

**MIAMI DADE COLLEGE  
MEDICAL CENTER CAMPUS  
SCHOOL OF HEALTH SCIENCES**

**Department of Emergency Medical  
Services**

**LECTURE COURSE OUTLINE  
EMS 1119 – EMERGENCY MEDICAL  
TECHNICIAN – BASIC**

# EMS 1119 – EMERGENCY MEDICAL TECHNICIAN- BASIC LECTURE

## COURSE DESCRIPTION:

A review of basic life support theory. Areas of emphasis include the prehospital environment, preparatory information, patient assessment, medical emergencies, behavioral emergencies, OB/GYN emergencies, trauma emergencies, pediatric emergencies and EMS operations.

### Miami Dade College Learning Outcomes

Miami Dade College has adopted the General Education Outcomes listed below. Upon completion of a program of study at the Medical Center Campus, graduates from Miami Dade College should emulate these outcomes.

1. Communicate effectively using listening, speaking, reading and writing skills.
2. Use quantitative analytical skills to evaluate and process numerical data.
3. Solve problems using critical and creative thinking and scientific reasoning.
4. Formulate strategies to locate, evaluate, and apply information.
5. Demonstrate knowledge of diverse cultures, including global and historical perspectives.
6. Create strategies that can be used to fulfill personal, civic, and social responsibilities.
7. Demonstrate knowledge of ethical thinking and its application to issues in society.
8. Use computer and emerging technologies effectively.
9. Demonstrate an appreciation for aesthetics and creative activities.
10. Describe how natural systems function and recognize the impact of humans on the environment.

This course provides intentional learning experiences to address outcomes 1 - 4, 6, 7, & 10

**DAY:** \_\_\_\_\_

**TIME:** \_\_\_\_\_ **ROOM:** \_\_\_\_\_

**PREREQUISITE COURSES:** EMS 1059

**CO-REQUISITE COURSES:** EMS 1119L, EMS 1431

**REQUIRED TEXTS:**

**Emergency Care and Transportation of the Sick and Inured 9<sup>th</sup>ed,**  
**Jones and Bartlett**

JB Learning On-line Program

**ADDITIONAL REQUIRED SUPPLIES:**

1. Scantron answer sheets
2. #2 pencils

**INSTRUCTOR: Ricky Barnet**

**OFFICE: 2208**

**OFFICE PHONE: 237-4457**

**E-Mail       rbarnet@mdc.edu**

**COURSE EVALUATION:**

Your final course grade will be based on the following criteria:

15% - Quizzes	35% - Mid Term Examination
35% - Comprehensive Final Examination	15% - Online Tests

**QUIZZES, EXAMINATIONS, AND FINAL EXAMINATION**

There will a number of quizzes during this semester. You will have two (2) examinations. They will vary in length. They will, for the most part, be multiple choice-type examinations. However, there may be essays or fill-in-the-blank questions. Your final examination will be comprehensive. Be prepared!!! Any examination that is missed will count as a zero (0), unless there are "major extenuating circumstances" which warrant a make-up exam.

**ONLINE EXAMS AND EVALUATION**

For successful completion of the EMT program, students must participate and complete the required online testing. The information of these online exams supports the lecture and laboratory content of the program. It is highly recommended that the student complete the supporting information associated with the chapters and related testing. There will be 12 Module Exams throughout the semester. Each exam will have one week access for completion. If the exam is not completed within the designated week the student will receive a grade of "0" for that exam. At the end of the course all 12 module exams will be averaged together and will be 15% of the overall lecture grade.

### **COURSE GRADING SCALE:**

A = 100 - 94

B = 93 - 87

C = 86 - 80

F = 79 - below

### **ACCESS SERVICES**

Students with documented disabilities should contact the campus ACCESS office in advance for information on appropriate policies and procedures for obtaining assistance. No retroactive accommodations can be provided. The ACCESS office is located in room # 1345-1 at 305 237-4048. Additional information is available at <http://www.mdc.edu/medical/studentservices/access>

### **COURSE COMPLETION**

In order to successfully complete EMS 1119, each student will be expected to pass a program exit examination. This multiple choice type assessment is comprehensive and highly suggestive, with regards to the national examinations that must be taken after program completion. The program exit examination includes 150 items, and will be administered on\_\_\_\_\_. In the event that an 80% or higher score is not attained, a second attempt at a similar test form will be administered. A passing score on the test **must** be earned along with a passing course grade average in order to **successfully** complete EMS 1119. If the student does not complete the program exit examination within the required time period, an "F" grade will be awarded until the student successfully completes this examination.

## **SUGGESTIONS FOR SUCCESSFULLY COMPLETING THIS COURSE**

- You instructor is here to help you succeed. Feel free to stop by the office or call. Keep the lines of communication open.
- Class begins promptly on time. You should arrive at class about ten minutes before it begins. This will give you time to settle in and talk before class begins. Please do not arrive late. It is distracting to everyone.
- If you will be unavoidably late or absent, please call the instructor (as a courtesy) as soon as you know.
- There will be a good deal of lecture during this class. However, please ask questions, discuss and participate. Your time is valuable. It will not do you any good to come to class and not participate.
- Look over the course outline and course schedule before each class. This will allow you to focus your study time in the most valuable area.
- Read the assigned pages BEFORE class. This will allow you to participate in class and ask any questions about information that is unclear.
- READ and STUDY the articles that you receive as handouts in class. This information will be on tests and quizzes.
- The instructor will always review the quizzes and tests after they are graded. This is time for you to ask questions and clarify any information you do not understand. This is NOT THE TIME TO ARGUE about specific questions. That may be done after class or on a break. Arguing test questions will result in the review ending immediately.
- If you feel you are not doing as well as you wish to, please speak with your instructor. Your instructor can make arrangements to schedule a tutor to assist you.
- Treat everyone, as you would like them to treat you. This includes students, instructors, staff and administrators. Actually it should include everyone you meet. Common courtesy goes a long way...in class as well as in life.
- Realize that this outline of objectives should serve as a guide to the major topics the class will cover. It is by no means an exhaustive list of every point you need to know.

EMS 1119 – EMERGENCY MEDICAL TECHNICIAN –BASIC LECTURE  
TABLE OF CONTENT

<u>DATE</u>	<u>MODULE NUMBER</u>	<u>CONTENT</u>
_____	1.0	Preparatory
_____	2.0	Patient Assessment
_____	3.0	Scene Management
_____	4.0	Pharmacological Administration
_____	5.0	Medical Emergencies
_____	6.0	Behavioral Emergencies
_____	7.0	OB/GYN Emergencies
_____	8.0	Trauma
_____	9.0	Infants and Children
_____	10.0	EMS Operations
_____		Final Examination

## **Module 1.0 – Preparatory**

### **General Objective:**

Upon completion of this module, the student will demonstrate knowledge of the Emergency Medical Technician-Basic system.

### **Specific Objectives:**

- 1.0 Define Emergency Medical Services (EMS) systems. Florida Statute 401 & Florida Administrative Code 64J-1
- 2.0 Differentiate the roles and responsibilities of the EMT from other prehospital care providers.
- 3.0 Describe the roles and responsibilities related to safety, quality improvement, and medical direction and the EMT's role in the process.
- 4.0 State the specific Florida statutes and regulations regarding the EMS system.
- 5.0 Assess areas of personal attitude and conduct of the EMT.
- 6.0 Characterize the various methods used to assess the EMS system.
- 7.0 List the possible emotional reactions that the EMT, the EMT's family, and the patient's family may experience when faced with trauma, illness, and death or dying of an adult, child, or infant.
- 8.0 State the steps in the EMT's approach to the family confronted with death or dying of an adult, child, or infant.
- 9.0 Recognize the signs and symptoms of critical incident stress and state ways of alleviating the stress.
- 10.0 Demonstrate knowledge of the medical-legal aspects of the significant exposure cases for the patient and the EMT.
- 11.0 Define the EMT scope of practice
- 12.0 Discuss the importance of and the rationale for DNR advance directives and local and state provisions regarding the EMS application.
- 13.0 Explain the rationale for the concept of varying degrees of DNR.
- 14.0 Define consent (implied and expressed) and discuss methods of obtaining consent.
- 15.0 Discuss the implications for the EMT in patient refusal of transport, and in abandonment, negligence, and battery.
- 16.0 Discuss the consideration of the EMT in organ retrieval.
- 17.0 State the conditions that require an EMT to notify local law enforcement officials and differentiate the actions that need to be taken to assist in the preservation of crime scene.

## Module 2.0 – Patient Assessment

### General Objective:

Upon completion of this module, the student will demonstrate and understanding of the assessment of the patient in the prehospital setting.

### Specific Objectives:

- 1.0 Describe and discuss the anatomy and physiology of the various body systems.
- 2.0 Identify the components and the importance of the SAMPLE history.
- 3.0 Explain the difference between auscultation and palpation for obtaining blood pressure.
- 4.0 Differentiate between a sign and a symptom.
- 5.0 Discuss the need to search for additional medical identification.
- 6.0 Describe the guidelines and safety precautions for moving a patient or carrying patients and/or equipment specific to EMT.
- 7.0 State three situations that may require the use of an emergency move.
- 8.0 Describe the anatomy and physiology of the respiratory and airway system differentiating adult, child, and infant.
- 9.0 Differentiate between the signs of adequate and inadequate ventilation.
- 10.0 Discuss the various pressure points utilized to assess a patients pulse
- 11.0 Discuss the assessment of skin color, temperature, state of dryness or moistness and capillary refill
- 12.0 Discuss the assessment of pupillary response including size, reactive and non-reactive, equal and unequal.
- 13.0 Summarize reasons for forming a general impression of the patient.
- 14.0 Discuss the reasons for repeating the initial assessment as part of the ongoing assessment.
- 15.0 Describe trending of assessment components.
- 16.0 Discuss the reasons for and the areas included in the focused rapid trauma assessment and discuss what should be evaluated.
- 17.0 Differentiate when the rapid assessment may be altered in order to provide patient care.
- 18.0 Discuss the components of and areas of the body included in a detailed physical assessment.
- 19.0 Explain what additional care should be provided while performing the detailed physical assessment.
- 20.0 Distinguish between detailed physical exam that is performed on a trauma patient and that of a medical patient.
- 21.0 4 Hours of HIV/AIDS training as required by Chapter 381 of Florida Statute.



## **Module 3.0 - Scene Management**

### **General Objective:**

Upon completion of this module, the student will demonstrate an understanding of the procedures used to secure a scene.

### **Specific Objectives:**

- 1.0 Recognize and describe hazards/potential hazards.
- 2.0 Discuss common mechanisms of injury/nature of illness.
- 3.0 Identify the total number of patients at the scene and the need for additional help or assistance.
- 4.0 Evaluate scene safety prior to entry.
- 5.0 Explain the need to determine scene safety, including the importance of body substance isolation (BSI), and the steps the EMT should take for personal protection from airborne and bloodborne pathogens.

## **Module 4.0 – Pharmacological Administration**

### **General Objective:**

Upon completion of this module, the student will have an understanding of the medications used by the EMT.

### **Specific Objectives:**

- 1.0 Identify medications carried on the unit by brand and generic names.
- 2.0 Identify medications that the EMT may assist patients to administer by brand and generic name.
- 3.0 Discuss the various forms of medications and the rationale for their administration.
- 4.0 Correctly read labels and inspect each type of medication.

## **Module 5.0 – Medical Emergencies**

### **General Objective:**

Upon completion of this module, the student will demonstrate an understanding of the various responses required regarding a medical emergency.

### **Specific Objectives:**

- 1.0 Complete a pre-hospital report for patients with medical emergencies.
- 2.0 State the generic name, medication forms, dose administration, action, indications, contraindications and side effects of medications used for medical emergencies.
- 3.0 Evaluate the need for medical direction in medical emergencies.
- 4.0 Respond correctly to medical respiratory emergencies.
- 5.0 Differentiate between upper airway obstruction and lower airway disease in the infant and child patient.
- 6.0 Respond correctly to medical cardiac emergencies.
- 7.0 Define the role of the EMT-B in the emergency cardiac care system.
- 8.0 Recognize the importance of prehospital ACLS intervention, if available, and the importance of urgent transport to a facility with ACLS if it is not available in the pre-hospital setting.
- 9.0 List the indications and contraindications for automated external defibrillation (AED) and the impact of age and weight on defrillation.
- 10.0 Identify the patient with altered mental status who is taking diabetic medications and the implications of a diabetes history.
- 11.0 Administer oral glucose and assess and document the patient's response to it.
- 12.0 Recognize the patient experiencing an allergic reaction and respond correctly to allergy emergencies.
- 13.0 List the various ways that poisons enter the body and signs and symptoms associated with poisoning.
- 14.0 Identify patients suffering from environmental emergencies, including heat exposure, cold exposure, water-related emergencies, and bites and stings.
- 15.0 Describe the complications of near drowning.

## **Module 6.0 – Behavioral Emergencies**

### **General Objective:**

Upon completion of this module, the student will demonstrate an understanding of the various responses required regarding behavior emergencies.

### **Specific Objectives:**

- 1.0 Define behavioral emergencies.
- 2.0 Discuss the general factors that may cause an alteration in the patient's behavior.
- 3.0 State various reasons for psychological crisis.
- 4.0 Discuss the characteristics of a patient's behavior that suggest he/she is at risk for suicide or violence.

## **Module 7.0 – OB/GYN Emergencies**

### **General Objective:**

Upon completion of this module, the student will demonstrate an understanding of various responses required regarding OB/GYN emergencies.

### **Specific Objectives:**

- 1.0 Identify and explain the use of an obstetrics kit.
- 2.0 Identify pre-delivery emergencies.
- 3.0 Identify the steps to assist in pre-delivery and in the normal cephalic delivery, and in the delivery of the placenta.
- 4.0 Identify the necessary care procedures of the fetus as the head appears and of other neonatal procedures, including post-delivery care.
- 5.0 Identify the steps involved to cut the umbilical cord.
- 6.0 Discuss the routine post delivery care and the emergency care of the mother with excessive bleeding.
- 7.0 Discuss the procedures for the following abnormal delivery:
  - a. Vaginal bleeding
  - b. breech birth
  - d. Prolapsed cord
  - e. limb presentation

## **Module 8.0 – Trauma**

### **General Objective:**

Upon completion of this module, the student will demonstrate an understanding of various trauma situations.

### **Specific Objectives:**

- 1.0 Establish the relationship between airway management and the trauma patient.
- 2.0 Establish the relationship between body substance isolation and various trauma situations.
- 3.0 Differentiate between arterial, venous, and capillary bleeding and respond correctly to bleeding and shock.
- 4.0 Identify types of closed and open soft tissue injuries.
- 5.0 Differentiate between an open and a closed painful, swollen, deformed extremity and respond correctly to musculoskeletal trauma situations.
- 6.0 Identify potential spine and head injuries and respond correctly to injuries to the head and spine.
- 7.0 Discusses the assessment of the adult patient using the trauma scorecard methodology for the adult trauma patient

## Module 9.0 – Infants and Children

### General Objective:

Upon completion of this module, the student will demonstrate an understanding of conditions and various responses associated with the care of the infant and child in the pre-hospital setting.

### Specific Objectives:

- 1.0 Identify the development considerations for the following age groups:
  - a. Infant
  - b. toddler
  - c. Pre-school
  - d. school age
  - e. Adolescent
- 2.0 Describe differences in anatomy and physiology of the infant, child, and adult patient.
- 3.0 Differentiate the response of the ill or injured infant or child (age specific) from that of an adult.
- 4.0 Indicate various causes of respiratory emergencies in the infant, child patient, and differentiate between respiratory distress and respiratory failure.
- 5.0 Describe the method in determining end organ perfusion in the infant and child patient.
- 6.0 State the usual cause of cardiac arrest in infants and children versus adults.
- 7.0 List the common causes and describe the management of seizures in the infant and child patient.
- 8.0 List the possible causes of sudden infant death syndrome (SIDS) and the EMT-B's role and relationship with family members.
- 9.0 Differentiate between the injury patterns in adults, infants, and children and discuss the field management of the infant and child trauma patient.
- 10.0 Summarize the indicators and the medical legal responsibilities in suspected child abuse.
- 11.0 Deal with the feelings of infant and child patients, the patient's family, and the EMT-B.
- 12.0 Discusses the assessment the pediatric trauma patient using the trauma scorecard methodology

## Module 10.0 – Operations

### General Objective:

Upon completion of this module, the student will demonstrate knowledge of the emergency service operations.

### Specific Objectives:

- 1.0 List the phases of an ambulance call, discuss the medical and non-medical equipment needed to respond to a call and identify what is essential for completion of the call.
- 2.0 Describe the general provisions of state laws relating to the operation of the ambulance and privileges in any or all of the following categories:
  - a. Speed warning lights
  - b. sirens
  - c. Right-of-way
  - d. parking
  - e. Turning
  - f. Contributing factors to unsafe driving
- 3.0 Describe the considerations that should be given to request for escorts, following an escort, and vehicle intersections and discuss “Due Regard for Safety of All Others”.
- 4.0 State the information essential in order to respond to a call and discuss various situations that may affect response to a call.
- 5.0 Distinguish among the terms cleaning, disinfection, high level disinfection, and sterilization and describe how to clean or disinfect items following patient care.
- 6.0 Prepare a unit to respond after use.
- 7.0 Define and discuss the fundamental components of extrication, its purpose, the role and protective equipment of the EMT-B, and the steps necessary to protect the patient.
- 8.0 Distinguish between simple and complex access and evaluate various methods of gaining access.
- 9.0 Explain the EMT-B’s role during a call involving hazardous materials or a hazard at the scene.