

Patient Assessment and Airway Management (EMSP 1356)



Credit: 3 semester credit hours (2hours lecture, 2 hours lab)

Prerequisite/Co-requisite: Submit a copy of a course completion certificate from a EMT-Basic Course or a copy of EMT-Basic certification. Co-requisite: EMSP 1338, EMSP 1355, EMSP 1260, EMSP 1149.

Course Description

A detailed study of the knowledge and skills required to perform patient assessment and airway management.

Required Textbook and Materials

1. EMS Program Student Handbook.
 - a. Nancy Caroline's Emergency Care in the Streets, 6th edition,
 - b. **ISBN:** 9780763764692
2. Program uniform T-shirt.
 - a. EMT / Paramedic Pants (dark blue or black)
 - b. Conservative Black leather belt (no designs)
 - c. Black leather shoes or boots (not tennis shoes)
 - d. Stethoscope, Pen light, BP cuff, Trauma shears

Course Objectives¹

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

1. Perform a proper history and comprehensive physical exam on any patient;
(SCANS: F1.5, F2.5, F3.5, F4.5, F5.5, F6.5, F7.5, F8.5, F9.5, F10.5, F11.5, F12.5, F13.5, F14.5, F15.5, F16.5, F17.5 C1.5, C2.5, C3.5, C4.5, C5.5, C6.5, C7.5, C8.5, C9.5, C10.5, C11.5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5)
2. Demonstrate the ability to develop a patient care plan: communicate with others;
(SCANS: F1.5, F2.5, F3.5, F4.5, F5.5, F6.5, F7.5, F8.5, F9.5, F10.5, F11.5, F12.5, F13.5, F14.5, F15.5, F16.5, F17.5 C1.5, C2.5, C3.5, C4.5, C5.5, C6.5, C7.5, C8.5, C9.5, C10.5, C11.5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5, C19.5, C20.5)
3. Establish and/or maintain a patient airway, oxygenate, and ventilate a patient;
(SCANS: F1.5, F2.5, F3.5, F4.5, F5.5, F6.5, F7.5, F8.5, F9.5, F10.5, F11.5, F12.5, F13.5, F15.5, F16.5, F17.5 C1.5, C3.5, C4.5, C5.5, C6.5, C7.5, C8.5, C9.5, C10.5, C11.5, C12.5, C13.5, C14.5, C15.5, C16.5, C17.5, C18.5, C19.5, C20.5)

¹ Curriculum based on Department of Transportation National Standard Curriculum
Approved 12/2009

SCANS Skills and Competencies

Beginning in the late 1980's, the U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) conducted extensive research and interviews with business owners, union leaders, supervisors, and laborers in a wide variety of work settings to determine what knowledge workers needed in order to perform well on a job. In 1991 the Commission announced its findings in *What Work Requires in Schools*. In its research, the Commission determined that "workplace know-how" consists of two elements: foundation skills and workplace competencies. The three-part foundation skills and five-part workplace competencies are further defined in the SCANS attachment.

Course Outline

- A. Welcome to LIT EMS Advanced Program
 - 1. Introduction of EMS Staff, Instructors and students
 - 2. EMS program policies
 - 3. Registering an account with JB Course Manager.
- B. Introduction to advanced pre-hospital care
 - 1. Roles and responsibilities to advanced pre-hospital care
 - 2. Medical legalities and ethical issues in advanced pre-hospital care
- C. The Human Body
 - 1. Major human body systems (anatomy and physiology)
- D. General Histology
 - 1. Anatomy and Physiology at the cellular level.
- E. Acid Based Balance
 - 1. Blood gases
- F. Respiratory Acidosis
 - 1. Signs, symptoms and treatment
 - 2. Range of blood gas values.
 - 3. Scenario training in patients with respiratory acidosis.
- G. Respiratory Alkalosis
 - 1. Signs, Symptoms and treatment
 - 2. Range of blood gas values
 - 3. Scenario training in patients with respiratory alkalosis.
- H. Metabolic Acidosis
 - 1. Signs, Symptoms and treatment
 - 2. Range of blood gas values
 - 3. Scenario training for patient with metabolic acidosis
 - 4. Major Exam 1.
- I. General overview of Pathophysiology
 - 1. Respiratory diseases and the affect on the body's functions.
 - 2. Cardiac diseases and the affect on the body's functions.

Comment [L1oT1]: Align margins.

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3. Endocrine diseases and the effect on the body.
- J. General Principles of Pharmacology
 1. Origin of medications
 2. Classifications of Medications
 3. D50, Thiamine, Narcan.
- K. IV access
 1. IV administration skill instruction and practice.
 2. Blood draw instruction.
- L. Intraosseous Infusion
 1. Intraosseous skill instruction and practice.
 2. Different types of IOs infusion equipment and techniques.
- M. Medical Mathematics
 1. Drug calculations: dosages
 2. IV infusion rates.
 3. Major Exam 2
- N. Airway Management & Ventilation
 1. Endotracheal intubation techniques.
 2. Intubation skills instruction and practice.
 3. Capnography
- O. Therapeutic Communications.
 1. Scenarios.
 2. Major Exam 3
- P. Trauma and Trauma Systems
 1. Blunt Trauma/Penetrating Trauma
 2. Hemorrhage & Shock/Soft Tissue Trauma
 3. Burns/Musculoskeletal Trauma
 4. Head, face, neck and spinal trauma
 5. Thoracic and Abdominal Trauma
 6. Major Exam 4
- Q. Comprehensive Final Exam.

Grade Scale

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

Course Evaluation

Final grades will be calculated according to the following criteria:

- | | |
|--------------------|-----|
| 1. Quizzes | 40% |
| 2. Major Exams | 20% |
| 3. Professionalism | 20% |
| 4. Final Exam | 20% |

Course Requirements

1. Accountability for all classroom hours, as required by the Texas Department of State Health Services EMS Regulator.
2. Must wear the EMS program class uniform, as required by the EMS Program.
3. Must maintain a minimum of 75% average in order to obtain a course completion certificate and eligibility for the NREMT certification exam, as required by the Texas Department of State Health Services EMS Regulator.

Course Policies

1. Clinical rotations must be performed and documentation submitted prior to the end of class.
2. Attendance Policy. Texas Department of State Health Services Bureau of EMS makes the student accountable for all rotation requirements. If you miss a rotation then it is the student's responsibility to contact the clinical coordinator to see how the rotation can be rescheduled.
3. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.
4. Additional class policies as defined by the EMS Program Student handbook.

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.

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Course Schedule

Week	Topic	Reference
Week 1	Course introduction and policies	Ch 1 - 3
Week 2	The Human Body	Ch 4
Week 3	Acid base balance	Ch 5
Week 4	Alkalosis and acidosis	Ch 6 -7
Week 5	Pathophysiology	Ch 8
Week 6	General Pharmacology	Ch 9
Week 7	IV Therapy	Ch 10
Week 8	IV Therapy	Ch10
Week 9	Medical Mathematics	Ch 11
Week 10	Medical Mathematics	Ch 11
Week 11	Airway Management & Ventilation	Ch 12
Week 12	Airway Management & Ventilation	Ch 12
Week 13	Hemorrhage & Shock	Ch 13-16
Week 14	Head & Neck Trauma	Ch 17-20
Week 15	Chest & Abdominal Trauma	Ch 21-24
Week 16	Finals Week	