

COURSE SYLLABUS

LAST REVIEW	Spring 2021
COURSE TITLE	Paramedic Concepts III
COURSE NUMBER	PMED 0229
DIVISION	Health Professions
DEPARTMENT	Emergency Medical Education
CIP CODE	51.0904
CREDIT HOURS	4
CONTACT HOURS/WEEK	Class/Lab: 4
PREREQUISITES	PMED 0228
COREQUISITES	PMED 0245
COURSE PLACEMENT	This course is part of a selective admission program. Students must be admitted to the Paramedic program to enroll in this course.

COURSE DESCRIPTION

The didactic content of this course will cover kinematics of trauma, pathophysiology of trauma, trauma systems, assessing and management hemorrhage and shock, soft tissue trauma, head, facial and neck trauma, spinal trauma, thoracic trauma, abdominal trauma, musculoskeletal trauma, burns, blunt and penetrating trauma, and blast injuries. The student will utilize and build upon previous semesters' content in assessing and managing the trauma patient during scenario-based sim/lab.

PROGRAM LEARNING OUTCOMES

1. Perform Basic Life Support and Advanced Life Support skills.
2. Communicate effectively orally and in writing across a diverse set of situations and cultures and with individuals, teams and large groups.
3. Demonstrate effective analytical and critical thinking skills to make appropriate decisions in critical and non-critical situations.
4. Analyze ethical problems that occur in Emergency Medical Services to implement practical resolutions

TEXTBOOKS

<http://kckccbookstore.com/>

METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom.

Methodology will be selected to best meet student needs.

COURSE OUTLINE

Per DOT National Standard Curriculum and Kansas Board of EMS requirements the following topics will be explored.

- I. Trauma Systems
 - A. Trauma center designation
 - B. Transport decisions
- II. Hemorrhage and Shock
 - A. Clotting
 - B. Hemorrhage assessment
 - C. Stages of Shock
 - D. Shock assessment and management
- III. Soft Tissue Trauma
 - A. Pathophysiology of soft-tissue injury
 - B. Dressing and bandage materials
 - C. Assessment of soft-tissue injuries
 - D. Management of soft-tissue injuries
- IV. Burns
 - A. Pathophysiology of burns
 - B. Assessment of thermal burns
 - C. Management of thermal burns
 - D. Assessment and management of electrical, chemical and radiation burns.
- V. Head, Facial and Neck Trauma
 - A. Pathophysiology of head, facial, and neck trauma
 - B. Assessment of head, facial and neck trauma
 - C. Management of head, facial, and neck trauma
- VI. Spinal Trauma
 - A. Pathophysiology of spinal trauma
 - B. Assessment of spinal trauma
 - C. Management of spinal trauma

- VII. Thoracic Trauma
 - A. Pathophysiology of thoracic trauma
 - B. Assessment of thoracic trauma
 - C. Management of thoracic trauma
- VIII. Abdominal Trauma
 - A. Pathophysiology of abdominal trauma
 - B. Assessment of abdominal trauma
 - C. Management of abdominal trauma
- IX. Musculoskeletal Trauma
 - A. Pathophysiology of musculoskeletal trauma
 - B. Assessment of musculoskeletal trauma
 - C. Management of musculoskeletal trauma
- X. Blunt Trauma
 - A. Kinetics of blunt trauma
 - B. Blunt trauma
- XI. Penetrating Trauma
 - A. Physics of penetrating trauma
 - B. Specific tissue/organ injuries
 - C. Special concerns with penetrating trauma
- XII. Shock Trauma Resuscitation
 - A. Pathophysiology of shock trauma resuscitation
 - B. Trauma critical care concepts
- XIII. Environmental Emergencies
 - A. Pathophysiology of Heat and Cold Disorders
 - B. Heat Disorders
 - C. Cold Disorders
 - D. Near-Drowning and Drowning
 - E. Diving Emergencies
 - F. High Altitude Illness
- XIV. Transport Operations
 - A. Regulations
 - B. Ground Transportation
 - C. Air Medical Transportation
- XV. Incident Management and Mass-Casualty Incidents
 - A. NIMS
 - B. EMS Response

- C. Triage
 - D. Debriefing
- XVI. Vehicle Extrication and Special Rescue
 - A. Guidelines for Rescue Operations
 - B. Vehicle Extrication
 - C. Special Rescue Situations
- XVII. Hazardous Materials
 - A. Regulations and Standards
 - B. Identification of Hazardous Materials
 - C. Exposure, Contamination
 - D. Response, Mitigation, Decontamination
- XVIII. Terrorism Response
 - A. Terrorism Events
 - B. Preparation and Response
 - C. Methods and Agents
- XIX. Disaster Response
 - A. Natural/Man-Made Disasters
 - B. Preparation and Response
 - C. Debriefing
- XX. Crime Scene Awareness
 - A. Scene Awareness
 - B. Safety Practices
 - C. Evidence Preservation

COURSE LEARNING OUTCOMES

Upon successful completion of this course, the student will:

1. Demonstrate knowledge of kinematics, pathophysiology of trauma.
2. Demonstrate knowledge of trauma systems.
3. Demonstrate knowledge of hemorrhage and shock resuscitation.
4. Demonstrate knowledge and ability to manage soft tissue trauma and burn trauma.
5. Demonstrate knowledge and ability to manage head, facial and neck trauma.
6. Demonstrate knowledge and ability to manage spinal, thoracic and abdominal trauma.
7. Demonstrate knowledge and ability to manage musculoskeletal trauma.
8. Demonstrate knowledge and ability to manage blunt and penetrating trauma.
9. Given a trauma scenario, will provide effective team lead and management of trauma patient in a scenario-based sim/lab.
10. Demonstrate knowledge and ability to manage environmental emergencies through proper patient assessment and treatment.

11. Discuss considerations, safety practices and process for transporting patients.
12. Identify the importance of Incident Management, the major components of the National Incident Management System (NIMS) and how it is applied to mass-casualty incidents.
13. Identify the considerations, and safety practices while operating at a vehicle extrication and special rescue incident.
14. Demonstrate knowledge of hazardous materials awareness and how EMS functions within a hazardous materials incident.
15. Discuss the importance and components of preparing, responding to and functioning in a terrorism response.
16. Discuss the importance and components of preparing, responding to and functioning in a disaster response.
17. Demonstrate knowledge of crime scene awareness to ensure personal safety and evidence preservation.

ASSESSMENT OF COURSE LEARNING OUTCOMES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES

Student Handbook

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

College Catalog

<https://www.kckcc.edu/academics/catalog/index.html>

College Policies and Statements

<https://www.kckcc.edu/about/policies-statements/index.html>

Accessibility and Accommodations

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.