



## HEALTHCARE SCIENCE

**COURSE:** 25.564 Emergency and Disaster Preparedness

**UNIT:** 1.1 Introduction to Emergency and Disaster Preparedness



## INTRODUCTION

### Annotation:

This unit will serve as an introduction to and overview of the Emergency and Disaster Preparedness course while providing a review of skills and knowledge gained in the prerequisite course, Introduction to Healthcare Science Technology. Safety, communication, and teamwork will be emphasized.

### Grade(s):

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

### Time:

Five 50 minute periods

### Author:

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### Additional Author(s):

Michael Higgins, Language Arts

### 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

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## **GPS Focus Standards:**

**HS-EDP-1.** Students will demonstrate knowledge and understanding of the academic subject matter required for proficiency within their area. Academic standards are integrated throughout the standard statements within their applicable discipline areas and documented immediately following the standard statement.

**HS-EDP-2.** Students will discuss the history and basic overview of the following disaster preparedness/emergency management agencies including the Department of Homeland Security, Federal Emergency Management Agency (FEMA), Citizen Corps, and Georgia Emergency Management Agency (GEMA).

- a. Identify and briefly discuss the history of the most common national, regional, state, and local disaster preparedness/emergency management agencies.
- b. Discuss the primary focus of the Citizen Corps as identified by FEMA.
- c. Differentiate between the basic responsibilities of each in an emergency/disaster situation: Citizen Emergency Response Team Member, Medical Reserve Corps Representative, First Responders, and Emergency Medical Technicians.

## **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:**



## UNDERSTANDINGS & GOALS

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### Enduring Understandings:

- Students will understand the basic role of emergency management personnel and agencies in the United States, what constitutes a Mass Casualty Incident, the concept of triage, and what factors must be considered when planning for a large-scale public event.

### Essential Questions:

- What factors must be considered when planning for a large-scale public event?
- What is involved in preparing for an emergency or disaster?
- What constitutes a Mass Casualty Incident?
- What is triage?
- How can I keep myself safe when assisting during an emergency or disaster?

### Knowledge from this Unit:

- Student knows the definition of a Mass Casualty Incident.
- Student knows why and when a triage system must be utilized.
- Student knows the role of emergency management agencies and personnel.

### Skills from this Unit:

- Student can assess a scene for potential hazards.
- Student can practice aseptic technique and utilize personal protective equipment.
- Student can research and pre-plan for a major event in the community; such as a parade or festival.



# ASSESSMENT(S)

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## Assessment Method Type:

- ☒ 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
- ☒ Constructed Responses
  - ☐ Chart good reading/writing/listening/speaking habits
  - ☒ Application of skills to real-life situations/scenarios
- ☐ Post-test

## Assessment(s) Title:

- Pre-Test-use fall and spring finals from Introduction to Healthcare Science
- Event Planning and Management Project

## Assessment(s) Description/Directions:

- Pre-Test: administer at beginning of first day as a refresher exercise. Let students know that this will **not** be a graded assignment. Teachers may opt to use attached samples or own final exams from Introduction to Healthcare Science Technology course to be better suited to own classes. If using the attached exams teacher may want to administer in two days instead of 1- 90 min period.

- Event Planning and Management Project: distribute assignment handout at beginning of assignment.
- Group Slideshow Grading Rubric: distribute with Event Planning and Management Project worksheet.

#### **Attachments for Assessment(s):**

- Pre-Test
- Event Planning and Management Project Handout
- Group Slideshow Grading Rubric



## **LEARNING EXPERIENCES**

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### **Sequence of Instruction**

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

**HS-EDP-1.** Students will demonstrate knowledge and understanding of the academic subject matter required for proficiency within their area. Academic standards are integrated throughout the standard statements within their applicable discipline areas and documented immediately following the standard statement.

**HS-EDP-2.** Students will discuss the history and basic overview of the following disaster preparedness/emergency management agencies including the Department of Homeland Security, Federal Emergency Management Agency (FEMA), Citizen Corps, and Georgia Emergency Management Agency (GEMA).

#### **2. Review Essential Questions.**

- What factors must be considered when planning for a large-scale public event?
- What is involved in preparing for a potential emergency or disaster?
- What constitutes a Mass Casualty Incident?
- What is triage?
- How can I keep myself safe when assisting during an emergency or disaster?

#### **3. Identify and review the unit vocabulary.**

Disaster, Disaster Psychology, Emergency, Hazards, Terrorism, Triage, Mass Casualty Incident (MCI), Personal Protective Equipment (PPE), Search and Rescue (SAR)

#### 4. Assessment Activity.

##### LESSON ONE

1. Pre-test: use the fall and spring final exams from the Introduction to Healthcare Science Technology course as an **ungraded** refresher exercise. Tell students not to guess or spend a great deal of time on any given question. Note: sample exams are attached, or use individual teacher's exams.
2. Review exams as a class and identify areas that may need additional refresher time.
3. Review class safety rules, principles of infection control and scene safety.

##### LESSON TWO

1. Ask students: "Based on the title of this course, what topics do you think will be covered? What would you like to learn?" Write responses on the board.
2. List out the main topics that will be covered and allow time for discussion/questions for each.
  - History and overview of emergency management agencies in the United States.
  - Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED).
  - Disaster preparedness including preparing one's home, school, and community for an emergency.
  - Fire chemistry including use of a fire extinguisher.
  - Emergency treatment of victims in a disaster or emergency situation.
  - Triage.
  - Basic search and rescue operations.
  - Disaster psychology.
  - Terrorism awareness.
3. Ask students to brainstorm how some of the things they learned in the Introduction to Healthcare Science Technology course might be different in the face of an extreme emergency or disaster. Explain the concept of a Mass Casualty Incident (MCI). Clarify that it is not the number of patients that determines if a situation is an MCI, but whether the resources available are taxed. Can a situation with just four or five patients be an MCI? Why or why not?
4. Introduce the concept of triage and why CPR is not performed during an MCI.
5. Discuss issues such as personal protective equipment during a large scale event.
6. Find an article about an incident that has occurred recently in the local area, such as a school bus accident (see attached sample with notes). Hand out article and give students time to read individually.
7. Discuss the incident, making note of issues such as agencies involved, triage, how/where individuals were transported, and if any disaster psychology issues were addressed. NOTE: as an alternative or additional

assignment, can make this a current event homework assignment. Have students find articles and note the major issues. Have students share with class.

8. Ask students how they would feel if they witnessed such an incident. Would they be prepared to react? Emphasize that this course will provide skills and knowledge needed to be prepared for a wide variety of emergencies and disasters.

### **LESSON THREE/FOUR/FIVE**

1. Brainstorm large events in Georgia that require a great deal of pre-planning and are potential targets for a disaster or terroristic attack. Examples include: Fourth of July Fireworks at a venue such as Centennial Olympic Park, Peachtree Road Race, Gay Pride Parade, Festival at Stone Mountain, music concerts, etc.
2. Assign students into groups of 3-4 and have them choose one of the events discussed (or can pull from hat). Distribute assignment handout and slideshow grading rubric (attached). Go through instructions with students and answer questions at beginning of project. Be certain to allow ample time for the brainstorming portion of the project prior to allowing students to begin specific research.
3. Have students' complete project and present to class.

### **Attachments for Learning Experiences:**

### **Notes & Reflections:**



## **CULMINATING PERFORMANCE TASK** (Optional)

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**Culminating Unit Performance Task Title:**

**Culminating Unit Performance Task Description/Directions/Differentiated**

**Attachments for Culminating Performance Task**



## UNIT RESOURCES

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### Web Resources:

[www.citizencorps.gov/cert/](http://www.citizencorps.gov/cert/)

[http://www.citizencorps.gov/programs/mrc\\_detailed.shtm](http://www.citizencorps.gov/programs/mrc_detailed.shtm)

<http://www.dhs.gov/index.shtm>

<http://www.gema.ga.gov/>

<http://www.fema.gov/>

### Attachment(s):

### Materials & Equipment:

- Computers for student research and slideshow creation

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

<input checked="" type="checkbox"/>	Slide Show Software	<input type="checkbox"/>	Graphing Software	<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Interactive Whiteboard	<input type="checkbox"/>	Calculator	<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Student Response System	<input type="checkbox"/>	Desktop Publishing	<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Web Design Software	<input type="checkbox"/>	Blog	<input type="checkbox"/>	Video
<input type="checkbox"/>	Animation Software	<input type="checkbox"/>	Wiki	<input type="checkbox"/>	Electronic Game or Puzzle Maker
<input type="checkbox"/>	Email	<input checked="" type="checkbox"/>	Website		