



**Clinical – Emergency Medical Technology/Technician
(EMSP 2164)**

Credit

- 1 semester credit hours (0 hours lecture, 0 hours lab, 12 External)

Prerequisite:

- EMT-Basic certification

Co-requisite:

- EMSP 1172
- EMSP 2205
- EMSP 2444

Course Description

A health-related; work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

Required Textbook and Materials

- EMS Program Student Handbook
- Fisdap Scheduler and Skills Tracker
- EMSP Program Clinical Uniform
- Stethoscope
- Pen Light
- Trauma Shears
- Safety Glasses

Course Objectives¹

Upon completion of this course, the student will be able to:

A. Psychomotor Skills

1. The student must demonstrate the ability to safely administer medications.
 - a. The student should safely, and while performing all steps of each procedure, properly administer medications via IM/SC administration route at least 2 times to live patients.
 - b. The student should safely, and while performing all steps of each procedure, properly administer medications via IV administration route at least 4 times to live patients.
2. The student must demonstrate the ability to safely gain venous access in all age group patients.
 - a. The student should safely and successfully access venous circulation at least 10 times on live patients of various age groups.
 - b. The student must gain venous access on at least 1 patient aged 0 - 17 years, 1 patient aged 18 - 64 years, and 1 patient aged 65 and older.

¹ Curriculum based on Department of Transportation National Standard Curriculum

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3. The student must demonstrate the ability to effectively ventilate patients of all age groups.
 - a. The student should effectively ventilate at least 2 live patients of various age groups.
4. The student must demonstrate the ability to safely perform a live intubation.
 - a. The student should safely, and while performing all steps of each procedure, successfully intubate at least 1 live patient.
 - b. If a student is unable to encounter a patient requiring intubation throughout the clinical phase the student may request to substitute 1 live intubation with 3 approved high fidelity simulations to meet the “live intubation” requirement for this clinical/field phase, or a student can substitute a live intubation with an approved cadaver intubation.
5. The student must demonstrate the ability to safely perform a patient’s blood sugar using a glucometer on at least 1 live patient.
6. The student must demonstrate the ability to safely perform airway management techniques on 4 live patients of varying age groups.
7. The student must demonstrate the ability to safely perform a 12-lead ECG acquisition from varying age groups on at least 5 live patients.

B. Ages

1. The student must demonstrate the ability to perform a comprehensive assessment on 1 newborn patient.
2. The student must demonstrate the ability to perform a comprehensive assessment on 1 infant patient.
3. The student must demonstrate the ability to perform a comprehensive assessment on 1 toddler patient.
4. The student must demonstrate the ability to perform a comprehensive assessment on 1 pre-school patient.
5. The student must demonstrate the ability to perform a comprehensive assessment on 1 school age patient.
6. The student must demonstrate the ability to perform a comprehensive assessment on 1 adolescent patient.
7. The student must demonstrate the ability to perform a comprehensive assessment on at least 20 adult patients.
8. The student must demonstrate the ability to perform a comprehensive assessment on at least 10 geriatric patients.

C. Pathologies

1. The student must demonstrate the ability to perform a comprehensive assessment on at least 10 trauma patients.
2. The student must demonstrate the ability to perform a comprehensive assessment on at least 10 medical patients.
3. The student must demonstrate the ability to perform a comprehensive assessment on at least 5 psychiatric patients.
4. The student must demonstrate the ability to perform a comprehensive assessment on at least 1 obstetric patient.

D. Complaints

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1. The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for at least 10 patients with chest pain.
2. The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for at least 4 patients with dyspnea/respiratory distress.
 - a. The student should perform an advanced patient assessment, formulate and implement a treatment plan on at least 8 adult patients and at least 1 pediatric patients (including infants, toddlers, and school age) with dyspnea/respiratory distress.
3. The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for at least 2 patients with a syncopal episode.
4. The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for at least 2 patients with abdominal complaints.
5. The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for at least 2 patients with altered mental status.

E. Affective Skills

1. While in the clinical setting, the student must demonstrate integrity.
 - a. The student must demonstrate honesty and trustworthiness.
 - b. The student must maintain confidentiality.
 - c. The student must accurately complete documentation.
2. While in the clinical setting, the student must demonstrate empathy.
 - a. The student will respond appropriately to the emotional needs of the patients/family members and the health care team.
 - b. The student will demonstrate respect for others.
 - c. The student will demonstrate a calm, compassionate, and helpful demeanor.
3. While in the clinical setting, the student must demonstrate self-motivation.
 - a. The student will take initiative to complete assignments.
 - b. The student will seek out learning experiences
 - c. The student will take initiative to improve and/or correct behavior
 - d. The student will take on/follow through on tasks with minimal supervision.
 - e. The student will show enthusiasm for learning and improvement.
 - f. The student will strive for excellence in all aspects of patient care and professional activities.
 - g. The student will accept constructive feedback in a positive manner.
4. While in the clinical setting, the student will demonstrate proper appearance and personal hygiene.
 - a. The student will wear neat, clean, well-maintained clothing and/or uniform.
 - b. The student will demonstrate good personal hygiene and grooming.

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- c. The student will wear proper uniform and identification.
- 5. While in the clinical setting, the student will demonstrate self-confidence.
 - a. The student will demonstrate the ability to trust personal judgment.
 - b. The student will demonstrate an awareness of strengths and limitations.
 - c. The student will exercise good personal judgment.
- 6. While in the clinical setting, the student will demonstrate adequate communication skills.
 - a. The student will speak clearly, write legibly, and listen actively.
 - b. The student will document a complete and accurate patient care report.
 - c. The student will communicate effectively with Medical Control
 - d. The student will adjust communication strategies as needed.
- 7. While in the clinical setting, the student will demonstrate effective time management.
 - a. The student will demonstrate consistent punctuality.
 - b. The student will complete tasks and assignments on time.
- 8. While in the clinical setting, the student will demonstrate teamwork and diplomacy.
 - a. The student will place the success of the team above self-interest.
 - b. The student will help and support other team members.
 - c. The student will show respect for all team members.
 - d. The student will remain flexible and open to change.
 - e. The student will communicate effectively with others to resolve problems.

Course Outline

A. Emergency Room

Student will be scheduled for 40 contact hours.

Purpose:

It is the purpose of this rotation is to assess patients presenting with various medical problems in a medically supervised facility. It is at the preceptor's discretion which skills and medications the student may perform/administer during their clinical rotations.

During the clinical rotations in the ED, the student will:

- 1. Utilize appropriate universal precautions at all times.
- 2. Assist in the triage of patients.
- 3. Perform a patient assessment, including:
 - a. Vital signs, pulse oximetry and glucose check
 - b. Obtain chief complaint and history of present illness.
 - c. Perform a physical exam.
 - d. Obtain medical history.
- 4. Demonstrate proper airway management and oxygen therapy.

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5. Discuss and demonstrate proper IV therapy and technique, as well as blood draws.
6. Discuss and demonstrate knowledge of medication prior to administration, including looking up the medication for the following: indications, contraindications, proper dosage, side effects, calculations of dosage and proper administration technique (SQ, IV, IM, SL, nebulized or ET). Only administer the medication under direct supervision of the RN, MD, or LIT preceptor. Never administer a medication you have not looked up.
7. Assist with the following: hemorrhage control, splinting techniques and cardiac arrest patients (CPR, BVM, medications administration, nasogastric tubes, and orogastric tubes).

B. Cardiac Cath Lab

Student will be scheduled for 8 contact hours.

Purpose:

It is the purpose of this rotation to assess the patient requiring cardiac catheterization. It is at the preceptor's discretion which skill and medications the student may perform/administer during their clinical rotations.

During the clinical rotations in the cardiac cath lab the student will:

1. Utilize appropriate universal precautions as all times
2. Perform a patient assessment, if possible and permitted, including:
 - a. Vital signs, pulse oximetry and glucose check.
 - b. Obtain chief complaint and history of present illness.
 - c. Perform a physical exam.
 - d. Obtain a medical history.
3. Demonstrate proper airway management and oxygen therapy
4. Discuss and demonstrate knowledge of medication prior to administration, including: indications, contraindications, proper dosage, side effects, calculations of dosage, proper administration technique (SQ, IV, IM, SL, nebulized and ET) under the direct supervision of the RN, MD, or LIT preceptor.
5. Observe the cardiac catheterization.

E. Intensive Care Unit/Critical Care Unit (Adult)

Student will be scheduled 12 contact hours Adult ICU.

Purpose:

It is the purpose of this rotation to assess patients on various IV medications, assess the effects of multiple IV medications on patients, assess respiratory status of patients on ventilators, assess patients with acute critical illnesses, and to assess illness pathologies specific to a critical illness. It is at the preceptor's discretion

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which skills and medications the student may perform/administer during their clinical rotations.

During the clinical rotations in the ICU/CCU, the student will:

1. Utilize appropriate universal precautions at all times.
2. Perform a patient assessment, including:
 - a. Vital signs, pulse oximetry and glucose check
 - b. Obtain chief complaint and history of present illness.
 - c. Perform a physical exam
 - d. Obtain a medical history
3. Demonstrate proper airway management and oxygen therapy, including assisting with the care of patients with either mechanical ventilators or trachs (i.e. suctioning, BVM or NGT/OGT).
4. Discuss and demonstrate proper IV therapy and technique.
5. Discuss and demonstrate knowledge of medication prior to administrations, including: indications, contraindications, proper dosage, side effects, calculations of dosage, proper administration technique (SQ, IV, IM, SL, nebulized and ET) under the direct supervision of the RN, MD, or LIT preceptor.
6. Discuss and correlate the injuries sustained by the patient to the mechanism of injury.
7. Discuss and identify the possible complications of the patient's illness related to the following systems and areas: respiratory, cardiovascular, musculoskeletal, metabolic, neurological, GI/GU and psychosocial.
8. Take the opportunity to communicate with patients (if possible) and their families to fully comprehend the medical history and how it relates to the patient's diagnosis. This will help you gain experience in looking at the "big picture" and better help you understand how your initial care in the field will affect the patient and how their care is continued through admission.

C. Medical Director/ Emergency Department Physician

Student will be scheduled 8 contact hours.

Purpose:

It is the purpose of this rotation to assess patients presenting with various medical problems across all age ranges, in a medically supervised facility. The student will shadow the EMS Program Medical Director/Emergency Department Physician in the Emergency Department. It is at the Medical Director discretion which skills and medications the student may perform/administer during the clinical rotation.

During the clinical rotations with the Medical Director/Emergency Department Physician, the student will:

1. Utilize appropriate universal precautions at all times.
2. Assist in the triage of patients.

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3. Perform a patient assessment, including:
 - a. Vital signs, pulse oximetry and glucose check
 - b. Obtain chief complaint and history of present illness.
 - c. Perform a physical exam.
 - d. Obtain medical history.
4. Demonstrate proper airway management and oxygen therapy.
5. Discuss and demonstrate proper IV therapy and technique, as well as blood draws.
6. Discuss and demonstrate knowledge of medication prior to administration, including looking up the medication for the following: indications, contraindications, proper dosage, side effects, calculations of dosage and proper administration technique (SQ, IV, IM, SL, nebulized or ET). Only administer the medication under direct supervision of the Medical Director or RN.

D. Ambulance Service

Students will be scheduled 72 contact hours

Purpose:

It is the purpose of this rotation to assess patients presenting with various medical problems across all age ranges, in a field setting with an EMS agency. This phase of EMS rotations begins the mentorship between a specific EMS crew and the student. The student will be assigned with the same EMS crew for the remainder of their EMS and Field Internships. In this phase the student is in the role of EMS partner to the EMS preceptor. It is at the EMS preceptor's discretion which skills and medications the student may perform/administer during the field rotation.

During the field rotations with an EMS Service, the student will:

1. Utilize appropriate universal precautions at all times.
2. Assist in the triage of patients.
3. Perform a patient assessment, including:
 - a. Vital signs, pulse oximetry and glucose check
 - b. Obtain chief complaint and history of present illness.
 - c. Perform a physical exam.
 - d. Obtain medical history.
4. Demonstrate proper airway management and oxygen therapy including invasive airway management to include; Supraglottic techniques and Infraglottic techniques.
5. Discuss and demonstrate proper IV therapy and technique, as well as blood draws.
6. Assist with the following: hemorrhage control, splinting techniques and cardiac arrest patients (CPR, BVM, medications administration, nasogastric tubes, and orogastric tubes).
7. Discuss and demonstrate knowledge of medication prior to administration, including looking up the medication for the following: indications, contraindications, proper dosage, side effects, calculations of dosage and

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proper administration technique (SQ, IV, IM, SL, nebulized or ET). Only administer the medication under direct supervision of the EMS Preceptor.

8. Document all patient contacts for that ambulance rotation.
9. Preceptor shall document a student evaluation form.
10. Student shall document an ambulance rotation evaluation form.

Grade Scale

90 – 100	A
84 – 89	B
75 – 83	C
70 – 74	D
0 – 69	F

Course Evaluation

Final grades will be calculated according to the following criteria:

Psychomotor Skills	20%
Ages	15%
Pathologies	15%
Complaints	15%
Affective	15%
Quality of patient care reports	20%

Course Requirements

- Student must meet required number of clinical patient contacts, as required by the Texas Department of State Health Services, CoAEMSP and EMSP Program guidelines.
- Patient care reports for all required patient contacts, as required by the Texas Department of State Health Services, CoAEMSP and EMS Program guidelines.
- Students must maintain a 75% grade average in all EMSP courses.
- Student that has not met all stated goals may receive an Incomplete “I”. The grade of “I” may be assigned at the discretion of the instructor. A grade of "I" is intended to be assigned when the student is unable to complete some course work as a result of unusual circumstances. An "I" is not intended to allow a student to repeat a course. Plans to complete deficiencies in a course should be made with the instructor. Incomplete course work must be finished during the following long semester. If course work is not completed during the long semester, the Office of Records will change the “I” grade to the grade of “F.” The course must then be repeated if credit is denied. An “I” grade also automatically becomes an “F” if the

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student re-registers for the course before removing the deficiencies and receiving a grade change.

Course Policies

- See EMS Program Student handbook for specific course policies.

Technical Requirements (for courses using Blackboard)

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at:

https://help.blackboard.com/en-us/Learn/9.1_2014_04/Student/015_Browser_Support/015_Browser_Support_Policy A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of the online technology and resources.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building. You may also visit the online resource at <http://www.lit.edu/depts/stuserv/special/defaults.aspx>

Student Code of Conduct Statement

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu or obtained in print upon request at the Student Services Office. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document