



HEALTHCARE SCIENCE

COURSE: 25.562 Concepts of Emergency Medicine

UNIT: 1.1 Introduction to Emergency Medical Services



INTRODUCTION

Annotation:

This standard will give the student an understanding of the overview of the Emergency Medical Services system including personnel training, certification, and responsibilities.

Grade(s):

<input type="checkbox"/>	9 th
<input type="checkbox"/>	10 th
<input checked="" type="checkbox"/>	11 th
<input checked="" type="checkbox"/>	12 th

Time:

Five 50 minute class periods

Author:

Mark Elsey, BS, NREMT-P

Additional Author(s):

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



FOCUS STANDARDS

GPS Focus Standards: Please list the standard and elements covered.

HS-CEM-2. Students will demonstrate an understanding of the overview of the Emergency Medical Services system including personnel training, certification, and responsibilities.

- a. Discuss the history of Emergency Medical Services System.
- b. Differentiate between the levels of training and certification requirements of First Responder, Emergency Medical Technician-Basic, Emergency Medical Technician-Intermediate and Emergency Medical Technician- Paramedic.
- c. Differentiate between the roles and responsibilities of the First Responder, Emergency Medical Technician-Basic, Emergency Medical Technician-Intermediate, Emergency Medical Technician-Paramedic, and other public safety agencies such as law enforcement personnel and utility company employees.
- d. Evaluate the essential components of an Emergency Medical System.

GPS Academic Standards:

ELA11C1. The student demonstrates understanding and control of the rules of the English language, realizing that usage involves the appropriate application of conventions and grammar in both written and spoken formats.

National / Local Standards / Industry / ISTE:

See module at:

<http://www.nhtsa.gov/people/injury/ems/pub/frnsc.doc>

Module 1 Preparatory
Lesson 1-1



UNDERSTANDINGS & GOALS

Enduring Understandings:

- Prompt medical care is important to saving lives. Historically, the EMS System continues to emerge as an important part of patient care. Through this system emergency care may be initiated at the scene of the illness or injury by individuals with varying levels of training and credentialing. Early intervention by highly skilled EMS workers can make the difference many times in whether lives are saved.

Essential Questions:

- How did EMS get started in the United States and why?
- How does EMS vary from country to country, pick another country and compare and contrast?
- What does the future have in store for EMS?

Knowledge from this Unit: Factual information.

- The components of an Emergency Medical System.
- How the roles and responsibilities of the First Responder differ from other pre-hospital/out-of-hospital care providers.
- The responsibilities of a First Responder in accordance with the standard of an EMS professional.

Skills from this Unit: Performance.

- Discuss ways in which the First Responders may be valuable additions to the Emergency Medical Services System on various types of emergencies.
- Evaluate the essential components of an Emergency Medical System.
- Differentiate the roles and responsibilities of the First Responder from other pre-hospital/out-of-hospital care providers
- Demonstrate the responsibilities of a First Responder in accordance with the standard of an EMS professional.



ASSESSMENT(S)

Assessment Method Type: Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

- ☐ Pre-test
- ☒ Objective assessment - multiple-choice, true- false, etc.
 - ☒ Quizzes/Tests
 - ☒ Unit test
- ☒ Group project
- ☒ Individual project
- ☐ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
 - ☐ Self-check rubrics
 - ☐ Self-check during writing/planning process
 - ☐ Journal reflections on concepts, personal experiences and impact on one's life
 - ☐ Reflect on evaluations of work from teachers, business partners, and competition judges
 - ☐ Academic prompts
 - ☐ Practice quizzes/tests
- ☒ Subjective assessment/Informal observations

- _____ ☐ Essay tests
- _____ ☐ Observe students working with partners
- _____ ☒ Observe students role playing
- _____ Peer-assessment
 - _____ ☐ Peer editing & commentary of products/projects/presentations using rubrics
 - _____ ☐ Peer editing and/or critiquing
- X Dialogue and Discussion
 - _____ ☐ Student/teacher conferences
 - _____ ☐ Partner and small group discussions
 - _____ ☒ Whole group discussions
 - _____ ☐ Interaction with/feedback from community members/speakers and business partners
- x Constructed Responses
 - _____ ☐ Chart good reading/writing/listening/speaking habits
 - _____ ☒ Application of skills to real-life situations/scenarios
- _____ Post-test

Assessment(s) Title:

- History of EMS power point
- History of EMS Timeline
- Vocabulary Contract
- Unit workbook pages

Assessment(s) Description/Directions:

- Students will create a Multi-Media presentation on the history of EMS assessed by the project rubric on <http://teachnology.com/> or individual teacher made rubric or find many timeline rubrics on the Web such as http://www.readwritethink.org/lesson_images/lesson398/rubric-timeline2.pdf
- Students will review and summarize scholarly medical articles related to EMS and report on their findings in a report. Reports will be evaluated using a teacher made rubric or research rubric from <http://teachnology.com/>.
- On the wall, students will create a time line of the history of EMS.
- Students will create a Multi-Media presentation that will analyze and discuss the different agencies and their roles toward the public assessed by the project rubric on <http://teachnology.com/> or individual teacher made rubric.
- As a group, students complete a written report and research presentation on the history of EMS in the twentieth century. Recommended to divide students into four groups. Utilize an individualized, teacher made rubric or both the team work and project rubric at <http://teachnology.com/>
- If a workbook is used, learners will complete the workbook pages related to this unit. Workbook pages will be graded on a 100 point scale.
- Students complete a written exam on a scale of 0-100 to assess understanding of emergency medical care.

- Students will complete the Unit Key Terms (Definitions) using a vocabulary contract. Vocabulary Contract will be graded on a 100 point scale.

Attachments for Assessment(s): Please list.

Link to a timeline for EMS dating back to 1865: <http://www.emergencysquad.org/TheHistoryofEMS.html>

Vocabulary Contract attached



LEARNING EXPERIENCES

Instructional planning: Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

Sequence of Instruction

1. Identify the Standards. Standards should be posted in the classroom for each lesson.

HS-CEM-2. Students will demonstrate an understanding of the overview of the Emergency Medical Services system including personnel training, certification, and responsibilities.

2. Review Essential Questions.

- How did EMS get started in the United States and why?
- How does EMS vary from country to country, pick another country and compare and contrast?
- What does the future have in store for EMS?

3. Identify and review the unit vocabulary.

- Direct medical direction
- Emergency medical dispatcher
- Emergency medical services (EMS) System
- Emergency Medical Technician
- EMT-Basic
- EMT-Intermediate
- EMT-Paramedic
- First Responder
- Indirect medical direction
- Medical direction

- National EMS Education and Practice Blueprint
- Quality improvement

4. Assessment Activity.

Interest Approach

Try: "The Name Game"

Pass out the following questions to the class, ask them to walk around the room and introduce themselves to each class member. Find a person who fits each description. Enter that name in the appropriate space. Try to use each person only once.

1. Who is from the central part of the county? _____
2. Who has their scanner on at home 24 hours a day? _____
3. Who is wearing mismatched socks? _____
4. Who has green eyes? _____
5. Who has broken a bone? (Preferably their own) _____
6. Whose initials are C.P.? _____
7. Who is an only child? _____
8. Who has been involved in EMS for more than 5 years? _____
9. Who wears more than three patches on their jacket? _____
10. Who is a vegetarian? _____
11. Who drives a red car? _____
12. Who has ever ridden in an ambulance? _____
13. Who has ever done CPR to a real patient? _____
14. Who has ever flown in a hot air balloon? _____
15. Who never speeds? _____
16. Who has been certified in CPR for more than 5 years? _____
17. Who has been hospitalized for more than 3 days? _____
18. Who does not routinely wear a seat belt? _____
19. Who likes spinach? _____
20. Who wears contacts? _____

If possible, ask a local EMT, Paramedic, Police Officer and Fire Fighter to visit the class and do a panel discussion at the very beginning of the program. This will allow the students to talk with the actual public safety professional and hear their thoughts and comments.

LESSON ONE

Give students KWL form: This allows students to record what they know about EMS and what they learn, and compare.

Assign Unit Vocabulary and workbook pages to be handed in by day three.

Pass out a graphic organizer to the class that will assist in the video presentation. Then the students will watch first half of "The History of Modern EMS" video. As the video is running be prepared to stop it and answer questions and reaffirm that students are understanding and writing notes.

Discuss

- The components of the EMS system
- The levels of the EMS training
- Activating the EMS system
- Medical oversight

LESSON TWO

Prior to video; introduce the First Responder level to the class, cover:

- Roles and responsibilities
- Patient related duties
- Traits
- Skills
- Equipment, tools and supplies

Then:

Watch second half of "The History of Modern EMS" video. As the video is running be prepared to stop it and answer questions and reaffirm that students are understanding and writing notes.

When the video is finished, discuss ways in which the First Responders may be valuable additions to the Emergency Medical Services System on various types of emergencies.

Have the students share stories of any exposure to EMS during their life. Listen to what they remember and try to explain what was going on. This technique can be use by the instructor throughout the course and will help build a bond between student and instructor.

Role Play Idea: Introduction to EMS

One student will be the patient. Four students will be grouped into two EMS crews. Each crew is dispatched for a person complaining of difficulty breathing.

ROLE PLAY #1

Patient: You have called 911 for difficulty breathing. Hang your arm and leg off the stretcher when the First Responders throw you onto it.

1st Rescue Team: You are dressed in jeans and dirty T-shirts. One of you is chewing tobacco and has dirty, greasy hands. The other Responder is smoking a cigarette, has a ripped shirt, is wearing a baseball cap backwards, and is eating a candy bar and finishing a soda.

Walk over to the patient and say “Hey Bud, ya hurt?” Then pick the patient up by the arms and throw the patient onto the stretcher. As you try to roll the patient out the door, the stretcher crashes into the side wall; you back up, and do it again.

ROLE PLAY #2

Patient: You have called 911 for difficulty breathing.

2nd Rescue Team: You are dressed in uniforms and are clean cut, well groomed, and polite. Walk over to the patient and introduce yourselves. Ask the patient why he or she called 911. Tell the patient you are there to help them; gently assist the patient onto the stretcher and carefully wheel the stretcher out the door.

LESSON THREE

Put students in groups of 4 people. On the wall, student groups will create a time line of the history of EMS. Each group will complete a different decade. Students could also create a Multi-Media presentation on the history of EMS assessed by the project rubric on www.teachnology.com or individual teacher made rubric.

Near class start, explain personal safety. Role playing could be used to impress the importance on your

students through your classes.

Also, describe why it is inappropriate to judge a patient based on a cultural, gender, age, or socioeconomic model, and to vary the standard of care rendered as a result of that judgment.

LESSON FOUR

Explain the rationale for maintaining a professional appearance when on duty or when responding to calls. Ask your students to describe in their own words, what they feel a First Responder would look like. Have them pay close attention to piercings, tattoos, facial hair, and soiled clothes and how those items might be seen by an injured or sick patient.

Summarize the unit; remember to answer any questions and to emphasize the outline of the unit and the essential questions

Administer a unit quiz of at least 5 questions. Grade, return and discuss wrong answers.

Also, have graded the workbook pages related to the unit and vocabulary to return to the students. This will allow them review material prior to the Unit assessment in lesson five.

LESSON FIVE

Ask students to clear their desks and use a pen or pencil.

Administer the Units written assessment, approximately 8 multiple choice, and 2 short answers.

Grade and return.

Prepare students for GPS CEM-3

Attachments for Learning Experiences:

Notes & Reflections:

Have “tools of the trade” available for students to examine and become familiar with. This will help stimulate curiosity and questions about emergency medicine.

Remediation Sheets or “Ticket out the Door”

The remediation sheet should be completed after every class to identify individual students or groups of students having difficulty demonstrating the cognitive, affective or psychomotor objectives of the lesson. The instructor

should provide appropriate remediation to the individual or group before the next class. Instructors should assist students to achieve success in the program.

These sheets should be copied and placed at the end of each lesson.

First Responder Remediation Sheet

Date	Student
Area of Difficulty	
Action Plan	
Completed	



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Attachments for Culminating Performance Task: Please list.



UNIT RESOURCES

Web Resources:

EMS-Related Organizations

The organizations listed below offer resources for specific EMS interests and information. Some organizations offer training opportunities through local branches. To obtain membership, dues, and participation information, write to the organization(s) most closely associated with your interests.

This is only a sampling of EMS-related organizations. EMS journals and other EMS professionals may provide information on additional organizations.

American Red Cross (ARC)

National Disaster Response

Contact your local Red Cross chapter

American Trauma Society (ATS)

Membership Department

8903 Presidential Parkway, Suite 512

Upper Marlboro, MD 20772-2656

FARMEDIC National Training Center

ATTN: Dave Oliver

Alfred State College

Alfred, NY 14802

Florida EMS Clearinghouse

2002 Old St. Augustine Road, Building D

Tallahassee, FL 32301

International Association of Dive Rescue Specialists (IADRS)

P.O. Box 5259

San Clemente, CA 92674-5259

International Critical Incident Stress Foundation, Inc.

ATTN: Team Information

5018 Dorsey Hall Drive, Suite 104

Ellicott City, MD 21042

National Association For Search And Rescue

4500 Southgate Place, Suite 100

Chantilly, VA 22021

National Association of Emergency Medical Technicians (NAEMT)

102 West Leake Street

Clinton, MS 39056

National Association of EMS Physicians (NAEMSP)

230 McKee Place, Suite 500

Pittsburgh, PA 15213

National Flight Paramedic's Association

35 South Raymond Avenue, Suite 205

Pasadena, CA 91105

National Registry of Emergency Medical Technicians (NREMT)

ATTN: First Responder Department

6610 Busch Boulevard

Columbus, OH 43229

Air Medical Physician Association (AMPA) Ms. Pat Petersen, Executive Director 383 F St. Salt Lake City, UT 84103
Website: www.ampa.org.

Association of Air Medical Services (AAMS)
Ms. Dawn Mancuso, Executive Director
110 North Royal St., Suite 307
Alexandria, VA 22314
703 836 8732; fax 703 836 8920
e-mail: dmancuso@aams.org website: www.aams.org.

National EMS Pilots Association (NEMPSA)
Ms. Dawn Mancuso, Executive Director
110 North Royal St., Suite 307
Alexandria, VA 22314
703 836 8732; fax 703 836 8920
e-mail: dmancuso@aams.org
Website: www.nemspa.org.

Air & Surface Transport Nurses Association (ASTNA) Ms. Karen Wojdyla, Executive Director 9101 E. Kenyon Ave., Suite 3000
Denver, CO 80237
303-770-2220; fax 303-770-1812
e-mail: info@gwami.com
Website: www.astna.org.

National Flight Paramedics Association (NFPA) Ms. Pat Petersen, Executive Director 383 F St. Salt Lake City, UT 84103
801 381 NFPA; fax 801 321 1668
Website: www.nfpa.rotor.com.

<http://health.state.ga.us/programs/ems/offices>
www.nhtsa.dot.gov
www.innerbody.com
www.amhrt.org
www.jems.com
www.nremt.org
www.mosbyjems.com
www.dhs.gov

Attachment(s): Supplemental files not listed in assessment, learning experiences, and performance task.

Materials & Equipment:

- Large sheets of paper,
- Tape
- Markers for the time-line on the wall

What 21st Century Technology was used in this unit:

X	Slide Show Software
	Interactive Whiteboard
	Student Response System
	Web Design Software
	Animation Software
	Email

	Graphing Software
	Calculator
	Desktop Publishing
	Blog
	Wiki
X	Website

	Audio File(s)
	Graphic Organizer
	Image File(s)
X	Video
	Electronic Game or Puzzle Maker