

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: EMS 185 **Credits:** 2

Course Title: Advanced Trauma Care

Course Description:

Examines the assessment and management of trauma emergencies as outlined by the National Emergency Medical Service Education Standards (NEMSES) within the Advanced EMT curriculum. Lecture 2 hours. Total 2 hours per week.

General Course Purpose:

The purpose of this course is to introduce the student to the pathophysiology, signs, symptoms, and treatments of trauma emergencies.

Course Prerequisites and Co-requisites:

Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS.

Co-requisite: EMS 186: Advanced Trauma Care Laboratory

Student Learning Outcomes:

Upon completing the course, the student will be able to

- Integrate knowledge of causes and pathophysiology, trauma scoring, transport and destination issues, transport mode, and age-related assessment and treatment modifications for pediatric and geriatric patients into the management of traumatic injuries, including:
 - Bleeding and fluid resuscitation
 - Abdominal and Genitourinary Trauma:
 - Blunt versus penetrating mechanisms
 - Evisceration
 - Impaled object
 - Solid and hollow organ injuries
 - Injuries to the internal or external genitalia
 - Vascular injury
 - Retroperitoneal injuries
 - Chest Trauma:
 - Blunt vs penetrating mechanisms
 - Open chest wound
 - Impaled object
 - Hemothorax
 - Cardiac tamponade
 - Rib fractures
 - Flail chest
 - Commotio cordis
 - Traumatic aortic disruption
 - Pulmonary contusion
 - Blunt cardiac injury

- Traumatic asphyxia
- Head, Facial, Neck, and Spine Trauma:
 - Life threats
 - Spine trauma
 - Penetrating neck trauma
 - Laryngotracheal injuries
 - Shaken Baby Syndrome
 - Facial fractures
 - Skull fractures
 - Foreign body in the eyes
 - Globe rupture
 - Dental trauma
 - Severe epistaxis
- Nervous System Trauma:
 - Traumatic Brain Injury
 - Spinal Cord Injury
- Orthopedic Trauma:
 - Open fractures
 - Closed fractures
 - Dislocations
 - Amputations/ replantation
 - Upper and lower extremity orthopedic trauma
 - Sprains/ Strains
 - Pelvic fractures
 - Pediatric fractures
- Soft Tissue Trauma:
 - Wounds (avulsion, bite, laceration, puncture, incision)
 - Burns (electrical, chemical, thermal, radiation) and inhalation injury
 - Chemicals in the eye and on the skin
 - Crush/ compartment syndrome
 - High-pressure injection injury
- Multi-System Trauma and Blast Injuries
- Environmental Emergencies:
 - Drowning
 - Temperature-related illness
 - Bites and envenomations
 - Lightning injury
- Special Considerations in Trauma:
 - Pregnant patient
 - Pediatric patient
 - Geriatric patient
 - Cognitively impaired patient

Major Topics to Be Included:

None

Effective Date/Updated: June 5, 2024