Course Objectives/Course Outline Spokane Community College

Course Title: Paramedic Operations

Prefix and Course Number: EMS 224

Course Learning Outcomes:

By the end of this course, a student should be able to:

- understand standards and guidelines that help ensure safe and effective ground and air medical transport, operations in austere environments including HAZMAT, crime scene, rescue and extended care situations.
- Understand and implement the Incident command system.

Course Outline:

Paramedic Operations

- I. Identify current local and state standards which influence ambulance design, equipment requirements and staffing of ambulances. (C-1)
- II. Discuss the importance of completing an ambulance equipment/ supply checklist. (C-1)
- III. Discuss the factors to be considered when determining ambulance stationing within a community. (C-1)
- IV. Describe the advantages and disadvantages of air medical transport. (C-1)
- V. Identify the conditions/ situations in which air medical transport should be considered. (C-1)
- VI. Explain the need for the incident management system (IMS)/ incident command system (ICS) in managing
- VII. emergency medical services incidents. (C-1)
- VIII. Define the term multiple casualty incident (MCI). (C-1)
- IX. Define the term disaster management. (C-1)
- X. Describe essential elements of scene size-up when arriving at a potential MCI. (C-1)
- XI. Describe the role of the paramedics and EMS systems in planning for MCIs and disasters. (C-1)
- XII. Define the following types of incidents and how they affect medical management: (C-1) Open or uncontained incident
 - A. Closed or contained incident
- XIII. Describe the functional components of the incident management system in terms of the following: (C-1)
 - 1. Command
 - 2. Finance
 - 3. Logistics
 - 4. Operations
 - 5. Planning
- XIV. Differentiate between singular and unified command and when each is most applicable. (C-3)
- XV. Describe the role of command. (C-1)
- XVI. Describe the need for transfer of command and procedures for transferring it. (C-1)
- XVII. Differentiate between command procedures used at small, medium and large scale medical incidents. (C-1)
- XVIII. Explain the local/ regional threshold for establishing command and implementation of the incident management system including threshold MCI declaration. (C-1)

XIX. Describe the role of both command posts and emergency operations centers in MCI and disaster

management. (C-1)

- XX. Describe the role of the physician at multiple casualty incidents. (C-1)
- XXI. Define triage and describe the principles of triage. (C-1)
- XXII. Describe the START (simple triage and rapid treatment) method of initial triage. (C-1)
- XXIII. Given a list of 20 patients with various multiple injuries, determine the appropriate triage priority with 90% accuracy. (C-3)
- XXIV. Define primary and secondary triage. (C-1)
- XXV. Describe when primary and secondary triage techniques should be implemented. (C-1)
- XXVI. Describe the need for and techniques used in tracking patients during multiple casualty incidents. (C-1)
- XXVII. Describe techniques used to allocate patients to hospitals and track them. (C-1)
- XXVIII. Describe modifications of telecommunications procedures during multiple casualty incidents. (C-1)
- XXIX. List the physical and psychological signs of critical incident stress. (C-1)
- XXX. Describe the role of critical incident stress management sessions in MCIs. (C-1)
- XXXI. Define the term rescue. (C-1)
- XXXII. Explain the medical and mechanical aspects of rescue situations. (C-1)
- XXXIII. Explain the role of the paramedic in delivering care at the site of the injury, continuing through the rescue process and to definitive care. (C-1)
- XXXIV. Describe the phases of a rescue operation. (C-1)
- XXXV. List and describe the types of personal protective equipment needed to safely operate in the rescue

environment to include: (C-1)

- a. Head protection
- b. Eye protection
- c. Hand protection
- d. Personal flotation devices
- e. Thermal protection/ layering systems
- f. High visibility clothing
- g. Specialized footwear
- XXXVI. Explain the differences in risk between moving water and flat water rescue. (C-1)
- XXXVII. Explain the effects of immersion hypothermia on the ability to survive sudden immersion and self rescue. (C-1)
- XXXVIII. Explain the phenomenon of the cold protective response in cold water drowning situations. (C-1)
- XXXIX. Identify the risks associated with low head dams and the rescue complexities they pose. (C-1)
- XL. Given a picture of moving water, identify and explain the following features and hazards associated with: (C-2)
 - a. Hydraulics
 - b. Strainers
 - c. Dams/ hydro-electric sites
- XLI. Explain why water entry or go techniques are methods of last resort. (C-1)
- XLII. Explain the rescue techniques associated with reach-throw-row-go. (C-1)
- XLIII. Given a list of rescue scenarios, identify the victim survivability profile and which are rescue
 - versus body recovery situations. (C-1)
- XLIV. Explain the self rescue position if unexpectedly immersed in moving water. (C-1)
- XLV. Given a series of pictures identify which would be considered "confined spaces" and

potentially

oxygen deficient. (C-3)

- XLVI. Identify the hazards associated with confined spaces and risks posed to potential rescuers to include: (C-1)
 - a. Oxygen deficiency
 - b. Chemical/ toxic exposure/ explosion
 - c. Engulfment
 - d. Machinery entrapment
 - e. Electricity
- XLVII. Identify components necessary to ensure site safety prior to confined space rescue attempts. (C-1)
- XLVIII. Identify the poisonous gases commonly found in confined spaces to include: (C-1)
 - a. Hydrogen sulfide
 - b. Carbon dioxide
 - c. Carbon monoxide
 - d. Low/ high oxygen concentrations
 - e. Methane
 - f. Ammonia
 - g. Nitrogen dioxide
- XLIX. Explain the hazard of cave-in during trench rescue operations. (C-1)
- L. Describe the effects of traffic flow on the highway rescue incident including limited access superhighways and regular access highways. (C-1)
- LI. List and describe the following techniques to reduce scene risk at highway incidents: (C-1)
 - a. Apparatus placement
 - b. Headlights and emergency vehicle lighting
 - c. Cones, flares
 - d. Reflective and high visibility clothing

List and describe the hazards associated with the following auto/ truck components: (C-1)

- a. Energy absorbing bumpers
- b. Air bag/ supplemental restraint systems
- c. Catalytic converters and conventional fuel systems
- d. Stored energy
- e. Alternate fuel systems
- LII. Given a diagram of a passenger auto, identify the following structures: (C-1)
 - a. A, B, C, D posts
 - b. Fire wall
 - c. Unibody versus frame designs
- LVII. Describe methods for emergency stabilization using rope, cribbing, jacks, spare tire, and come-a-longs for vehicles found on their: (C-1)
 - a. Wheels
 - b. Side
 - c. Roof
 - d. Inclines
- LVIII. Describe the electrical hazards commonly found at highway incidents (above and below ground). (C-1)
- LVIV. Explain the difference between tempered and safety glass, identify its locations on a vehicle and how to break it safely. (C-3)