	Analyze attributes and attitudes of an effective leader.
01.19	Demonstrate effective techniques for managing team conflict.
01.20	Describe factors that influence the current delivery system of healthcare.
01.21	Discuss the importance of continuing medical education and skills retention.
01.22	Continuum of care (S, F).
01.23	Assess personal attitudes and demeanor that may distract from professionalism.
01.24	Serve as a role model and exhibit professional behaviors in the following areas: • Integrity • Empathy • Self-motivation • Appearance and personal hygiene • Self-confidence • Communications (including phone, email and social media etiquette) • Time management • Teamwork and diplomacy • Respect • Patient advocacy (inclusive of those with special needs, alternate lifestyles and cultural diversity) • Careful delivery of service
02.0	**Research:** Demonstrate a simple depth, simple breadth of knowledge of research and evidence-based decision making. The student will be able to:
02.01	Discuss EMS research and evidence-based decision making • Conduct scientific literature searches • Read, interpret, and extract information from journal articles relevant to a project
02.02	Explain the importance of assessing and treating patients based on evidence-based decision-making.
02.03	Interpret graphs, charts, and tables.
02.04	Measure time, temperature, distance, capacity, and mass/weight.
02.05	Convert and use traditional and metric units.
02.06	Make estimations, approximations and judge the reasonableness of the result.
02.07	Convert time from a 12-hour format to a 24-hour format

	02.08 Demonstrate ability to evaluate and draw conclusions.
	02.09 Calculate ratios.
	02.10 Explain the rationale for the EMS system gathering data.
	02.11 Impact of research on EMT care (S, S).
	02.12 Data collection (S, S).
	02.13 Evidence-based decision making (S,S).
03.0	**Workforce Safety and Wellness:** Demonstrate a fundamental depth, foundational breadth of knowledge of workforce safety and wellness. The student will be able to:
	03.01 Explain the need to determine scene safety.
	03.02 Discuss the importance of body substance isolation (BSI).
	03.03 Describe the steps and equipment the EMT should take for personal protection from airborne and blood borne pathogens and communicable disease.
	03.04 List possible emotional reactions that an individual (EMT and EMT family, Patient and Patient family) may experience when faced with trauma, illness, death and dying.
	03.05 Discuss the steps the EMT should take when approaching a family confronted with death and dying.
	03.06 Recognize the warning signs of personal stress and discuss the strategies and resources available for EMTs to utilize.
	03.07 Demonstrate good body mechanics while using a stretcher and other patient moving devices.
	03.08 Discuss the guidelines and safety precautions to be followed when lifting and moving patients and equipment.
	03.09 Discuss patient positioning in common emergency situations.
	03.10 Discuss situation that may require the use of medical restraints on the patient and explain guidelines and safety consideration for their use.
	03.11 Define “infectious disease” and “communicable disease.”
	03.12 Disease transmission (F, F).
	03.13 Describe the routes of transmission and associated risks for infectious disease.
	03.14 Explain the mode of transmission and the steps to prevent/deal with an exposure of hepatitis, meningitis, tuberculosis and HIV.
	03.15 Explain how immunity to infectious diseases is acquired.

	03.16 Explain post exposure management of exposure to patient blood or body fluids, including proper notification documentation.
	03.17 Describe the components of physical fitness and mental wellbeing.
	03.18 Identify personal health practices and environmental factors which affect physical, mental, and emotional wellbeing.
	03.19 Prevention of work-related injuries and illnesses (F, F).
	03.20 Responder mental health, resilience and suicide prevention (F, F).
	03.21 Wellness principles (F, F).
	03.22 Discuss complementary and alternative health practices.
	03.23 Explain the basic concepts of positive self-image, wellness and stress.
	03.24 Discuss the need for a wellness and stress control plan that can be used in personal and professional life.
	03.25 Explore the importance of adequate nutrition (i.e. U.S. Department of Agriculture's MyPlate food guide (www.choosemyplate.gov)).
	03.26 Demonstrate safe behaviors in the proper use of medical equipment.
	03.27 Explain the theory of root- cause analysis.
	03.28 Identify and describe methods in medical error reduction and prevention in the various healthcare settings.
	03.29 Identify and practice security procedures for medical supplies and equipment in various healthcare settings.
	03.30 Describe fire, safety, disaster and evacuation procedures in the various healthcare settings.
	03.31 Discuss applicable accrediting and regulatory agency patient safety guidelines.
04.0	**Documentation:** Demonstrate a fundamental depth, foundational breadth of knowledge of the principles of medical documentation and report writing. The student will be able to:
	04.01 Discuss applications of technology in healthcare.
	04.02 Demonstrate basic computer skills.
	04.03 Interpret and utilize information from electronic health records.
	04.04 Identify methods of electronic communication to access and distribute data.
	04.05 Describe the use and importance of properly written communication and patient care documentation.
	04.06 Explain the legal implication of the patient care report.

	04.07 Supporting medical necessity (S,S).
	04.08 Identify the minimum dataset reference patient information and administrative information on the patient care report.
	04.09 Understand how to document refusal of care, including legal implications.
	04.10 Discuss the implications of the Health Insurance Portability and Accountability Act of 1996 on confidential documentation.
	04.11 Describe the special considerations concerning mass casualty incident documentation.
	04.12 Demonstrate completion of a patient care report for a medical and trauma patient.
05.0	**EMS System Communication:** Demonstrate a simple depth, simple breadth of knowledge of the EMS communication system, communication with other health care professionals, and team communication. The student will be able to:
	05.01 Understand the basic principles of the various types of communications equipment used in EMS.
	05.02 Describe the use of radio communication and correct radio procedures, including the proper methods of initiating and terminating the radio call/transmission.
	05.03 Explain the rationale for providing efficient and effective radio communications and patient reports.
	05.04 Identify the essential components of the verbal report and legal aspects that need to be considered.
	05.05 Perform an organized and concise radio transmission.
	05.06 Team communication and dynamics (S,S).
	05.07 Perform an organized, concise verbal patient report that would be given to the staff at a receiving facility.
	05.08 Perform a brief, organized verbal report that would be given during transfer of care at an incident scene.
06.0	**Therapeutic Communication:** Demonstrate a simple depth, simple breadth of knowledge of the principles of therapeutic communication. The student will be able to:
	06.01 Describe principles of therapeutic and effective communication with patients.
	06.02 Health care literacy (S, S).
	06.03 Non-discriminatory communication that addresses inherent or unconscious bias, is culturally aware and sensitive, and intended to improve patient outcome (S, S).
	06.04 Discuss basic speaking and active listening skills.
	06.05 Recognize the importance of patient/client education regarding healthcare.
	06.06 Discuss the adjustment of communication strategies to effectively communicate with patients with: • Differing age groups

	• Differing developmental stages • Special needs • Differing cultures, including language barriers
	06.07 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.
	06.08 Discuss the strategies for interviewing persons in special situations.
	06.09 Distinguish between and respond to verbal and non-verbal cues.
	06.10 Analyze elements of communication using a sender-receiver/close loop model.
	06.11 Exhibit positive non-verbal behaviors.
	06.12 Establish proper patient rapport.
07.0	**Medical/Legal and Ethics:** Demonstrate a fundamental depth, foundational breadth of knowledge of medical legality and ethics. – The student will be able to:
	07.01 Discuss the rational, importance, and limitations of patient autonomy.
	07.02 Differentiate between expressed, implied and involuntary consent.
	07.03 Discuss the methods of obtaining consent and procedures for minors.
	07.04 Discuss the issues of abandonment, negligence, false imprisonment and battery and their implications to the EMT.
	07.05 Discuss the implications for the EMT in patient refusal of care and/or transport.
	07.06 Explain the importance, necessity and legality of patient confidentiality.
	07.07 Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or Florida provisions regarding EMS application.
	07.08 Patient rights/advocacy (S, S).
	07.09 Discuss State of Florida and Federal special reporting situations including: • Abuse • Sexual assault • Gunshot and knife wounds • Communicable disease • Animal Bites
	07.10 Differentiate between civil tort and criminal actions.
	07.11 Discuss the elements of negligence and defenses/protections from liability.

	07.12 Discuss the role of the EMT at crime scenes and preservation of evidence.
	07.13 Define ethics and morality and discuss their implication for the EMT.
	07.14 Discuss Florida legislation such as: • Baker Act (FS 394.451) • Marchman Act (FS 397.601 and FS 397.675) • Emergency Examination and Treatment of Incapacitated Persons Act (FS 401.445)
	07.15 Differentiate between the scope of practice and the standard of care as applied to the EMT.
	07.16 Discuss the legal concepts and limitations of immunity, including Good Samaritan statutes and governmental immunity.
	07.17 Describe the appropriate patient management and care techniques in a refusal of care situation.
	07.18 Analyze the relationship between the law, morals and ethics in EMS and the premise that should under lie the EMTs ethical decisions.
	07.19 Describe the criteria necessary to honor an advance directive.
	07.20 Explain the rationale for the needs, benefits and varying degrees of advance directives.
08.0	**Anatomy and Physiology**: Demonstrate a fundamental knowledge of the anatomy and function of all human systems to the practice of EMS. The student will be able to:
	08.01 Identify the following topographic terms: • Medial • Lateral • Proximal • Distal • Superior • Inferior • Anterior • Posterior • Midline • Right and left • Mid-clavicular • Bilateral • Mid-axillary
	08.02 Describe the life support chain, aerobic metabolism, and anaerobic metabolism.
	08.03 Define anatomy, physiology, pathophysiology, and homeostasis.
	08.04 Identify and describe the anatomical structures and functions of the following:

• skeletal system • Muscular system • Respiratory System • Circulatory/ Cardiovascular system • Nervous System • Integumentary system • Digestive system • Endocrine system • Renal system • Reproductive system • Lymphatic System
08.05 Explain cellular anatomy and physiology.
08.06 Explain cellular respiration.
08.07 Discuss cell division.
08.08 Describe the different types of muscle tissues including skeletal, smooth and cardiac.
08.09 Name and identify the location of the bones of the axial and appendicular skeleton.
08.10 Describe the classification and types of joints.
08.11 Discuss the mechanisms of breathing including: • mechanical ventilation • pulmonary volumes • dead space • lung compliance
08.12 Explain the diffusion of gases in external and internal respiration.
08.13 Describe oxygen and carbon dioxide transport in the blood.
08.14 Describe nervous and chemical mechanisms that regulate respirations.
08.15 Discuss respiration and acid-base balance.
08.16 Discuss the hemodynamics of blood pressure.
08.17 Discuss the role of nutrition, metabolism and body temperature on body function.
08.18 Describe the causes, advantages, and disadvantages of a fever.

	08.19 Discuss the hypothalamus functions as the thermostat in the body.
09.0	**Medical Terminology:** Demonstrate a fundamental knowledge in the use of medical terminology. The student will be able to:
	09.01 Identify medical terminology word parts such as: • Root words • Prefixes • Suffixes • Combining forms
	09.02 Correctly utilize medical terminology describing each of the following: • Body structures • Functions • Conditions and disorders • Body regions • Cavities • Areas • Landmarks
	09.03 Correctly use medical abbreviations and symbols.
	09.04 Read and understand basic medical documentation in medical records and medical reports.
	09.05 Communicate with healthcare professionals utilizing basic medical terminology.
	09.06 Explain the rationale for using accepted medical terminology correctly.
10.0	**Pathophysiology:** Demonstrate a fundamental knowledge of the causes and pathophysiology of shock and the components of resuscitation. The student will be able to:
	10.01 Discuss signs of irreversible death.
	10.02 Review the anatomy and physiology of the respiratory and cardiovascular systems.
	10.03 Discuss and identify the pathophysiology of respiratory failure and respiratory and cardiac arrest.
	10.04 Understand shock, including pathophysiology, causes, and the signs and symptoms associated with the various types of shock.
	10.05 Discuss the variations in the pathophysiology of shock patients of all ages.
11.0	**Life Span Development:** Demonstrate a fundamental knowledge of life span development to patient assessment and management. The student will be able to:
	11.01 Describe the major physiologic and psychosocial characteristics patients of all ages.

12.0	**Public Health:** Demonstrate a simple knowledge of the principles of illness and injury prevention in emergency care. The student will be able to:
	12.01 Define public health and explain the goal of the public health field.
	12.02 Identify the EMS role within the public health field.
	12.03 Discuss basic concepts of epidemiology.
	12.04 Discuss ways of EMS involvement in injury prevention.
	12.05 Identify areas of need for prevention programs in the community.
13.0	**Principles of Pharmacology:** Demonstrate a simple depth, simple breadth of knowledge of pharmacology, medication safety, and medication types used during an emergency. The student will be able to:
	13.01 Explain the “rights” of medication administration and describe how each one related to EMS.
	13.02 Discuss and differentiate the various medication forms and the appropriate routes of administration
	13.03 Describe the difference between a generic medication name and trade name and provide an example of each.
	13.04 Specific medication classes to be determined locally • Class names (S, S) • Class indications (S, S) • Class complications (S, S) • Class side effects (S, S) • Polypharmacy (S, S)
	13.05 Discuss the components and elements of a drug profile including: • Class • Actions • Contraindications • Side effects • Dose • Route • Adverse drug reactions (S, S) • Medication response relationships (F,F)
	13.06 Describe the role of medical direction in medication administration and explain the difference between direct orders (online) and standing orders (off-line).
14.0	**Pharmacology:** Demonstrate a fundamental depth, simple breadth of knowledge of emergency medications within the scope of practice of the EMT. The student will be able to:
	14.01 State the following for each medication that can be administered by an EMT as dictated by the State of Florida and local medical direction:

	• Medication safety • Medication legislation • Naming • Classifications • Storage and security • Medication interactions • Adverse drug reactions • Metabolism and excretion • Mechanism of action • Medication response relationships
14.02	State the following for each medication that can be administered by an EMT as dictated by the State of Florida and local medical direction (Acute Medications): • Generic / Trade Names, Drug Classifications • Effects • Actions • Indication • Contraindications • Complications • Routes of administration • Side effects • Interactions • Doses of medications
14.03	Demonstrate the steps in properly inspecting each type of medication. (Medication Administration) • Use a Medication Cross Check procedure • Use an autoinjector • Use a unit-dose, premeasured intranasal device • Administer medications to a patient • Provide pain management, including ethical and safety considerations • Routes of administration
14.04	Discuss the difference between administration versus assistance of patient medications. (Chronic or Maintenance Medications) • Class names • Class indications • Class complications • Class side effects • Polypharmacy
15.0	**Respirations:** Demonstrate a fundamental depth, foundational breadth of knowledge of respiration. The student will be able to:

	15.01 Anatomy of the Respiratory System and review the pulmonary ventilation process to include mechanics of ventilation and alveolar ventilation (tidal volumes, dead space, etc.): • Control of respirations • Mechanics of respiration • Pulmonary ventilation • Oxygenation • Mechanical ventilation
	15.02 Physiology and pathophysiology of respiration • Pulmonary ventilation • Oxygenation • Respiration • External • Internal • Cellular
	15.03 Demonstrate the correct operation of oxygen tanks and regulators.
	15.04 Describe the following regarding supplemental oxygen delivery devices: • Indications • Contraindications • Advantages • Disadvantages • Complications • Liter flow range • Concentration of delivered oxygen • Procedures • Purpose • Components
	15.05 Demonstrate the use of low, medium, high, and variable concentration oxygen delivery devices for all age groups.
	15.06 Describe assessment and management for adequate and inadequate respiration, including the use of pulse oximetry and capnography.
	15.07 Explain the rationale for providing adequate oxygenation through high inspired oxygen concentrations to patients who, in the past, may have received low concentrations.
	15.08 Discuss the use of an oxygen humidifier and the requirements needed for its use.
	15.09 Discuss the differences between negative pressure and positive pressure ventilation.
16.0	**Airway Management:** Demonstrate a fundamental depth, foundational breadth of knowledge of airway management patients of all ages within the scope of practice of the EMT. The student will be able to:

	16.01 Review the structures and functions of the Anatomy of the Airway and the Respiratory System (Include age- related variations in pediatric and geriatric patients). • Normal • Abnormal • Special Considerations (MDI, In-Line Neb, Simple Face Mask, Venturi, CPAP/BiPAP)
	16.02 Describe appropriate assessment of the airway and the management for a patient with or without adequate breathing (Include age-related variations in pediatric and geriatric patients).
	16.03 Describe the Techniques of assuring a patent airway, indications for airway management, and demonstrate the steps in performing the head-tilt chin-lift and jaw thrust in all age groups (Include age- related variations in pediatric and geriatric patients). • Demonstrate the techniques of suctioning. • Demonstrate relief of FBAO. • Demonstrate how to insert an oral and nasal -airway adjunct. • Demonstrate how to insert both esophageal and supra-glottic airways.
17.0	**Artificial Ventilations:** Demonstrate a fundamental depth, foundational breadth of knowledge of assessment and management utilizing ventilation patients of all ages. The student will be able to:
	17.01 Effect of ventilation on cardiac output • E.g. Bag Valve Mask, Ventilator, CPAP, Hyper Mechanical Inflation
	17.02 Demonstrate how to ventilate a patient with a pocket mask.
	17.03 Demonstrate the safe and effective ventilation for a patient with a BVM for one or two rescuers using oral-nasal adjuncts with appropriate airway positioning.
	17.04 Discuss the signs of adequate and inadequate ventilation using the BVM.
	17.05 Describe the steps involved in performing a comprehensive assessment of ventilations.
	17.06 Demonstrate how to ventilate a patient with a stoma.
	17.07 Demonstrate the use of various devices used in the assessment of supra-glottic airway placement.
	17.08 Describe the following for a patient with an automatic transport ventilator (ATV): • Indications • Contraindications • Advantages • Disadvantages • Complications • Technique for ventilating
	17.09 Describe the following for a patient with a CPAP: • Indications • Contraindications • Advantages

	• Disadvantages • Complications • Technique for ventilating
18.0	**Scene Size-Up:** Demonstrate a fundamental depth, foundational breadth of knowledge of scene management and multiple patient situations**.** The student will be able to:
18.01	Recognize and describe hazards/potential hazards at the scene.
18.02	Discuss common mechanisms of injury/nature of illness.
18.03	Discuss the priority considerations for multiple-patient situations.
18.04	Explain why it is important for the EMT to anticipate and determine the need of appropriate Scene management including but not limited to traffic incident management, additional resources, or specialty resources.
18.05	Discuss the importance of continuous scene assessment to ensure safety of the EMS Impact of the environment on team and the patient care.
18.06	Explain why it is important for the EMT to anticipate and determine the need for additional or specialized resources.
18.07	Discuss the importance of continuous scene assessment to ensure safety of the EMS team and the patient.
18.08	Discuss the minimum standard precautions that should be followed and PPE that should be worn as appropriate.
18.09	Discuss special considerations for dealing with a violent scene.
18.10	Explain the rationale for crew members to evaluate scene safety prior to entering.
18.11	Explain how patient situations affect your evaluation of mechanism of injury or illness.
19.0	**Primary Assessment:** Demonstrate a fundamental depth, simple breadth of knowledge of the primary assessment for all patient situations. The student will be able to:
19.01	Summarize the elements of a general impression of the patient.
19.02	Explain the reason for performing a primary assessment.
19.03	Discuss and demonstrate methods of assessing level of responsiveness using AVPU.
19.04	Discuss and demonstrate methods of assessing the airway and providing airway care patients of all ages.
19.05	Describe and demonstrate methods used for assessing if a patient is breathing patients of all ages.
19.06	Differentiate between a patient with adequate and inadequate breathing.
19.07	Describe and demonstrate the methods used to obtain a pulse patients of all ages.

	19.08 Discuss and demonstrate assessing the patient for external bleeding.
	19.09 Describe and demonstrate the assessment and interpretation of skin color, temperature, moisture and capillary refill patients of all ages.
	19.10 Explain the reasons prioritizing a patient for care and transport.
	19.11 Describe when it is appropriate to expose the patient completely.
	19.12 Differentiate between critical life-threatening, potentially life- threatening, and non-life-threatening patient presentations.
20.0	**History-Taking:** Demonstrate a fundamental depth, foundational breadth of knowledge of the components of history taking. The student will be able to:
	20.01 Determine and investigate the chief complaint (MOI/NOI).
	20.02 Describe components of the patient history.
	20.03 Explain the importance of obtaining a SAMPLE and OPQRST history.
	20.04 Acknowledge the feelings patients experience during assessment.
	20.05 Discuss the value of obtaining a family and social history.
	20.06 Describe examples of different techniques the EMT may use to obtain information from patients, family or bystanders during the history taking process.
21.0	**Secondary Assessment:** Demonstrate a fundamental depth, foundational breadth of knowledge of techniques used for a secondary assessment. The student will be able to:
	21.01 Discuss the components and techniques of the physical exam and skills involved.
	21.02 Discuss the indications for performing: • Rapid assessment • Focused exam • Head to toe exam
	21.03 Demonstrate: • Rapid exam • Focused exam • Head to toe exam
	21.04 Describe and demonstrate the techniques of inspection, palpation, percussion, and auscultation. • Respiratory system including breath sound quality • Cardiovascular system • Neurological system • Musculoskeletal system • Major anatomical regions

	21.05 Describe and demonstrate the importance of obtaining a baseline set of vital signs. • E.g., Non-Invasive Blood Pressure, Blood Glucose, Temperature …
	21.06 Discuss blood pressure ranges patients of all ages.
22.0	**Monitoring Devices:** Demonstrate a simple depth, simple breath of knowledge of monitoring devices within the scope of practice of the EMT. The student will be able to:
	22.01 Describe and demonstrate the purpose, indications, procedure, normal findings, and limitations of the following patient monitoring technologies. • Pulse oximetry • Glucometry • Capnography • Noninvasive BP monitoring • Thermometry • Telemetry • Cardiac monitoring – 12 lead ECG acquisition and transmission
	22.02 Demonstrate proper placement of a cardiac monitor and diagnostic ECG leads.
23.0	**Reassessment:** Demonstrate a fundamental depth, foundational breadth of knowledge of how and when to perform a reassessment for all patient situations. The student will be able to:
	23.01 Describe the components of reassessment and demonstrate the skills involved.
	23.02 Discuss the reasons for repeating the primary assessment as part of the reassessment.
	23.03 Explain trending assessment components and its value to other health professionals who assume care of the patient.
	23.04 Demonstrate the reassessment of patients of all ages.
24.0	**Medical Overview:** Demonstrate a simple depth, foundation breadth of knowledge of pathophysiology, assessment and management of medical complaints. The student will be able to:
	24.01 Pathophysiology, assessment, and management of a medical complaints to include • Identify factors that affect the patient Transport Decision and Medically Appropriate Destination • E.g., Scene Safety, Environmental Factors, Chief Complaint, Preconceptions.
	24.02 Discuss forming a field impression and utilizing available information to determine a differential diagnosis.
25.0	**Neurology:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of neurologic disorders/emergencies patients of all ages. The student will be able to:
	25.01 Review the anatomy and physiology of the nervous system.
	25.02 Describe the pathophysiology of the following neurologic disorders: • Altered mental status • Stroke

	• Transient ischemic attack • Headache • Seizures • Syncope • Dementia vs. delirium • Alzheimer's disease • Headache • Brief Resolved Unexplained Event (BRUE) • Other neurological disorders to be determined locally
25.03	Discuss and identify the causes, signs and symptoms of ischemic strokes, hemorrhagic strokes, and transient ischemic attacks and their similarities and differences.
25.04	Discuss and demonstrate how to use a stroke scoring system in the assessment of patients with suspected stroke.
25.05	Define and differentiate generalize seizure, partial seizure and status epilepticus and list their possible causes.
25.06	Define and differentiate migraine headache, sinus headache, tension headache and discuss how to distinguish harmless headaches from something more serious.
25.07	Define "altered mental status" and identify the possible causes.
25.08	Describe and demonstrate the assessment and management of the patient with various neurological emergencies in patients of all ages to include: • Strokes • Headaches • Seizures • Altered mental status
25.09	Discuss the transport of the stroke patient to the appropriate treatment center.
26.0	**Abdominal and Gastrointestinal Disorder:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of abdominal and gastrointestinal disorders/emergencies patients of all ages. The student will be able to:
26.01	Review the basic anatomy and physiology the gastrointestinal, genital and urinary systems.
26.02	Define and describe the pathophysiology of the following abdominal and gastrointestinal disorders: • Abdominal pain • Acute abdomen • Peritonitis • Appendicitis • Pancreatitis • Cholecystitis • Gastrointestinal bleeding • Esophageal varices

	• Gastroenteritis • Ulcers • Intestinal obstruction • Hernia • Abdominal aortic aneurysm
	26.03 Identify the signs and symptoms of common GI disorders.
	26.04 Describe and demonstrate the assessment and management of the patient with various gastrointestinal emergencies.
	26.05 Differentiate between hemorrhagic and non-hemorrhagic abdominal pain.
27.0	**Immunology:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of immunology disorders/emergencies patients of all ages. The student will be able to:
	27.01 Define and differentiate allergic reaction and anaphylaxis.
	27.02 Describe the pathophysiology of the following immunology disorders: • allergic reaction • anaphylaxis • anaphylactic shock
	27.03 Describe and demonstrate the assessment and management of the patient in patients of all ages experiencing an allergic or anaphylactic reaction.
	27.04 Review the following for the epinephrine auto-injector: • generic and trade names • medication forms • dose • administration • action • contraindications
	27.05 Demonstrate the use of epinephrine auto-injector.
	27.06 Review the anatomy and physiology of the organs and structures related to anaphylaxis.
	27.07 Describe the incidence, morbidity and mortality of anaphylaxis.
	27.08 Recognize the signs and symptoms related to anaphylaxis.
	27.09 Describe the risk factors for and prevention of anaphylaxis and appropriate patient education.
	27.10 Discuss common antigens most frequently associated with anaphylaxis.
	27.11 Explain the importance of separating the patient from the allergen when possible.

28.0	**Infectious Disease:** Demonstrate a simple depth, simple breadth of knowledge of the assessment and management of a patient who may have an infectious disease patients of all ages. The student will be able to:
	28.01 Discuss the causes of infectious diseases
	28.02 Describe the pathophysiology of infectious diseases of significant public health concern.
	28.03 Describe and demonstrate the assessment and management of the patient in patients of all ages experiencing an infectious disease.
	28.04 Discuss mandatory notification to state or federal agencies of various diseases.
	28.05 Identify patients with risk factors for infectious disease.
	28.06 Explain the principles and practices of infection control in prehospital care.
	28.07 Describe and discuss the rationale for the various types of PPE.
	28.08 Discuss the proper disposal of contaminated supplies (sharps, gauze sponges, tourniquets, etc.).
	28.09 Discuss decontamination of the ambulance and disinfection of patient care equipment, and areas in which care of the patient occurred.
	28.10 Describe the actions to take if the EMS provider is exposed to an infectious disease.
	28.11 Demonstrate the ability to comply with body substance isolation guidelines.
	28.12 Discuss the pathophysiology, risk factors, assessment, and prehospital management of sepsis/systemic inflammatory response syndrome (SIRS)
	28.13 Identify the signs and symptoms and discuss the assessment and prehospital management of a patient in septic shock.
	28.14 Describe the risk factors for and prevention of infectious disease and appropriate patient education (including but not limited to hand-washing, PPE use, and disposal of contaminated supplies).
29.0	**Endocrine Disorders:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of endocrine disorders/emergencies patients of all ages. The student will be able to:
	29.01 Review the anatomy and physiology of the endocrine system and its main function in the body.
	29.02 Describe the pathophysiology and signs and symptoms of the following endocrine disorders: • Insulin dependent Diabetes Mellitus • Non-insulin dependent Diabetes Mellitus • Hypoglycemia • Hyperglycemia • Diabetic Ketoacidosis (DKA) • Hyperglycemic Hyperosmolar Non-ketotic Syndrome (HHNS)
	29.03 Define and differentiate between Type I and Type II Diabetes.

	29.04	Identify and demonstrate the steps in the management of the patient taking diabetic medicine with an altered mental status and a history of diabetes, patients of all ages.
	29.05	Review the following for oral glucose: • Generic and trade names • Medication forms • Dose • Administration • Action • Contraindications
	29.06	Demonstrate the steps of using a glucometer device and administering oral glucose.
	29.07	Describe and demonstrate the assessment and the management of the patient experiencing an endocrinologic emergency to include hypo- and hyper-glycemia.
	29.08	Discuss the general assessment findings associated with endocrinologic emergencies. Patients of all ages.
	29.09	Describe the risk factors for and prevention of endocrine emergencies, including but not limited to healthy lifestyles and modifiable risk factors, the use of blood sugar monitoring devices and self-administration of prescribed medications.
30.0	**Psychiatric:** Demonstrate a fundamental depth, foundational breadth of knowledge regarding the assessment and management of psychiatric emergencies patients of all ages. The student will be able to:	
	30.01	Differentiate among behavior, psychiatric disorders and behavioral emergencies
	30.02	Discuss common psychiatric disorders and behavioral emergencies.
	30.03	Discuss the general factors that may cause an alteration in a patient's behavior.
	30.04	Discuss patterns of violence, abuse, and neglect.
	30.05	Discuss the risk factors/signs or symptoms of various psychiatric emergencies to include acute psychosis, suicide ideation, excited delirium, anxiety, depression, medical fear, substance use disorder, and PTSD.
	30.06	Manage a behavioral emergency scenario applying knowledge of medical/legal Florida Statutes.
	30.07	Describe and demonstrate the assessment and management of the patient experiencing a behavioral or psychiatric emergency.
	30.08	Discuss the risk factors/signs or symptoms of various psychiatric emergencies to include acute psychosis, suicide ideation, excited delirium, anxiety, depression, medical fear, substance use disorder, and PTSD.
	30.09	Demonstrate an understanding of appropriate and available mental health resources and provide patient education.
	30.10	Describe and demonstrate the assessment and management of the patient experiencing a behavioral or psychiatric emergency, patients of all ages.
	30.11	Describe the biological, psychosocial, and sociocultural influences on psychiatric disorders.

	30.12 Describe the special considerations for the safety of the EMS provider and EMS crew, the patient and bystanders when dealing with behavioral and psychiatric emergencies.
	30.13 Describe and demonstrate methods of restraint that may be used in the management of a patient with a behavioral emergency.
	30.14 Explain the importance of provider behavior and communication in the care of a patient with a behavioral emergency.
31.0	**Cardiovascular**: Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of cardiovascular emergencies patients of all ages. The student will be able to:
	31.01 Review the basic anatomy and physiology of the cardiovascular system.
	31.02 Describe the pathophysiology and signs and symptoms of the following cardiovascular disorders: • Acute coronary syndrome • Angina pectoris • Thromboembolism • Myocardial infarction • Hypertensive emergencies • Aortic aneurysm/dissection • Left and right sided heart failure • Cardiogenic shock • Cardiac arrest
	31.03 Describe and demonstrate the assessment and management of the patient experiencing a cardiac emergency.
	31.04 Discuss the indications and contraindications for automated external defibrillation (AED). (including automatic, manual and vest type).
	31.05 Explain the impact of age and weight on defibrillation.
	31.06 Discuss the position of comfort for patients with various cardiac emergencies.
	31.07 Explain the rationale for early defibrillation.
	31.08 Discuss and differentiate among various types of external defibrillators.
	31.09 Discuss and differentiate among the various types of implanted cardiac devices.
	31.10 Understand the importance of maintenance and operators check list for AED’s.
	31.11 Demonstrate the ability to use an AED according to the latest American Heart Association (AHA) guidelines.
	31.12 Explain the role medical direction plays in the use of automated external defibrillation.
	31.13 Explain the rationale for administering nitroglycerin oxygen and ASA to a patient with chest pain or discomfort.

	31.14 Demonstrate the assessment and documentation of patient response to the automated external defibrillator.
	31.15 Demonstrate the assessment and documentation of patient response to nitroglycerin.
	31.16 Discuss the purpose and use of CPR assist devices.
	31.17 Describe the risk factors for and prevention of cardiac related diseases and provide appropriate patient education.
	31.18 Discuss the signs and symptoms of acute coronary syndrome and provide appropriate patient education to include self-administration of prescribed medications.
32.0	**Toxicology:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of toxicological (poisoning and overdose) emergencies patients of all ages. The student will be able to:
	32.01 Define and differentiate among toxicology, poisoning, and overdose.
	32.02 Describe the pathophysiology and signs and symptoms of the following toxicological emergencies, including but not limited to: • Food poisoning • Carbon monoxide poisoning • Cyanide poisoning • Exposure to acid or alkaline substances • Exposure to hydrocarbons • Methanol ingestion • Isopropanol ingestion • ethylene glycol ingestion • Exposure to poisonous plants • Drug withdrawal • Alcoholic syndrome • Withdrawal syndrome (including delirium tremens) • Illicit drug use • Medication overdose • Opioid overdose • Organa phosphate overdose • Nerve agents
	32.03 Discuss various ways that toxins enter the body. Including inhalation, ingestion, injection, and absorption.
	32.04 Discuss and demonstrate the assessment and management for the patient with a toxicological emergency.
	32.05 Discuss the role of the Poison Control Center with the nationwide contact number 800-222-1222 in the United States.
	32.06 Explain the rationale for contacting medical direction early in the prehospital management of a patient with a toxicological emergency.
	32.07 Review the following for Narcan (naloxone):

	• Generic and trade names • Medication forms • Dose • Administration • Action • Contraindications
32.08	Discuss the use of medication assisted treatments for substance misuse disorders including suboxone, methadone, and naltrexone and potential complications.
32.09	Discuss safe uses and practices with potentially toxic substances while providing appropriate patient education
33.0	**Respiratory:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of respiratory disorders/emergencies patients of all ages. The student will be able to:
33.01	Review the basic anatomy and physiology of the respiratory system.
33.02	Describe the pathophysiology and signs and symptoms of the following respiratory disorders: • Chronic Obstructive Pulmonary Disease • Asthma • Bronchiolitis • Pulmonary Edema • Spontaneous Pneumothorax • Hyperventilation Syndrome • Cystic Fibrosis • Pulmonary Embolism • Pneumonia • Viral Respiratory Infections • Poisonous Exposures • Bacterial respiratory infections
33.03	Discuss signs of adequate air exchange.
33.04	Discuss the signs and symptoms of a patient across the continuum from respiratory distress to failure.
33.05	Describe and demonstrate the assessment and management of the patient with a respiratory emergency. Patients of all ages.
33.06	Review the following for the metered-dose inhalers and small volume nebulizers for medications within the scope of practice of the EMT: • Generic name • Medication forms • Dose • Administration • Action

	• Indications • Contraindications
	33.07 Describe and demonstrate the steps in facilitating the use of an inhaler and a small volume nebulizer.
	33.08 Differentiate between upper and lower airway obstruction.
	33.09 Demonstrate assessment and interpretation of normal and abnormal lung and breath sounds. Patients of all ages.
	33.10 Discuss common respiratory disorders, self-administered medications, and equipment (including, but not limited to home oxygen, nebulizers, and CPAP) and provide appropriate patient education.
34.0	**Hematology:** Demonstrate a simple depth, simple breadth of knowledge of the assessment, and management of hematology disorders patients of all ages. The student will be able to:
	34.01 Review the compositions and functions of blood and plasma.
	34.02 Describe the pathophysiology of the following hematology disorders: • Anemia • Sickle Cell Anemia / Sickle Cell Crisis • Hemophilia/Clotting disorders
	34.03 Describe and demonstrate the assessment and the management of the patient with a hematological disorder. Patients of all ages.
	34.04 Discuss signs, symptoms, and potential complications of various hematological disorders and provide appropriate patient education
35.0	**Genitourinary /Renal:** Demonstrate a simple depth, simple breath of knowledge of the assessment and management of genitourinary/renal emergency patients of all ages. The student will be able to:
	35.01 Review the basic anatomy and physiology of the genitourinary and renal systems.
	35.02 Describe the pathophysiology and signs and symptoms of the following genitourinary/ renal disorders: • Urinary tract infection • Kidney stones • Kidney failure
	35.03 Discuss the basic principles and complications of kidney dialysis.
	35.04 Discuss the recognition and complications of urinary catheters.
	35.05 Describe and demonstrate the assessment and management of the patient with a dialysis emergency. Patients of all ages.
	35.06 Discuss traumatic injuries to the genitourinary system, including, but not limited to: sexual assault (female and male).
36.0	**Gynecology:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of gynecologic emergencies patients of all ages. The student will be able to:
	36.01 Review the basic anatomy and physiology of the female reproductive system.

	36.02 Describe the pathophysiology and signs and symptoms of the following gynecologic disorders and emergencies, including but not limited to: • Sexual assault • Non-traumatic vaginal bleeding • Menstrual pain • Ovarian cyst • Endometritis • Endometriosis • Pelvic inflammatory disease • Sexually Transmitted Disease
	36.03 Describe and demonstrate the assessment and management of the patient experiencing a gynecologic emergency. Patients of all ages.
	36.04 Describe the assessment and management of a patient who has experienced a sexual assault including the psychosocial impact and assessment findings/presentations.
	36.05 Discuss the professional and psychological importance of maintaining a patient's modesty and privacy while still being able to obtain necessary information.
	36.06 Discuss the need to provide care for a patient of sexual assault, while still preventing destruction of crime scene information.
37.0	**Non-Traumatic Musculoskeletal Disorders:** Demonstrate a fundamental depth, foundational breadth of knowledge of the assessment and management of non-traumatic fractures patients of all ages. The student will be able to:
	37.01 Review the basic anatomy and physiology of the musculoskeletal system.
	37.02 Describe and demonstrate the assessment and management of the patient in all age groups with a non-traumatic musculoskeletal emergency.
38.0	**Diseases of the Eyes, Ears, Nose, and Throat:** Demonstrate a simple depth, simple breadth of knowledge of assessment and management of diseases of the Eyes, Ears, Nose, and Throat patients of all ages The student will be able to:
	38.01 Describe and demonstrate the assessment and management of the patient in all age groups with abnormal conditions affecting the eyes, ears, nose and throat, including epistaxis.
39.0	**Shock and Resuscitation:** Demonstrate a fundamental knowledge of the causes, pathophysiology, and management of shock and respiratory failure patients of all ages. The student will be able to:
	39.01 Discuss and identify causes and pathophysiology of the categories of hemorrhage and shock.
	39.02 Review causes and pathophysiology of respiratory failure and arrest.
	39.03 Review causes and pathophysiology of cardiac failure or arrest.
	39.04 Discuss the various types and degrees of shock.
	39.05 Discuss post resuscitation management.

	39.06 Explain the system components of CPR, the links in the AHA chain of survival and how each relates to patient survival.
	39.07 Define and differentiate between compensated and decompensated shock.
	39.08 Discuss the importance of teamwork in the successful management of the critical patient.
	39.09 Demonstrate how to perform one and two rescuer CPR, adult, child, and infant.
	39.10 Demonstrate how to perform rescuer level appropriate defibrillation in an adult, child, and infant patient.
	39.11 Demonstrate rapid decision making based on differential field diagnosis of the critical patient with a ***special arrest*** peri-arrest condition.
	39.12 Describe and demonstrate the assessment and management of the patient with hemorrhage and shock.
	39.13 Discuss ethical issues in resuscitation.
	39.14 Discuss options for termination resuscitation.
40.0	**Trauma Overview:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment and management of the trauma patient patients of all ages. The student will be able to:
	40.01 Discuss pathophysiology of the trauma patient.
	40.02 Discuss the components of a comprehensive trauma systems and levels of trauma centers.
	40.03 Describe the considerations for different transportation modes, ***transport and destination issues*** to a trauma center.
	40.04 Discuss the kinematics of blunt and penetrating trauma.
	40.05 Discuss and describe significant and non-significant Mechanism of Injury (MOI) and provide examples of each.
	40.06 Demonstrate the application of the State of Florida's trauma scorecard methodologies as required in Florida Statute and Florida Administrative Code (F.A.C.).
	40.07 Discuss the National Trauma Triage Protocol of injured Patients.
	40.08 Discuss forming a field impression and utilizing available information to determine a differential diagnosis.
	40.09 Identify the need for rapid intervention transport of the trauma patient.
41.0	**Bleeding:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of bleeding patients of all ages. The student will be able to:
	41.01 Review the anatomy and physiology of the circulatory system.
	41.02 Discuss the different types of bleeding and classes of hemorrhage.

	41.03 Review signs and symptoms of shock (hypo-perfusion).
	41.04 Demonstrate effective hemorrhage control to include application of a tourniquet.
	41.05 Review the pathophysiology of hemorrhagic shock.
	41.06 Recognize the need for rapid transport for patients that are bleeding and showing signs of shock (hypo-perfusion).
	41.07 Describe and demonstrate the assessment and management of a patient with hemorrhagic shock.
	41.08 Discuss the possible complications of an improperly applied dressing, bandage, tourniquet, and hemostatic agents.
42.0	**Chest Trauma:** Demonstrate a fundamental depth, simple breadth of knowledge of pathophysiology, assessment and management of chest trauma patients of all ages. The student will be able to:
	42.01 Review the anatomy and physiology of the thoracic/chest cavity and respiratory system.
	42.02 Differentiate between a pneumothorax (open, simple and tension) and hemothorax.
	42.03 Discuss the pathophysiology, signs and symptoms, and MOI of myocardial injuries, including the following: • Pericardial tamponade • Myocardial contusion • Myocardial rupture • Commotio cordis • Aortic sheerer
	42.04 Discuss the pathophysiology, signs and symptoms, and MOI of specific chest wall injuries, including the following: • Rib fracture • Flail segment • Sternal fracture • Open chest wound • Impaled object
	42.05 Describe and demonstrate the assessment and management of chest trauma ***to include blunt versus penetrating trauma.***
43.0	**Abdominal and Genitourinary Trauma:** Demonstrate a fundamental depth, simple breadth of knowledge of pathophysiology, assessment and management of abdominal and genitourinary trauma patients of all ages. The student will be able to:
	43.01 Review the anatomy and physiology of the abdominal cavity and genitourinary system.
	43.02 Discuss the pathophysiology, signs and symptoms, and MOI for abdominal trauma including *evisceration, impaled objects, blunt versus penetrating mechnaisms*, h***o***llow and solid ***organ*** injuries.
	43.03 Describe and demonstrate the assessment and management of a patient with a suspected abdominal or genitourinary injury/trauma to include internal/external genitalia.
44.0	***Orthopedic Trauma:*** *Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of orthopedic trauma patients of all ages. The student will be able to:*

	44.01 Review the anatomy and physiology of the Musculo-skeletal system.
	44.02 Discuss pathophysiology, signs and symptoms, and MOI for orthopedic trauma including *evisceration, impaled objects, blunt versus penetrating mechanisms*, hollow and solid ***organ*** injuries.
	44.03 Discuss the different types of orthopedic trauma including fracture classifications. To include: • Open fracture • Closed fracture • Dislocation • Upper and Lower extremity orthopedic trauma • Sprains and Strains Pelvic Fracture
	44.04 Explain the rationale for stabilization of an injured extremity. To include: • Open fracture • Closed fracture • Dislocation • Upper and Lower extremity orthopedic trauma • Sprains and Strains • Pelvic Fracture
	44.05 Describe and demonstrate the assessment and management of a patient with a suspected orthopedic trauma.
	44.06 Discuss the following management techniques: • Heat therapy • Cold therapy • Splinting
	44.07 List the six “P’s” of orthopedic injury assessment.
	44.08 Discuss the need for assessment of distal pulses, motor, and sensation before and after splinting.
	44.09 Review age-associated changes in the bones.
	44.10 Discuss the proper procedures to package an amputated body part for replantation.
	44.11 Explain the rationale for splinting at the scene versus load and go.
	44.12 Demonstrate the proper use of various splinting materials and devices to include improvised and traction splints.
45.0	**Soft Tissue Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of soft tissue trauma patients of all ages. The student will be able to:
	45.01 Review anatomy and physiology of the integumentary system to include the layers of the skin.
	45.02 Describe the pathophysiology, signs and symptoms, and MOI of soft tissue trauma.

	45.03 Describe and demonstrate the assessment and management of various soft tissue injuries. • Wounds (e.g., avulsion, bite, laceration, puncture, and incisions) • Crush and compartment syndrome • High pressure injection injury
	45.04 Identify types of burn injuries, including: • Thermal burn • Chemical burn • Electrical burn • Radiation exposure
	45.05 Describe the depth classifications of burn injuries, including: • Superficial burn • Partial-thickness burn • Full-thickness burn • Other depth classifications
	45.06 Describe and demonstrate methods for determining body surface area percentage of a burn injury including the “rule of nines," the "rule of palms," and other methods.
	45.07 Explain how the seriousness of a burn is related to its depth and percent of body surface area (BSA) involved.
	45.08 Review the various management techniques for hemorrhage control.
	45.09 Differentiate among the types of injuries requiring the use of an occlusive versus non- occlusive dressing.
	45.10 Demonstrate the assessment and management of specific burn injuries including: • Thermal • Inhalation • Chemical ***(in the eye and on the skin)*** • Electrical • Radiation
46.0	**Head, Facial, Neck, and Spine Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of head, facial, neck and spine trauma patients of all ages. The student will be able to:
	46.01 Review the anatomy and physiology of the head, face, neck and spine.
	46.02 Describe the pathophysiology, signs and symptoms, and MOI for head, face, neck, and spine trauma.

	46.03 Describe and demonstrate the assessment and management of a patient with the following traumas to the head, face, neck, and spine: • Penetrating neck trauma • Laryngotracheal injury • Skull fracture • Facial fracture • Eye injury (foreign body) *eyes, globe rupture*) • Dental trauma • Shaken Baby Syndrome • Severe epistaxsis
	46.04 Recognize and manage life threats due to face, head, neck, and spine trauma.
	46.05 Discuss and demonstrate the utilization of the Glasgow Coma Scale.
47.0	**Nervous System Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment, and management of nervous system trauma patients of all ages. The student will be able to:
	47.01 Review the anatomy and physiology of the nervous system.
	47.02 Discuss the pathophysiology, signs and symptoms, and MOI for ***traumatic*** brain ***injury (TBI)*** and spinal cord trauma.
	47.03 Describe and demonstrate the assessment and management of a patient with a ***traumatic*** brain ***injury (TBI)*** and/or spinal cord trauma.
	47.04 Discuss the rationale and potential complications of spinal motion restriction of the entire spine when a cervical spine injury is suspected.
	47.05 Given a scenario, discuss whether or not to remove a helmet prior to transport of a patient.
	47.06 Demonstrate various methods for stabilization and removal of a helmet.
	47.07 Discuss documentation of assessment before, during, and after spinal motion restriction.
48.0	**Special Considerations in Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment and management of trauma patients with special considerations patients of all ages. The student will be able to:
	48.01 Review the anatomy and physiology for the following trauma patients: • Pregnant • Pediatric • Geriatric
	48.02 Discuss the pathophysiology, signs and symptoms, and MOI of trauma in the following patients: • Pregnant • Pediatric • Geriatric

	48.03 Discuss and demonstrate unique assessment and management considerations for the following trauma patients: • Pregnant • Pediatric • Geriatric • Cognitively impaired
49.0	**Environmental Emergencies:** Demonstrate a fundamental depth, foundational breadth of knowledge of pathophysiology, assessment and management of environmental emergencies, patients of all ages. The student will be able to:
	49.01 Define drowning and discuss its incidence, rick factors and prevention.
	49.02 Discuss the pathophysiology, signs and symptoms, and MOI of the following: • Drowning and water related incidents • Temperature-related illness • Bites and envenomation • Dysbarism such as high-altitude injuries • Diving injuries • Lightning (electrical) injury • High altitude illness • Radiation exposure • Other environmental emergencies
	49.03 Describes and demonstrate the assessment and management for a patient with the following: • Drowning and water related incidents • Temperature-related illness • Bites and envenomation • Dysbarism such as high-altitude injuries • Diving injuries • Lightning (electrical) injury • High altitude illness • Radiation exposure • Other environmental emergencies
	49.04 Discuss the fundamental principles of the gas laws including Boyle's, Dalton, Henry and Charles.
	49.05 Discuss scene management and provider safety considerations for a variety of environmental emergencies.
	49.06 Explain the five ways a body can lose heat.
	49.07 Discuss potentially life-threatening venomous species of insects, spiders and snakes in the U.S.
50.0	**Multi-Systems Trauma:** Demonstrate a fundamental depth, foundational breadth of knowledge of the pathophysiology, assessment, and management of multi-system trauma and blast injuries, patients of all ages. The student will be able to:

	50.01 Discuss the pathophysiology, signs and symptoms, and MOI of multi-system trauma and blast injuries.
	50.02 Describe and demonstrate assessment and management considerations for a patient of multi system trauma and blast injuries.
51.0	**Obstetrics:** Demonstrate a fundamental depth, foundational breadth of management of the obstetric patient within the scope of practice of the EMT. The student will be able to:
	51.01 Identify and describe the anatomical and the physiological changes during pregnancy.
	51.02 Define the stages of labor and discuss how to assess them.
	51.03 Differentiate between cephalic and abnormal delivery.
	51.04 Describe the management of a patient with pre-delivery emergencies.
	51.05 Discuss and demonstrate the patient care measures for all stages of labor in a cephalic delivery for the mother and the newborn.
	51.06 Describe the management of the mother post-delivery.
	51.07 Discuss and demonstrate the patient care measures for all stages of labor in abnormal deliveries for the mother and the newborn.
	51.08 Describe the procedures for handling complications of delivery.
	51.09 Describe special considerations when meconium is present in amniotic fluid or during delivery.
	51.10 Identify the factors that lead to premature birth and low birth weight newborns.
	51.11 Demonstrate the procedures for handling complications of pregnancy including pre-eclampsia, eclampsia, and high risk.
52.0	**Neonatal Care:** Demonstrate a fundamental depth, foundational breadth of knowledge of management of the newborn and neonatal patient within the scope of practice of the EMT. The student will be able to:
	52.01 Discuss and demonstrate assessment and management considerations of a neonate.
	52.02 Define the term neonate.
	52.03 Describe special patient care considerations of a premature baby.
	52.04 Calculate the Apgar score given various newborn situations.
	52.05 Discuss the common signs when ventilarory assistance is appropriate for a neonate.
	52.06 Discuss and demonstrate the steps in resuscitation of a neonate.
	52.07 Review the signs of hypovolemia in a newborn.

	52.08 Discuss the effects maternal narcotic usage has on the newborn.
	52.09 Discuss the management/treatment plan for vomiting in the neonate.
	52.10 Discuss the assessment findings associated with common birth injuries in the neonate.
53.0	**Pediatrics:** Demonstrate a fundamental depth, fundamental breath of knowledge of management of the pediatric patient within the scope of practice of the EMT. The student will be able to:
	53.01 Review the anatomy, physiology and pathophysiology differences of patients.
	53.02 Discuss the differences in approaching and assessing patients.
	53.03 Discuss and demonstrate assessment and management considerations for Sudden Unexplained Infant Death Syndrome (SUIDS).
	53.04 Describe the selection of appropriate airway adjuncts and ventilation devices.
	53.05 Discuss complications of improper utilization of airway adjuncts and ventilation devices.
	53.06 Describe the common causes, assessment and management of respiratory distress, failure, or arrest.
	53.07 Discuss the common causes, assessment and management of hypo-perfusion.
	53.08 Discuss the common causes, assessment and management of cardiopulmonary arrest.
	53.09 Describe the common causes, assessment and management of altered level of consciousness.
	53.10 Describe the common causes, assessment and management of trauma.
	53.11 Describe the common causes, assessment and management of neurological emergencies.
	53.12 Demonstrate proper technique for administering blow-by oxygen.
	53.13 Review proper technique for suctioning.
	53.14 Review appropriate use of airway adjuncts and ventilation devices.
	53.15 Review age-appropriate basic airway clearing maneuvers for a completely obstructed airway.
54.0	**Geriatrics:** Demonstrate a fundamental depth, foundational breadth of knowledge of management of the geriatric patient within the scope of practice of the EMT. The student will be able to:
	54.01 Define and discuss the term geriatrics.
	54.02 Review the anatomy, physiology and pathophysiology of the geriatric patient.

	54.03 Discuss common emotional and psychological concerns and conditions of the geriatric patient.
	54.04 Discuss the importance of fall prevention with the geriatric patient.
	54.05 Describe principles that should be employed when assessing and communicating with the geriatric patient.
	54.06 Describe the common causes, assessment, and management of the geriatric patient with a medical, trauma, or psychosocial complaint.
55.0	**Patients with Special Challenges:** Demonstrate a simple depth, simple breadth of knowledge of the management of the patient with special challenges patients of all ages. The student will be able to:
	55.01 Discuss the special considerations required when providing emergency care to patients with: • Abuse/neglect of vulnerable populations • Homelessness • Poverty • Bariatrics • Tech dependent • Hospice/terminally ill • Tracheostomy • Home care • Sensory deficit/loss • Developmental disability
	55.02 Discuss special considerations regarding common medical devices used in the home care of patients with special challenges including: • Respiratory devices • Cardiac devices • Gastro-urinary devices • Central & peripheral IV catheters
	55.03 Describe home care and the types of patients it serves and the services it encompasses.
	55.04 Differentiate between hospice/palliative care and curative care.
	55.05 Discuss the role of the EMT as a patient advocate for vulnerable populations.
56.0	**Principles of Safely Operating a Ground Ambulance:** Demonstrate a simple depth, foundational breadth of knowledge of risks and responsibilities of transport. The student will be able to:
	56.01 Discuss the importance of performing regular vehicle and equipment inspection.
	56.02 Demonstrate how to perform a daily inspection of an ambulance.
	56.03 Review the general provisions of Florida laws relating to the operation of the ambulance.

	56.04 Discuss the guidelines for operating an ambulance safety during emergency and non-emergency situation/incident.
	56.05 Review considerations that are required for ensuring scene safety, including personal safety, patient safety, and traffic control.
	56.06 Review how to clean and disinfect the ambulance and equipment.
57.0	**Incident Management:** Demonstrate a fundamental depth, fundamental breadth of knowledge of establishing and working within the incident management system. The student will be able to:
	57.01 Discuss the importance of NIMS (National Incidence Management System) and its functional components.
	57.02 Discuss unified command and when it is applicable.
	57.03 Describe the role of command and the procedures for transfer of command.
	57.04 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 • Extrication/rescue • Morgue • Communications
	57.05 Discuss the physical and psychological signs of critical incident stress.
58.0	**Multiple Casualty Incidents:** Demonstrate a simple depth, foundational breadth of knowledge of responding to an emergency during a multiple casualty incident. The student will be able to:
	58.01 Review essential elements of scene size-up when arriving at a potential MCI.
	58.02 Describe the role of the rescuers and EMS systems in planning for MCIs and disasters.
	58.03 Describe the role of the physician at multiple casualty incidents.
	58.04 Define triage and describe the principles of triage.
	58.05 Describe the START (simple triage and rapid treatment) and JUMP START method of initial triage.
	58.06 Describe techniques used to allocate patients to hospitals and track them.
	58.07 Discuss and describe the essential equipment to provide logistical support to MCI operations.

	58.08 Describe the role of critical incident stress management during and after MCIs.
	58.09 Demonstrate the use of local/regional triage tagging system.
59.0	**Air Medical:** Demonstrate a simple depth, simple breadth of knowledge of safe air medical operations and criteria for utilizing air medical response. The student will be able to:
	59.01 Describe key scene safety considerations when preparing for a helicopter medivac, including establishing a landing zone and approaching the aircraft.
	59.02 Describe the capabilities, protocols, and methods for accessing air medical transport.
	59.03 Review the advantages and disadvantages of air medical transport.
	59.04 Review the conditions/situations in which air medical transport should be considered.
60.0	**Vehicle Extrication:** Demonstrate a simple depth, simple breadth of knowledge for safe vehicle extrication and use of simple hand tools. The student will be able to:
	60.01 Describe the role of the EMT in patient rescue and vehicle extrication
	60.02 Describe personal and patient safety during vehicle extrication.
	60.03 Explain the difference between simple access and complex access in vehicle extrication.
	60.04 Discuss patient care considerations related to assisting with rapid extrication, providing emergency care to the trapped patient and removing and transferring a patient.
	60.05 Discuss the use of simple hand tools used for vehicle extrication.
	60.06 Discuss and describe the hazards and safe practices associated with the following vehicle components: • Energy absorbing bumpers • Air bag/supplemental restraint systems • Catalytic converters and conventional fuel systems • Stored energy • Hybrid-electric vehicles
	60.07 Describe methods for emergency stabilization using rope, cribbing, jacks, spare tire, and come-a-longs for vehicles.
	60.08 Describe the electrical hazards commonly found at highway incidents (above and below ground).
	60.09 Explain the difference between tempered and safety glass, identify its locations on a vehicle and how to break it safely.
	60.10 Explain typical door anatomy and methods to gain access to the patient.
61.0	**Hazardous Materials Awareness:** Demonstrate a simple depth, simple breadth of knowledge of risks and responsibilities of operating in a cold zone at a hazardous material or other special incident. The student will be able to:

61.01	Identify and describe 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 • Computer-Aided Management of Emergency Operations (CAMEO) • CHEMTREC • Technical specialists • Agency for toxic substances and disease registry
61.02	Explain primary and secondary contamination risk.
61.03	Review routes of exposure.
61.04	Discuss how the substance and route of contamination alters triage and decontamination methods.
61.05	Explain the common signs, symptoms, and treatment for the following substances: • Corrosives • Pesticides • Chemical asphyxiants • Hydrocarbon solvents
61.06	Identify local facilities and resources capable of treating patients exposed to hazardous materials.
61.07	Determine the appropriate level of PPE by considering the following: • Types • Application • Use and limitations • Use of chemical compatibility chart
61.08	Explain specific decontamination procedures.
61.09	Discuss the designated HAZMAT control zones (HOT, WARM, and COLD).
61.10	Discuss an emergency two-step decontamination process.
61.11	Identify DOT Labels, placards and markings that are used to designate HAZMAT materials.
61.12	Demonstrate the ability to use a variety of reference materials to identify a HAZMAT material.
62.0	**Mass Casualty Incidents Due to Terrorism and Disaster:** Demonstrate a simple depth, simple breadth of knowledge of risks and responsibilities of operating on the scene of a natural or man-made disaster. The student will be able to:

62.01	Describe the role of the EMT on the scene of a natural or man-made disaster.
62.02	Define the different types of terrorism and provide examples of incidents of each.
62.03	Describe the factors related to ensuring situational safety at the site of a disaster and the procedures required.
62.04	Discuss the National Terrorism Advisory System.
62.05	Discuss factors to consider when responding to a terrorist situation.
62.06	Review important actions to take at the scene of a terrorist event such as: • Scene safety • Personal protection • Notification procedures • Available resources • Working with in the command system
62.07	List and describe the main categories of weapons of mass destruction.
62.08	Discuss the different types of chemical agents and their signs and symptoms.
62.09	Review the treatment and management of patients exposed to various types of chemical agents and radiation.
62.10	Review the different types of radiations and their effect on the human body.
62.11	Discuss the use of a nerve agent antidote kit.

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Career and Technical Student Organization (CTSO)

HOSA: Future Health Professionals is the co-curricular career and technical student organization providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered.

Basic Skills

In Career Certificate programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Computation (Mathematics) and Communications (Reading and Language Arts). These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination.

Adult students with disabilities, as defined in Section 1004.02, Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01, F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College System Institution must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91, F.S.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their counselor and/or instructors. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Note: postsecondary curriculum and regulated secondary programs cannot be modified.

Program Length

In accordance with Rule 6A-10.024, F.A.C. an ATD program consists of a course of study that is part of an AS or AAS degree program, is less than 60 credit hours, is approximately 50% of the technical component (non-general education), and leads to employment in a specific occupation. An ATD program may consist of either technical credit or college credit.

Students must have a high school diploma, a GED, or a certificate of completion to be admitted to an ATD program. Within six weeks of entry, students in ATD programs of 450 or more hours must be tested pursuant to Rule 6A-10.040, F.A.C. and if below minimum standards for completion from the program, must receive remedial instruction. The minimum standards must be at least the equivalent of a score of ten (10) on all sections of basic skills test approved in Rule 6A-10.040, F.A.C. Students must successfully complete all remedial instruction before completing the ATD.

Community Colleges may offer either college or career credit toward the ATD. A Career Center in a public school district may offer an ATD program only as technical credit, with college credit awarded to a student upon articulation to a community college (Section 1004.02, F.S.)

When offered at a community college the standard length of this program is 12 credits. When offered at a technical center the standard length of this program is 300 clock hours.

Section 401.2701, Florida Statutes provides that college credit programs must meet occupational completion point hours of instructional and skills practice components.

In accordance with Rule 6A-10.024, F.A.C. all faculty providing instruction must have at least a baccalaureate degree or an associate degree with demonstrated competencies in the specific instructional program as defined by the Southern Association of Colleges and Schools.