Western Technical College

10531920 Paramedic Trauma

Course Outcome Summary

Course Information

Description	This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for an acutely injured patient.
Career Cluster	Law, Public Safety, Corrections and Security
Instructional Level	Associate Degree Courses
Total Credits	3
Total Hours	72

Textbooks

Prehospital Trauma Life Support and Nav Access Card: Prehospital Trauma Life Support - w/ Access. 9th Edition. Copyright 2019. National Association of Emergency Medical Technicians. Publisher: Jones & Bartlett Publishers.. **ISBN-13**: 978-1-284-17147-1. Required.

Program Outcomes

1. Integrate pathophysiological principles and assessment findings to provide appropriate patient care.
2. Demonstrate paramedic skills associated with established standards and procedures for a variety of patient encounters.
3. Communicate effectively with others.
4. Demonstrate professional behavior.
5. Meet state and national competencies listed for paramedic certification(s).

Course Competencies

1. Examine general principles of trauma.

Assessment Strategies

1.1. Oral, Written or Graphic Assessment

Criteria

You will know you are successful when:

1.1. you answer questions related to the learning objectives on a test.

1.2. you achieve the threshold identified by your Training Center on the assessment.

Learning Objectives

1.a. Discuss the identification and categorization of trauma patients as defined by the National Trauma Triage Protocol.
1.b. Discuss the mortality, morbidity, and significance of trauma in the United States.
1.c. Discuss the trauma system as it exists in Wisconsin.
1.d. List different types of traumatic injuries.
1.e. list the major components of the trauma patient assessment.
1.f. Differentiate between significant and non-significant mechanisms of injury (MOI).
1.g. Describe the primary assessment of a trauma patient.
1.h. Describe the secondary assessment (head-to-toe physical examination) of a trauma patient.
1.i. Discuss the role of documentation in caring for victims of trauma.
1.j. Discuss trauma scoring scales.
1.k. Discuss trauma center designations.
1.l. Discuss the transfer of trauma patients to the most appropriate hospital.

2. Analyze the pathophysiology, assessment considerations, morbidity/mortality, and management of a patient with chest trauma.

Assessment Strategies

2.1. Oral, Written or Graphic Assessment

Criteria

You will know you are successful when:

2.1. you answer questions related to the learning objectives on a test.
2.2. you achieve the threshold identified by your Training Center on the assessment.

Learning Objectives

2.a. Describe the morbidity and mortality of chest trauma, including prevention strategies.
2.b. Discuss the pathophysiology, assessment considerations, and management of a patient with a traumatic aortic disruption.
2.c. Discuss the pathophysiology, assessment considerations, and management of a patient with a pulmonary contusion.
2.d. Discuss the pathophysiology, assessment considerations, and management of a patient with a blunt cardiac injury.
2.e. Discuss the pathophysiology, assessment considerations, and management of a patient with a hemothorax.
2.f. Discuss the pathophysiology, assessment considerations, and management of a patient with an open, simple, or tension pneumothorax.
2.g. Discuss the pathophysiology, assessment considerations, and management of a patient with a cardiac tamponade.
2.h. Discuss the pathophysiology, assessment considerations, and management of a patient with rib fractures.
2.i. Discuss the pathophysiology, assessment considerations, and management of a patient with a flail chest.
2.j. Discuss the pathophysiology, assessment considerations, and management of a patient with commotion cordis.
2.k. Discuss the pathophysiology, assessment considerations, and management of a patient with tracheobronchial disruption.
2.l. Discuss the pathophysiology, assessment considerations, and management of a patient with a diaphragmatic rupture.
2.m. Discuss the pathophysiology, assessment considerations, and management of a patient with traumatic asphyxia.
2.n. Discuss the pathophysiology, assessment considerations, and management of a patient with chest trauma.
2.o. Discuss pediatric considerations as they pertain to the management of non-adult patients with chest trauma.
2.p. Discuss geriatric considerations pertaining to the treatment of geriatric patients with chest trauma.

3. Analyze the pathophysiology, assessment considerations, morbidity/mortality, and management of a patient with abdominal or genitourinary trauma.

Assessment Strategies

3.1. Oral, Written or Graphic Assessment

Criteria

You will know you are successful when:

3.1. you answer questions related to the learning objectives on a test.
3.2. you achieve the threshold identified by your Training Center on the assessment.

Learning Objectives

3.a. Describe the morbidity and mortality of abdominal and genitourinary trauma, including prevention strategies.
3.b. Discuss the pathophysiology, assessment considerations, and management of a patient with vascular injury.
3.c. Discuss the pathophysiology, assessment considerations, and management of a patient with solid and/or hollow organ injuries.
3.d. Discuss the pathophysiology, assessment considerations, and management of a patient with blunt or penetrating injury.
3.e. Discuss the pathophysiology, assessment considerations, and management of a patient with an evisceration.
3.f. Discuss the pathophysiology, assessment considerations, and management of a patient with a retroperitoneal injury.
3.g. Discuss the pathophysiology, assessment considerations, and management of a patient with an injury to the external genitalia.
3.h. Identify differences between pediatric and geriatric patients suffering from abdominal and genitourinary trauma.

4. Analyze the pathophysiology, assessment considerations, morbidity/mortality, and management of a patient with orthopedic trauma.

Assessment Strategies

4.1. Oral, Written or Graphic Assessment

Criteria

You will know you are successful when:

4.1. you answer questions related to the learning objectives on a test.
4.2. you achieve the threshold identified by your Training Center on the assessment.

Learning Objectives

4.a. Describe the morbidity and mortality of orthopedic trauma, including prevention strategies.
4.b. Discuss the pathophysiology, assessment considerations, and management of pediatric fractures.
4.c. Discuss the pathophysiology, assessment considerations, and management of tendon lacerations, transections, or ruptures (Achilles and patellar).
4.d. Discuss the pathophysiology, assessment considerations, and management of open fractures.
4.e. Discuss the pathophysiology, assessment considerations, and management of closed fractures.
4.f. Discuss the pathophysiology, assessment considerations, and management of dislocations.
4.g. Discuss the pathophysiology, assessment considerations, and management of compartment syndrome.

5. Analyze the pathophysiology, assessment considerations, morbidity/mortality, and management of a patient with soft tissue trauma.

Assessment Strategies

5.1. Oral, Written or Graphic Assessment

Criteria

You will know you are successful when:

5.1. you answer questions related to the learning objectives on a test.
5.2. you achieve the threshold identified by your Training Center on the assessment.

Learning Objectives

5.a. Describe the morbidity and mortality of soft tissue trauma.
5.b. Discuss the anatomy and physiology of soft tissue injury.

5.c. Discuss the pathophysiology of wound healing.
5.d. Discuss the pathophysiology, assessment considerations, and management of avulsions.
5.e. Discuss the pathophysiology, assessment considerations, and management of bite wounds.
5.f. Discuss the pathophysiology, assessment considerations, and management of lacerations.
5.g. Discuss the pathophysiology, assessment considerations, and management of puncture wounds.
5.h. Discuss the pathophysiology, assessment considerations, and management of electrical burns.
5.i. Discuss the pathophysiology, assessment considerations, and management of chemical burns.
5.j. Discuss the pathophysiology, assessment considerations, and management of thermal burns.
5.k. Discuss the pathophysiology, assessment considerations, and management of high-pressure injection wounds.

6. Analyze the pathophysiology, assessment considerations, morbidity/mortality, and management of a patient with head, facial, neck, or spinal trauma.

Assessment Strategies

6.1. Oral, Written or Graphic Assessment

Criteria

You will know you are successful when:

6.1. you answer questions related to the learning objectives on a test.
6.2. you achieve the threshold identified by your Training Center on the assessment.

Learning Objectives

6.a. Discuss the incidence of head, facial, neck, and spinal trauma.
6.b. Identify mechanisms of head, facial, neck, and spinal trauma.
6.c. Discuss the morbidity and mortality of head, facial, neck, and spinal trauma.
6.d. Identify categories of injury for head, facial, neck, and spinal trauma.
6.e. Discuss causes of brain injury.
6.f. Identify injuries also associated with head, facial, neck, and spinal trauma.
6.g. Discuss the prevention of head, facial, neck, and spinal trauma.
6.h. Discuss the pathophysiology, assessment considerations, and management of unstable facial fractures.
6.i. Discuss the pathophysiology, assessment considerations, and management of orbital fractures.
6.j. Discuss the pathophysiology, assessment considerations, and management of a perforated tympanic membrane.
6.k. Discuss the pathophysiology, assessment considerations, and management of skull fractures.
6.l. Discuss the pathophysiology, assessment considerations, and management of penetrating neck trauma (no spinal cord involvement).
6.m. Discuss the pathophysiology, assessment considerations, and management of laryngotracheal injuries.
6.n. Discuss the pathophysiology, assessment considerations, and management of spinal trauma (no central nervous system involvement).
6.o. Discuss the pathophysiology, assessment considerations, and management of mandibular fractures.

7. Analyze the pathophysiology, assessment considerations, morbidity/mortality, and management of a patient with nervous system trauma.

Assessment Strategies

7.1. Oral, Written or Graphic Assessment

Criteria

You will know you are successful when:

7.1. you answer questions related to the learning objectives on a test.
7.2. you achieve the threshold identified by your Training Center on the assessment.

Learning Objectives

7.a. Describe the morbidity and mortality of nervous system trauma, including prevention strategies.
7.b. Discuss the pathophysiology, assessment considerations, and management of cauda equine syndrome.
7.c. Discuss the pathophysiology, assessment considerations, and management of nerve root injury.
7.d. Discuss the pathophysiology, assessment considerations, and management of peripheral nerve injury.
7.e. Discuss the pathophysiology, assessment considerations, and management of traumatic brain injuries.
7.f. Discuss the pathophysiology, assessment considerations, and management of spinal cord injuries.
7.g. Discuss the pathophysiology, assessment considerations, and management of spinal shock.

8. Analyze the pathophysiology, assessment considerations, morbidity/mortality, and management of a patient with an environmental emergency.

Assessment Strategies

8.1. Oral, Written or Graphic Assessment

Criteria

You will know you are successful when:

8.1. you answer questions related to the learning objectives on a test.
8.2. you achieve the threshold identified by your Training Center on the assessment.

Learning Objectives

8.a. Describe the morbidity, mortality, and risk factors of environmental emergencies, including prevention strategies.
8.b. Discuss the pathophysiology, assessment considerations, and management of submersion incidents.
8.c. Discuss the pathophysiology, assessment considerations, and management of temperature-related incidents.
8.d. Discuss the pathophysiology, assessment considerations, and management of bites and envenomations.
8.e. Discuss the pathophysiology, assessment considerations, and management of electrical injury from lightning strikes.
8.f. Discuss the pathophysiology, assessment considerations, and management of high altitude illness.

9. Explain multi-system trauma.

Assessment Strategies

9.1. Oral, Written or Graphic Assessment

Criteria

You will know you are successful when:

9.1. you answer questions related to the learning objectives on a test.
9.2. you achieve the threshold identified by your Training Center on the assessment.

Learning Objectives

9.a. Define multi-system trauma.
9.b. Discuss the golden principles of out-of-hospital trauma care.
9.c. Discuss critical thinking in multi-system trauma care.
9.d. Discuss the pathophysiology, signs/symptoms, and management of multi-system trauma resulting from blast injuries.

10. Demonstrate trauma management skills and procedures.

Assessment Strategies

10.1. Skill Demonstration

Criteria

You will know you are successful when:

10.1. you follow the published protocol provided by your Training Center.

Learning Objectives

10.a. Manage the care of a trauma patient.