

Texarkana College EMT Program

Course Syllabus

Name of Course: EMSP 1001 - Emergency Medical Technician (EMT Academy)

Course Description: This course of study is an introduction to the level of Emergency Medical Technician (EMT). It includes all the skills necessary to provide emergency medical care at a basic life support (BLS) level with an ambulance service or other specialized services.

Learning Outcomes: The student will demonstrate a working knowledge of clinical information and related topics relevant to the practice of pre-hospital emergency medical care at the EMT level; demonstrate the ability to competently perform all applicable skills; and exhibit attitudes and behavior consistent with the ethics and professionalism expected of the EMT.

Key Concepts and General Course Plan: The field of emergency medical services (EMS) is extremely rewarding and will provide one with experiences that will be challenging and gratifying. A career in EMS provides the possibilities to respond to a variety of calls in uncontrolled environments requiring confidence, compassion, and a high degree of competence. Patient assessment is one of the most important skills an EMT performs, requiring good practical ability and the capability to think critically. This course presents the necessary information to move naturally, successfully, and effectively from the assessment-based approach to the diagnostic-based approach. As a student progresses through the course they will learn a new system of communication that involves the use of medical terminology. It is important to establish a basic understanding of medical terminology so they may communicate effectively, by both written and oral means, with other members of the medical team.

Didactic Learning Objectives: Upon successful completion of EMSP 1001, the student will be able to:

1. Identify the components of the EMS System and the role of the EMT.
2. Apply medical-legal aspects of emergency care.
3. Utilize topographic anatomical terms, identify human anatomy, and describe functions of major body systems.
4. Perform a basic history and physical examination to identify acute complaints and monitor changes.
5. Record vital and diagnostic signs and relate them to normal parameters.
6. Recognize immediate life threat due to respiratory failure, cardiac arrest or severe bleeding and perform the appropriate emergency care.
7. Select the indications and demonstrate the proper use of airway and breathing adjuncts.
8. Recognize shock and describe proper treatment procedures.
9. Identify and describe the emergency care of soft tissue and musculoskeletal injuries.
10. Demonstrate bandaging, splinting and traction splinting to various body parts.
11. Identify and describe the emergency care of head, face, eye, neck and spinal injuries.
12. Demonstrate appropriate head, neck and spinal immobilization techniques.

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13. Identify and describe the emergency care of chest, abdominal and genitalia injuries.
14. Identify signs and symptoms related to poisoning, bites, and stings, cardiac complications, stroke, respiratory difficulties, diabetic complications, acute abdominal disorders, seizures, and communicable diseases.
15. Describe the emergency care for common medical emergencies.
16. Identify and describe the emergency care of obstetrical and neonatal emergencies.
17. Demonstrate appropriate emergency care during a simulated newborn delivery.
18. Assess, describe and demonstrate the proper emergency care of burns.
19. Recognize and describe the proper procedures for handling a hazardous material situation.
20. Recognize and describe the emergency care of environmental emergencies from heat, cold, and water.
21. Identify and discuss management of patients requiring special attention, death and dying, stress in the workplace and other psychological aspects of emergency care.
22. Discuss and demonstrate techniques of gaining access to patients, patient packaging and patient removal.
23. Apply laws and regulations pertaining to driving an emergency vehicle and describe vehicle-handling techniques.
24. Demonstrate good communications through oral, written, and radio reports of incident and patient information.
25. Apply the principles of triage to a multi-casualty situation.
26. Discuss the responsibility of the EMT in vehicle and equipment maintenance, scene control, disposition of the deceased, crime scenes and other non-medical functions during an ambulance call.
27. Apply didactic knowledge, psychomotor proficiency and professional affective behavior during clinical and field experiences.

Methods of Instruction: All students will be required to complete the online, inter-active lectures and read the assigned textbook material prior to attending the classroom sessions. The weekly 4-hour class periods will consist of a topic-specific review, audiovisual materials, scenario-based activities, classroom presentations, skills demonstrations and laboratory practice, and other assignments as needed to adequately cover the subject matter. The entire course length will be approximately 12 weeks consisting of 168 total contact hours. The online lectures will comprise at least 48 hours of instruction and the students must attend at least one session per week of classroom time (minimum of 48 hours). The classes will be held twice per week and students will be given a current class schedule during the course orientation (first class meeting).

Required Textbooks: Each student will receive a current copy of the following:

Emergency Care and Transportation of the Sick and Injured, 11th Ed.; American Academy of Orthopaedic Surgeons (AAOS), Jones & Bartlett Learning, 2017, with the **Navigate 2 Premier Access** for the online learning management system (LMS).

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Optional Textbooks: If students need remedial resources, they are encouraged to perform an online search for trustworthy content or purchase one or all of the following suggested titles:

Emergency Care and Transportation of the Sick and Injured, 11th Ed., Student Workbook,
Emergency Care and Transportation of the Sick and Injured, 11th Ed., Case Studies,
Navigate 2 Test-Prep: Emergency Medical Technician, Jones & Bartlett Learning,
<http://www.jblearning.com/ems/technician/>

Methods of Evaluation: Students will be expected to complete all the online activities that support the learning objectives and will be given periodic quizzes in class at the discretion of the instructor and/or Program Coordinator. There will be at least six (6) Unit Exams administered electronically that will be timed events with deadlines as indicated on the current class schedule. No retakes will be allowed; however, students are encouraged to review their exam attempts and re-study the relative course material in the textbook. All students must maintain at least a 70% didactic average to be eligible for the end-of-course comprehensive computer-based final exam. To obtain a course completion certificate and be eligible for the National Registry CBT; all EMT students must pass the course final examination with at least a 70% score and demonstrate at least an 85% competency during the psychomotor practical assessments.

Each individual class will have a calendar developed to specify exact dates and deadlines; however, the overall course outline will follow this matrix:

PERIOD	CHAPT.(s)	TOPIC(s)
Week 1 – Orientation	Overview	Online course access & textbook assignments
Week 2 – Preparatory	1-4	EMS Systems, Workforce Safety, Medical, Legal & Ethical Issues, Communications & Documentation
Week 3 – Preparatory	5-8	Medical Terminology, The Human Body, Life Span Development, Lifting & Moving Patients
Week 4 – Assessment	9-10	Patient Assessment and Airway Management
Week 5 – Assessment & Treatment	11-13	Principles of Pharmacology, Shock & BLS Resuscitation (All students must have current BLS Provider card)
Week 6 – Medical	14-18	Medical Overview, Respiratory, Cardiovascular, Neurologic, Gastrointestinal & Urologic Emergencies
Week 7 – Medical	19-23	Endocrine, Hematologic, Immunologic, Toxicology, Psychiatric and Gynecologic Emergencies
Week 8 – Trauma	24-28	Trauma Overview, Bleeding, Soft-Tissue, Face and Neck, Head and Spine Injuries
Week 9 – Trauma	29-32	Chest, Abdominal, Genitourinary, & Orthopaedic Injuries and Environmental Emergencies
Week 10 – Special Patient Populations	33-36	Obstetrics, Neonatal, Pediatric & Geriatric Emergencies and Patients with Special Challenges
Week 11 – EMS Operations & Special Situations	37-41	Transport Operations, Vehicle Extrication & Special Rescue, Incident Management, Terrorism & Disaster Response and A Team Approach to Health Care
Week 12 – Finals	Review	Comprehensive Didactic and Practical Examinations

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Methods to Evaluate Learning Outcomes: EMT students will be fairly and equally evaluated in all learning domains; including didactic, psychomotor and affective. Core competencies will be substantiated based on key learning objectives developed and approved by the EMT Program Coordinator, Medical Director and Advisory Board and will include instructor and preceptor evaluations, student graduate surveys, licensure exam results after completion and employment placement of program graduates.

Psychomotor Objectives: All EMT students will receive detailed instructional sheets and be given a proper demonstration of the required skills. These evaluation sheets (minimum of one (1) peer and one (1) instructor evaluation per skill) will become part of each student's individual portfolio. Adequate time will be provided in the laboratory to practice and evaluate competency to safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND those within the state Scope of Practice and as approved by the Program Medical Director at the EMT level. These are:

- Basic life support including foreign body airway obstruction for conscious and unconscious infant, child and adult patients. Cardiac arrest management for all age ranges including the use of an automated external defibrillator (AED).
- Airway management including suctioning, use of airway adjuncts (oropharyngeal and nasopharyngeal), providing positive pressure ventilation with a bag-valve-mask, manually-triggered (demand valve) or automatic transport ventilators and providing supplemental oxygen therapy by nasal cannula, non-rebreather mask or other devices as ordered by medical direction.
- Conducting a primary patient assessment to identify and treat any life-threats; and then a secondary assessment including a complete physical exam and history to identify other contributing factors and provide treatment as indicated.
- Assisting the patient with their prescribed medications including bronchodilators per metered-dose inhaler or small volume nebulizer; aspirin and/or nitroglycerine for suspected myocardial infarction, oral glucose for hypoglycemic altered mental status, and use of an Epi. Auto-injector for anaphylactic shock.
- Treatment for injuries including bleeding control and shock management, long bone and joint splinting, use of unipolar and bipolar traction devices, spinal motion restriction for suspected spinal injury of all age ranges using a short or long board device, and proper restraint procedures for pediatric patients.
- Utilize safe lifting posture and body mechanics when moving patients and carrying equipment.
- Demonstrate correct interpersonal communication techniques with coworkers, patients and proper use of the radio system to contact medical control and/or give a verbal report to ER staff.

Clinical and Field Experiences: This portion of the educational process will include a health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision of the student is provided by the clinical professional. As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with

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the occupation and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the industry. These experiences will provide the EMT student with the opportunity to transfer the medical concepts, principles, and skills learned in the classroom and lab to direct patient care. This section of the course is designed for the student to be part of the hospital and prehospital teams as patient care is delivered in the Emergency Department, Labor and Delivery, and Advanced Life Support (ALS) EMS Units.

Before the student is allowed to attend a direct patient care activity; they must have completed and submitted all documentation indicating that the pre-clinical requirements have been met. In addition, the student must have practiced and demonstrated competency in the lab of at least these minimum skills: BLS to include CPR and use of an AED, vital signs measurement and a basic patient assessment with the appropriate history. Students will also receive a detailed orientation to the clinical areas with instructions for body substance isolation precautions and proper personal protective equipment (BSI and PPE). This will include a thorough discussion about patient confidentiality and the process for scheduling and documenting the clinical experiences and patient encounters. These instructions are provided in the **EMT Program Student Handbook** and all appropriate signed acknowledgements will be placed in the student's course record.

Required Equipment and Supplies: Program-approved uniform and ID badge as specified in the **EMT Program Student Handbook**. At a minimum, all students need to wear gloves and eye protection during all patient care activities and other PPE as needed for the situation.* In addition, a stethoscope, pen-light and watch with a second hand are necessary for patient assessment and vital signs measurement.

Learning Outcomes: All EMT students are expected to demonstrate professional behavior including but not limited to, integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time-management, teamwork/diplomacy, respect, patient advocacy and careful delivery of service. To successfully complete the Clinical and Field portions of this educational process, all students will be required to document their attendance and involvement in the following activities for a total of 72 hours:

Clinical (36 hours total in hospital)* – Students will attend a minimum of 24 hours in the Emergency Department & Triage to observe and assist with the assessment and care of various acuity level ill and injured patients of all age ranges. In addition, all students will attend at least 4 and not more than 12 hours in the Labor & Delivery to observe the progression of labor and if available witness one birth and/or care of the newborn.

EMS Field (36 hours total with ALS Unit)* – Students must participate as the third-person crew member on an ALS ambulance and complete documentation of an assessment and history on each patient encounter. All students must perform at least ten (10) patient assessments while in the Clinical or Field rotation and ensure that the required documentation and evaluations have been completed.

***See Addendum A-1 on Page 10**

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Upon pre-approval from the Program Coordinator and Medical Director, certain students with a current healthcare license (such as RN or RT) who work in a high patient acuity level area; may be allowed to substitute a portion of the in-hospital requirements for more hours in the field. This will be applied on an individual case-by-case basis; however, the student will still be expected to achieve and document all course and/or section requirements.

Methods of Evaluation: Direct observation of the student's performance in the clinical and field environments as they interact with the patient, family members, the EMS crew, other responders and health care providers is the most reliable method to evaluate their affective domain progress. In order to maintain relative objectivity, certain key guidelines and monitoring tools have been developed and are detailed in the **EMT Program Student Handbook**. These expectations have been thoroughly discussed and disseminated in advance with all concerned parties including the students, program faculty, clinical and field preceptors; and have been fully vested by the Program Coordinator, Medical Director and Advisory Board.

Performance/Learning Objectives: Because of patient availability, it may be possible that not all objectives can be met and that all skills may not be performed. If a valid attempt has been made to meet the core objectives, then additional reinforcement of patient conditions and necessary skills can be simulated using scenario-based activities in the Skills Lab. Upon successful completion of this section, the student will be able to:

1. Tour and receive orientation to the assigned area.
2. Perform equipment/vehicle checks and any other preparatory tasks.
3. Utilize "Body Substance Isolation" precautions of infection control.
4. Perform a complete Patient Assessment
 - a. Primary Assessment
 - b. Rapid or Focused Secondary Assessment (as appropriate)
 - c. Detailed Physical Examination (if applicable)
 - d. Ongoing Assessment
5. Assist and observe the triage of patients
6. Perform Airway Management
 - a. Manual techniques
 - b. Oropharyngeal and nasopharyngeal airways
 - c. Oropharyngeal suctioning
7. Perform Respiratory Support
 - a. Oxygen administration
 - b. Bag valve mask ventilation
 - c. Demand valve resuscitators
8. Perform CPR
 - a. Observe and assist in cardiac resuscitation
 - b. Observe and assist in trauma resuscitation
 - c. Observe and assist in the use of the Automatic External Defibrillator (AED)
9. Recognize and evaluate mechanisms of injury
10. Assist in the Treatment of Trauma Cases
 - a. Perform bleeding control; apply a tourniquet if needed
 - b. Dress and bandage wounds

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- c. Perform musculoskeletal immobilization
 - d. Apply traction splint
 - e. Assist with spinal immobilization
 - f. Penetrating wounds of chest and abdomen; and other trauma cases as available
11. Assist in the Treatment of Medical Cases
- a. Chest pain
 - i. Assist in the administration of nitroglycerine
 - ii. Assist with administering aspirin
 - b. Congestive heart failure
 - c. Chronic obstructive pulmonary disease
 - d. Obstructive airway
 - e. Asthma attack
 - i. Assist in the administration of the metered dose inhaler
 - ii. Assist in the administration of nebulizer treatment
 - f. Diabetic emergency
 - i. Assist in the use of the glucometer
 - ii. Assist in the administration of an instant glucose product
 - g. Altered mental status (seizures, stroke, syncope or coma)
 - h. Acute abdomen
 - i. Overdose (alcohol or drug abuse)
 - j. Anaphylaxis
 - i. Assist in the administration of the epinephrine auto-injector
 - k. Other medical cases as available
12. Assist with or Observe the Care of Behavioral Emergencies
- a. Suicidal behavior
 - b. Hostile/violent behavior
 - c. Acute grief or depression
 - d. Paranoia
 - e. Hysterical conversion
 - f. Acute anxiety/agitation
 - g. Schizophrenia
 - h. Anger
 - i. Confusion
 - j. Fear
 - k. Hyperactivity
 - l. Alcohol and drug abuse
 - m. Other behavioral cases which are safely available
13. Assist in the Care of Geriatric Patients
- a. Senility
 - b. Alzheimer's disease
 - c. Osteoporosis
 - d. Rheumatoid arthritis
 - e. Advanced physical debilitation
 - f. Other geriatric cases as available
14. Assist in the Care of Pediatric Patients

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- a. Signs and symptoms of pediatric illness
 - b. Febrile seizure
 - c. Restraint procedures
 - d. Psychological states of age progression
 - e. Note vital sign differences
 - f. Parental care
 - g. Respiratory emergency
 - h. Infectious/Communicable disease
 - i. Poisoning
 - j. Trauma
 - k. Other pediatric cases as available
15. Assist with or Observe the Care of Obstetric Patients
- a. Identify the three (3) stages of labor
 - b. Cephalic delivery
 - c. Clamping and cutting of the umbilical cord
 - d. Complications of delivery
 - e. Observe a Cesarean section
 - f. Note medications given to mother
 - g. Inspect delivered placenta and umbilical cord
 - h. Post-partum hemorrhage control
 - i. Newborn care and assessment
 - j. APGAR scoring
 - k. Premature infant care
 - l. Fetal monitoring (FHT)
 - m. Other obstetric cases as available
16. Observe the Management of Cases with Legal Implications or Which Require Evidence Preservation
- a. Sexual assault/rape
 - b. Child/elderly abuse
 - c. Shootings/stabbing
 - d. Animal bites
 - e. Other cases as available
17. Observe sterile technique and assist as directed
18. Assist with Patient Restraint, Patient Lifting, Moving, and Patient Transfers
19. Perform Patient Access, Packaging, and Extrication
20. Assist in any restocking, cleaning, or other duties as assigned in clinical/field facility
21. Observe Diagnostic Procedures/Tests
22. Review charts for clinical findings, diagnosis, and treatment plans as permitted; document for student records and the radio/oral communication of patient information while observing confidentiality policies
23. Assist or observe in any procedure, authorized by the attending physician and/or preceptor that will increase the understanding of the pathophysiology of the illness or injury

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Terminal Competency: Once all core course objectives have been reached and the correct documentation has been submitted; the instructor, Clinical Coordinator and/or Program Coordinator will review items for content accuracy and completeness. If any deficiencies are identified, the student will be allowed a reasonable time period for remediation and/or corrections as needed. A student who is unable to successfully complete all course requirements within the established timeframes will not receive a course completion certificate or be eligible to apply or sit for the National Registry computer-based testing (CBT). When candidates have met all course requirements; a **Terminal Competency Letter** will be verified by the Medical Director and the Program Coordinator documenting that they have achieved the established terminal competencies for all phases of the course and/or program (see example below).



Emergency Medical Technology Program

2500 North Robison Road

Texarkana, Texas 75599

EMT Course Requirements Attestation

Course Approval Number:

Date of Completion:

Course Description: This course of study is an introduction to the level of Emergency Medical Technician (EMT). It includes all the skills necessary to provide emergency medical care at a basic life support (BLS) level with an ambulance service or other specialized services. Upon completion of the course, students will demonstrate a working knowledge of clinical information and related topics relevant to the practice of pre-hospital emergency medical care at the EMT level; demonstrate the ability to competently perform all applicable skills; and exhibit attitudes and behavior consistent with the ethics and professionalism expected of the EMT.

As Medical Director of the Texarkana College EMT Program attest that the following students successfully met all the EMT course/program requirements:

1. Student Name
2. Student Name
3. Student Name
4. Student Name
5. Student Name
6. Student Name

James M. Smith, RN, LP
Program Coordinator

Dr. Matthew Young, MD
Program Medical Director

Date

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Addendum A-1:

This amendment to the EMT Syllabus is meant as clarification regarding required PPE and Clinical/EMS Field experiences. In response to a recent Pandemic of historical scale, it has become apparent that all EMT students will need to take extra precautions in order to maintain safety for them, their co-workers and the patients they encounter. Gloves and eye protection have been routine practice during any patient contact; and now the student will be required to wear a face mask that meets the current OSHA and CDC guidelines; as well as any additional regulations mandated by the healthcare facility and/or EMS agency. Furthermore, the EMT student must adhere to all established Texarkana College protocols related to campus access and screening; and the use of appropriate PPE and personal hygiene practices while attending any classroom and/or laboratory setting.

Certain uncontrollable factors may limit student access to specific areas and/or patient populations in the hospital and/or EMS settings. When sufficient numbers of “live” patient encounters are not possible; these will be simulated in a laboratory environment by utilizing case studies and/or instructor directed scenarios. Other delivery models could be deployed; including virtual sessions conducted via an online learning management system. The use of these various educational modalities will help to ensure student engagement and their ability to meet all core course objectives.

*TC does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs or activities.
The following person has been designated to handle inquiries regarding the nondiscrimination policies: Human Resources Director,
2500 N. Robison Rd., Texarkana, TX, 75599, (903) 823-3017 human.resources@texarkanacollege.edu*