Introduction to Emergency Medical Services

Course: Introduction to Emergency Medical Services

Course Description: Introduction to Emergency Medical Services is designed to expose students to the various career opportunities in the Emergency Medical Services field. Emergency care services are necessary for the safety of the community. A network of services are coordinated to provide aid and medical assistance from primary response to definitive care, involving personnel trained in the rescue, stabilization, transportation, and advanced treatment of traumatic or medical emergencies. Potential career opportunities may include emergency medical dispatch, first medical responder, ambulance personnel, medium and heavy rescue equipment, and paramedic units. Upon completion of this course, students will be trained in First Aid, Cardio Pulmonary Resuscitation (CPR) and Automatic External Defibrillator (AED).

Career Cluster: Health Science

Prerequisites: None

Program of Study Application: Introduction to Emergency Medical Services is a pathway course in the Health Science career cluster, Therapeutic Services pathway. The course would follow participation in one or more cluster courses and/or Gateway to Certified Nursing Assistant. Introduction to Emergency Medical Services would prepare a student to participate in further pathway courses in the Therapeutic Services pathway or a capstone experience.

**INDICATOR #EMS 1:** Explore roles, responsibilities, and professionalism of Emergency Medical Services (EMS) personnel.

**SUB-INDICATOR 1.1 (Webb Level: 2 Skill/Concept):** Distinguish differences among careers within EMS and explain in detail the education level, credentialing/licensure requirements.

**SUB-INDICATOR 1.2 (Webb Level: 3 Strategic Thinking):** Demonstrate emotional support to patient, bystanders, or other responders.

**SUB-INDICATOR 1.3 (Webb Level: 3 Strategic Thinking):** Investigate medical and legal standards in correlation with the Health Insurance Portability & Accountability Act (HIPAA)

**SUB-INDICATOR 1.4 (Webb Level: 4 Extended Thinking):** Apply concepts related to professional attitude and appearance

<table>
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<tr>
<th>Knowledge (Factual):</th>
<th>Understand (Conceptual):</th>
<th>Do (Application):</th>
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<tbody>
<tr>
<td>- Emotional Support Strategies</td>
<td>- Value of caring for patients</td>
<td>- Research education levels, credentialing, and career pathways within EMS</td>
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<td>- Careers, Credentialing, and Pathways in Emergency Medical Services</td>
<td>- Importance of following legal standards and the implications for not doing so</td>
<td>- Role play therapeutic communication</td>
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<td>- Different levels of EMS</td>
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- Professionalism
- Legal Standards (HIPAA)

- Investigate repercussions of not following legal standards
- Critique sample videos of EMS staff professionalism

**Benchmarks:**

*Students will be assessed on their ability to:*

- Recognize implications of not properly following HIPAA and other legal regulations
- Demonstrate professionalism by upholding EMS career standards in both the classroom and during internships
- Build a professional portfolio on an EMS career of their choosing
- Write an analysis of sample videos displaying varying levels of professionalism

**Academic Connections**

**ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):**

W.9-10.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

W.9-10.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

**Sample Performance Task Aligned to the Academic Standard(s):**

- Build a professional portfolio on an EMS career of their choosing
- Write a analysis of sample videos displaying varying levels of professionalism

**INDICATOR #EMS 2: Demonstrate skills in first aid, cardiopulmonary resuscitation (CPR) and automated external defibrillation (AED) certification standards set by the American Heart Association or the American Red Cross.**

**SUB-INDICATOR 2.1 (Webb Level: 2 Skill/Concept):** Understand how to perform First Aid for Students and/or CPR for Students and/or how to use an AED.

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<tr>
<th>Knowledge (Factual):</th>
<th>Understand (Conceptual):</th>
<th>Do (Application):</th>
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<tr>
<td>-First aid, CPR, and AED skills</td>
<td>-Importance of quality first aid, CPR, and AED skills</td>
<td>-Role play given scenarios dealing with first aid, CPR, and AED skills on a variety of patients</td>
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| -American Heart Association and American Red Cross standards | -Differences in administration of care between different ages/genders/races of patients | -Research standards of both the American Heart Association and the American Red Cross
|                                                               | -Appropriate certifications and renewal of certifications for each EMS role | |

**Benchmarks:**

*Students will be assessed on their ability to:*
- Complete certification applications and paperwork.
- Complete CPR and first aid certification
- Complete EMT certification

**Academic Connections**

**ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):**

11-12.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)

9-10.RI.1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

**Sample Performance Task Aligned to the Academic Standard(s):**

- Successfully complete certification applications and paperwork.
- Compare and contrast the standards of the American Heart Association and American Red Cross in terms of performing first aid and CPR.

**INDICATOR #EMS 3:** Determine the necessity of emergency medical care for a variety of patients with varied medical conditions

**SUB-INDICATOR 3.1 (Webb Level: 2 Skill/Concept):** Identify emergency medical treatment protocol

| Knowledge (Factual): | Understand (Conceptual): | Do (Application): |
- Anatomy, physiology, and pathophysiology
- Appropriate vital sign ranges
- Emergency medical treatment protocols
- Signs and symptoms as they relate to bodily function and treatment
- Importance of abnormal vital sign readings
- Value of knowing and following treatment protocols
- Role play using case scenarios and determining a plan of treatment
- Research implications of cases where protocols were not followed

**Benchmarks:**
*Students will be assessed on their ability to:*
- Demonstrate treatment of a mock patient given specific scenarios
- Triage a group of patients in a mock trauma scenario
- Identify specific treatment steps for given signs and symptoms

**Academic Connections**

**ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):**

HSA-CED.A.1 Create equations and inequalities in one variable and use them to solve problems.

9-10.RI.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

**Sample Performance Task Aligned to the Academic Standard(s):**

- Develop a set of inequalities to represent the acceptable ranges of vital signs
- Research and analyze implications of cases where protocols were not followed.

**Additional Resources**

- American Heart Association Website: [www.heart.org](http://www.heart.org)
- American Red Cross Website: [www.redcross.org](http://www.redcross.org)
- Emergency Medical Services Website: [http://doh.sd.gov/providers/ruralhealth/ems/](http://doh.sd.gov/providers/ruralhealth/ems/)
- South Dakota EMS Association Website: [www.sdemta.org](http://www.sdemta.org)
- Sanford School of EMS [http://sanfordhealthemseducation.org/emergency-medical-services](http://sanfordhealthemseducation.org/emergency-medical-services)