Career, Technical, & Agricultural Education

# HEALTHCARE SCIENCE

COURSE: 25.562 Concepts of Emergency Medicine

UNIT: 20.1 EMS Communications



# INTRODUCTION

#### **Annotation:**

Students will demonstrate the ability to communicate effectively through the various avenues within the EMS system by practicing with two-way radios.

# Grade(s):

	9 <sup>th</sup>
Х	10 <sup>th</sup>
Х	11 <sup>th</sup>
Х	12 <sup>th</sup>

## Time:

Five fifty minute periods

#### **Author:**

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# Additional Author(s):

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#### 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



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

# HS\_CEM-9:

Students will demonstrate the ability to communicate effectively through the various avenues within the EMS system.

- **a.** Demonstrate the appropriate use of public safety communications systems and equipment (fire pagers, two-way radios, scanners, etc.).
- **b.** Discuss confidentiality issues regarding the use of public safety communications equipment.
- **c.** Identify the essential components of the verbal report given to incoming public safety personnel and provide a brief, organized report that would be given to advance life-support providers arriving at the incident.
- **d.** Provide accurate, written documentation in the form of a field report or incident report in an accurate and timely manner.

#### **GPS Academic Standards:**

**ELA11LSV1:** The student participates in student-to-teacher, student-to-student, and group verbal interactions.

# National / Local Standards / Industry / ISTE:

### **AFFECTIVE OBJECTIVES**

3-7.10	Explain the rationale for providing efficient and effective radio communications
	and patient reports. (A-3)

# **PSYCHOMOTOR OBJECTIVES**

3-7.11	Perform a simulated, organized, concise radio transmission.(P-2)
3-7.12	Perform an organized, concise patient report that would be given to the staff at
	a receiving facility. (P-2)
3-7.13	Perform a brief, organized report that would be given to an ALS provider arriving
	at an incident scene at which the EMT-Basic was already providing care



# UNDERSTANDINGS & GOALS

### **Enduring Understandings:**

- Students will understand the need and importance for adequate and confidential communications about patient care in a pre-hospital setting.
- Students will understand how thorough and accurate communications can affect the end-result of patient care.

#### **Essential Questions:**

- Why is it important for EMS workers to possess good communication techniques?
- How has cell phone technology impacted EMS communications?
- How can portable cameras be used to help the EMS community communicate with the hospital?

# **Knowledge from this Unit:**

- Discuss confidentiality issues regarding the use of public safety communications equipment.
- Identify the essential components of the verbal report given to incoming public safety personal and provide a brief, organized report that would be given to advanced life-support providers arriving at the incident.
- How to communicate in special situations

#### **Skills from this Unit:**

- Demonstrate the appropriate use of public safety communications systems and equipment (fire pagers, two-way radios, scanners, etc.).
- Provide accurate written documentation in the form of a field report or incident report in an accurate timely manner.

# Vocabulary:

- Base Station
- Mobile Radio
- Portable Radio
- Repeater
- Watt
- Prehospital care report
- Minimum data set
- ETA



**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
	Dialogue and Discussion
	Student/teacher conferences
	Partner and small group discussions
	Whole group discussions
	Interaction with/feedback from community members/speakers and business partners
Х	Constructed Responses
	Chart good reading/writing/listening/speaking habits
	_x_ Application of skills to real-life situations/scenarios
	Post-test

# Assessment(s) Title:

Patient Care Report Activity

# Assessment(s) Description/Directions:

 The students will complete a patient care report based on a case study of an actual prehospital call.

# Attachments for Assessment(s):

Patient Care Report Activity



# 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**

#### Lesson 1

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

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- **d.** Provide accurate, written documentation in the form of a field report or incident report in an accurate and timely manner.
- 2. Review Essential Questions.
- 3. Identify and review the unit vocabulary.
  - Base Station transmitter/receiver at fixed location used for dispatch, coordination, medical control
  - Mobile Radio-radio physically mounted in vehicles
  - Portable Radio-hand held "walkie talkie"
  - **Repeater**-extend range of mobile and portable units which receive signals on one frequency and retransmits on a second frequency at a higher power
  - Watt- derived unit of power equal to 1 joule of energy per second
  - Prehospital care report-record produced during a call
  - Minimum data set-amount of information required pertaining to each EMS call
  - ETA-estimated time of arrival
- **4.** Introduce authentic communication example utilizing your local police scanner.

**Example: www.scanamerica.us** 

- **5.** Present multimedia presentation on EMS communications (the Temple College presentation is more detailed on communication)
  - **a.** Provide a copy of the presentation for special needs

#### Lesson 2

- 1. Identify the Standards. Standards should be posted in the classroom for each lesson.
- 2. Review Essential Questions.
- 3. Identify and review the unit vocabulary.
- **4.** Assign each student a partner and each pair must create a script of a radio medical report and a verbal report
- **5.** Allow each group to present their reports to the class. Utilize the two-way radio if available. Assess for inclusion of the required elements.

#### Lesson 3

- 1. Identify the Standards. Standards should be posted in the classroom for each lesson.
- 2. Review Essential Questions.
- 3. Identify and review the unit vocabulary.
- **4.** Discuss the importance of interpersonal communications and some of the challenges EMS providers face.
- **5.** Distribute Special Communications Situations assignment. Students should be in groups of 3 for this activity.
- **6.** Monitor student progress and allow groups to share role-plays

#### Lesson 4

- 1. Identify the Standards. Standards should be posted in the classroom for each lesson.
- 2. Review Essential Questions.
- 3. Identify and review the unit vocabulary.
- 4. Present multimedia presentation on EMS documentation
  - Provide a copy of the presentation for special needs

#### Lesson 5

- 1. Identify the Standards. Standards should be posted in the classroom for each lesson.
- 2. Review Essential Questions.
- 3. Identify and review the unit vocabulary.

4. Distribute Patient Care Report Activity and a blank copy of a patient care report. Instruct students to utilize case studies (www.trauma.org) to complete this activity. Assess the PCR for accuracy and completeness.

# **Attachments for Learning Experiences:**

- EMS communications multimedia presentation
- EMS documentation multimedia presentation
- Special Communications Situations Activity
- Patient Care Report Activity

#### **Notes & Reflections:**

- Most EMT textbooks will have a copy of a blank PCR. Most of the images located on the internet are not
- www.trauma.org has great prehospital case studies that can be utilized for the PCR, but it is just one example.
- A Language Arts centered enrichment may include researching medical trade journals (professional or nonprofessional) and reading and summarizing articles relevant to the unit



# CULMINATING PERFORMANCE TASK (Optional)

### **Culminating Unit Performance Task Title:**

Prehospital Care Report

### Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Utilizing real case studies, students will complete a PCR as if they were the responding provider.

#### **Attachments for Culminating Performance Task:**

Patient Care Report Activity



### Web Resources:

www.trauma.org

www.ems.gov

www.scanamerica.us

<u>http://www.templejc.edu/dept/ems/pages/powerpoint.html</u> additional PowerPoint's

# Attachment(s):

# **Materials & Equipment:**

- Two-way radio
- Computer
- LCD projector
- Temple College EMT-B Communications multimedia presentation

# What 21st Century Technology was used in this unit:

Х	Slide Show Software		Graphing Software	Х	Audio File(s)
	Interactive Whiteboard		Calculator		Graphic Organizer
	Student Response System		Desktop Publishing		Image File(s)
	Web Design Software		Blog		Video
	Animation Software		Wiki		Electronic Game or Puzzle Maker
	Email	Χ	Website		