

**CENTRAL TEXAS COLLEGE  
SYLLABUS FOR EMSP 1149 PRE-HOSPITAL TRAUMA LIFE SUPPORT  
(PHTLS)**

**Semester Hours Credit: 1**

**INSTRUCTOR:**

**OFFICE HOURS:**

**I. INTRODUCTION**

- A. A sixteen contact hour course for the pre-hospital care provider emphasizing pre-hospital care of trauma victims. The course is designed to improve the delivery of pre-hospital care in the critical area of trauma related emergencies by providing training in traumatology which supplements that obtained by First Responders, EMT-Bs, and EMT-Ps. To this aim the course focuses on emergency scene management, systematic rapid assessment, resuscitation, packaging and transportation of patients.**
- B. The course adheres to the curriculum developed by the National Association of Emergency Medical Technicians (NAEMT) and the American College of Surgeons Committee on Trauma for PHTLS. The course fulfills one of the Military Occupational Specialty requirements for the 91W designation, Health Care Specialist. It may also be used for continuing education credit by EMT-Bs and most other medical professionals.**
- C. This course is occupationally related and it may be used for continuing education credit to maintain certification in the field of Emergency Medical Technology at the Basic level.**
- D. Prerequisite: EMSP 1401/1160, or EMT-B licensure, or other training in pre-hospital medical care.**

**II. LEARNING OUTCOMES**

**Upon successful completion of this course, EMSP 1149, the student will:**

- A. Recognize the forces involved in commonly occurring kinds of trauma and state them in terms of a mechanism of injury. Relate mechanism of injury to possible injuries and injury patterns. Recognize life-**

**threatening injuries. Describe the pathophysiology of injuries. Assess and manage trauma patients. Perform appropriate interventions. (C5) (C6) (C7) (C15) (C18) (C19) (F1) (F2) (F5) (F6) (F8) (F9),(F10), (F12)**

- B. Demonstrate proficiency in the following areas of patient care: airway management and ventilation, assessment and management, rapid extrication, spinal immobilization, pediatric assessment, and pediatric immobilization. (C15) (C18) (C19)**

### **III. INSTRUCTIONAL MATERIALS**

- A. Required Text: PHTLS Basic and Advanced Prehospital Trauma Life Support *Fifth Edition*, National Association of Emergency Medical Technicians (NAEMT), Norman McSwain, Jeff Salomone. (ISBN 0-323-02744-X)**
- B. Companion CD-Rom: PHTLS Basic and Advanced Prehospital Trauma Life Support *Fifth Edition*, by: National Association of Emergency Medical Technicians (NAEMT), Norman McSwain, and Jeff Salomone. (ISBN 0-323-02744-X)**

### **IV. COURSE REQUIREMENTS:**

- A. This is a 16 contact hour course which follows the lesson plans of the NAEMT curriculum for the PHTLS Advanced Provider course. It is an intensive course with didactic and hands-on learning. It is fast paced so advanced review of the textbook material is highly recommended.**
- B. Since this is a compact course with only 16 contact hours, students cannot miss any class sessions. Any missed class sessions must be made up well before the final exam. Excessive absenteeism may/will result in the student being asked to drop the class, or getting an F for the course.**

***NOTE: CTC Attendance Policy***

**The following statements are from the Central Texas College Student Handbook: “Students are required to attend regularly, all classes in which they enrolled. Students are required to be in class on time.”**

**“Absences from classes, for any reason, must not exceed College standards. Students may be administratively withdrawn from any class when their absences exceed a total of four class meetings in a long semester, three class meetings for an eleven-week, eight-week**

semester, or for a six-week semester, and in the opinion of the instructor, they cannot satisfactorily complete the course. The final decision rest solely with the instructor.”

## V. EXAMINATIONS

There will be one practical exam and one written exam. The practical exam will be graded on a pass-fail basis and must be passed for the student to pass the course. The written exam will be the final exam and will determine the letter grade the student obtains for the course.

## VI. SEMESTER GRADE COMPUTATIONS

The grading scale is as follows:

A 90-100  
B 80-89.9  
C 70-79.9  
D 60-69.9  
F 0-59.9

## VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM THE INSTRUCTOR

- A. **Course Withdrawal:** It is the student’s responsibility to officially withdraw from a course if circumstances prevent attendance. Any student who desires to, or must, officially withdraw from a course after the first scheduled class meeting must file a Central Texas College Application for Withdrawal (CTC Form 59). The withdrawal form must be signed by the student.

CTC Form 59 will be accepted at any time prior to Friday of the 12th week of classes during the 16-week fall and spring semesters. The deadline for sessions of other lengths is:

10-week session Friday of the 8th week  
8-week session Friday of the 6th week  
5-week session Friday of the 4th week

The equivalent date (75% of the semester) will be used for sessions of other lengths. The specific last day to withdraw is published each semester in the Schedule Bulletin.

A student who officially withdraws will be awarded the grade of “W” provided the student’s attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a

withdrawal application with the College before they may be considered for withdrawal.

A student may not withdraw from a class for which the instructor has previously issued the student a grade of “F” or “FN” for nonattendance.

- B. **Administrative Withdrawal:** An administrative withdrawal may be initiated when the student fails to meet College attendance requirements. The instructor will assign the appropriate grade on CTC Form 59 for submission to the registrar.
- C. **Incomplete Grade:** The College catalog states, “An incomplete grade may be given in those cases where the student has completed the majority of the coursework but, because of personal illness, death in the immediate family, or military orders, the student is unable to complete the requirements for a course.” Prior approval from the instructor is required before the grade of “I” for Incomplete is recorded. A student who merely fails to show for the final examination will receive a zero for the final and an “F” for the course.
- D. **Cellular Phones and Beepers:** Cellular phones and beepers will be turned off while the student is in the classroom or laboratory.
- E. **American’s With Disabilities Act (ADA):** Students requiring accommodations for disabilities are responsible for notifying the instructor. Reasonable accommodations will be granted in full compliance with federal and state law and Central Texas College policy.
- F. **Instructor Discretion:** The instructor reserves the right of final decision in course requirements.
- G. **Civility:** Individuals are expected to be cognizant of what a constructive educational experience is and respectful of those participating in a learning environment. Failure to do so can result in disciplinary action up to and including expulsion.

## VIII. COURSE OUTLINE

- A. **Lesson One: Introduction**
  - 1. **Learning Outcomes:** Upon successful completion of this lesson, the student will:
    - a. Restate the rationale for a rapid and accurate assessment of patients with traumatic injuries.

- b. Explain the rationale for the identification of hypoxemia and shock
- c. Explain how initiation of key interventions in patients with traumatic injuries influences treatment outcome.
- d. Explain how safe and rapid transport to an appropriate facility of patients with traumatic injuries influences treatment outcome.

**2. Learning Activities:**

- a. Practice group management of a multitrauma patient to establish baseline skill level and possible areas where improvement may be needed. (C5) (C6)(C7)(C9)(C15) (C19)(F8)(F9)

**3. Equipment and Materials:**

- a. Computer-projector set-up.
- b. Instructor-prepared handouts
- c. Bandage scissors, Stethoscope, B/P cuff, penlight, exam gloves, cervical collars, extrication device, long spine board, 1000cc LR, IV set-up, IV caths. 14 & 16 ga., oxygen tank with supplemental oxygen delivery devices, BVM, pocket mask,

**4. Audio-Visual Aids:**

- a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)

**5. Lesson Outline:**

- a. Baseline scenarios
- b. PHTLS history
- c. Epidemiology of Trauma
- d. When patients die from trauma
- e. The Golden Period
- f. Trauma Team-the Golden Period
- h. Trauma Centers
- i. The Platinum ten minutes
- j. Management
- k. Components of PHTLS

**B. Lesson Two: Kinematics of Trauma**

**1. Learning outcomes: Upon successful completion of this lesson, the student will:**

- a. Discuss the laws of energy and motion
- b. Discuss trauma associated with blunt impact and penetrating injury
- c. Describe the effects of energy distribution in MVCs
- d. Describe the kinematics of blast and violent injuries
- e. Use kinematics to predict injury patterns

**2. Learning activities**

- a. View audio-visual aids or material of accidents and violence pertaining to trauma in humans. (C5)(F5)(F10)
- b. View injuries resulting from trauma. (C5)(F5)(F10)
- c. Practice trauma scenario and describe possible injuries (C5)(C6)(C7)(C15)(C18)(C19)(F2)(F5)(F6)
- 3. Equipment and Materials:
  - a. Computer-projector set-up.
  - b. Instructor-prepared handouts.
- 4. Audio-Visual Aids:
  - a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)
- 5. Lesson Outline:
  - a. Kinetic Energy
  - b. Velocity vs. Mass
  - c. Newton's First Law of Motion
  - d. Newton's First Law and Blunt Trauma
  - e. Law of Conservation of Energy
  - f. Predicting Injury
  - g. Head and Neck
  - h. Torso
  - i. Extremities
  - j. Types of Motor Vehicle Crashes
  - k. Restraint Devices
  - l. Air Bag Deployment
  - m. Motorcycle Crashes
  - n. Pedestrian vs Motor Vehicle
  - o. Falls
  - p. Sports and Recreational Activity Mechanisms
  - q. Blast Injuries
  - r. Penetrating Trauma

**C. Lesson Three: Assessment and Management**

- 1. **Learning outcomes:** Upon successful completion of this lesson, the student will:
  - a. Discuss the importance of scene assessment
  - b. Identify components of the primary survey
  - c. Differentiate between critical and non-critical patients
  - d. Defend the need for early transport of critical patients
  - e. Describe when to perform a secondary survey
- 2. **Learning activities**
  - a. Review various emergency scenes and describe proper safety procedures (C7) (F2)(F6)
  - b. Practice patient assessment scenarios.(C15)(C18)(C19)
  - c. Demonstrate proficiency in patient assessment in a practical skills testing station. (C6)(C15)(C18)(C19)(F2)

3. **Equipment and Materials:**
  - a. Computer-projector set-up.
  - b. Instructor-prepared handouts
  - c. Cervical collars, dressing and bandaging material, eye protection, exam gloves, airway management equipment, stethoscope, blood pressure cuff and a penlight.
4. **Audio-Visual Aids:**
  - a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)
5. **Lesson Outline:**
  - a. Decision Making
  - b. Critical Trauma Patient
  - c. Primary Survey
  - d. Secondary Survey
  - e. Transportation
  - f. Trauma Center Candidates
  - g. Pain Management
  - h. Communication
  - i. Documentation
  - j. Triage

**D. Lesson Four: Airway Management and Ventilation**

1. **Learning outcomes:** Upon successful completion of this lesson, the student will:
  - a. Identify patients in need of airway control
  - b. Explain the need for increased oxygenation and ventilation in the critical trauma patient
  - c. Discuss methods of manual and mechanical management of the airway
  - d. Discuss common errors in ventilation of the trauma patient
2. **Learning activities**
  - a. View audio-visual aids or materials of patients in need of airway control.(C5)(F5)(F10)
  - b. Demonstrate the use of airway and ventilation devices. (C15)(C18)(C19)
  - c. Practice airway management scenarios. (C5)(C15)(C18)(C19)
  - d. Demonstrate proficiency of airway management in a practical skills testing station.(C15)(C18)(C19)
3. **Equipment and Materials:**
  - a. Computer-projector set-up.
  - b. Instructor-prepared handouts
  - c. #14 or #12 gauge over-the-needle catheters, #20 gauge over-the-needle catheters, 10cc syringe, adult intubation manikin,

BVM with reservoir, chest decompression manikin or equivalent, cricothyrotomy manikin, curved laryngoscope blade, disposable gloves, endotracheal tube stylet, endotracheal tubes, laryngoscope handle, manikin lubricant, oxygen tank, oropharyngeal airway, nasopharyngeal airway, rigid cervical collar, scissors, yanker suction tip, pocket mask, sharps container, stethoscope, straight laryngoscope blade, tape roll.

4. **Audio-Visual Aids:**

a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)

5. **Lesson Outline:**

- a. Anatomy
- b. Respiratory System
- c. Findings
- d. Management Options
- e. Manual Maneuvers
- f. Suctioning
- g. Basic Adjuncts
- h. Dual Lumen Airways
- i. Endotracheal Intubation
- j. Face-to-Face Intubation
- k. Alternative Airway Procedures
- l. Pharmacologically Assisted Intubation (PAI)
- m. Oxygen
- n. Minute Volume
- o. Dead Space
- p. Assisted Ventilation

E. **Lesson Five:** Thoracic Trauma

1. **Learning outcomes:** Upon successful completion of this lesson, the student will:

- a. Describe the anatomy of the chest
- b. Discuss the mechanics of breathing
- c. Detail the assessment process in patients suspected of having thoracic trauma.
- d. Describe the management of: Rib fracture, Flail chest injury, Pulmonary contusion, Pneumothorax (open and tension), Hemothorax, Blunt cardiac injury

2. **Learning activities**

- a. View audio-visual aids or materials of thoracic trauma injuries.(C5)(F5)(F10)
- b. Practice management of thoracic injuries. (C7)(C15)(C18)(C19)
- c. Demonstrate proficiency in the management of thoracic injuries in a practical skills testing station.

- (C7)(C15)(C18)(C19)(F9)
3. **Equipment and Materials:**
    - a. Computer-projector set-up.
    - b. Instructor-prepared handouts
    - c. Sterile dressings, gloves, eye protection, universal dressing, occlusive dressing, #14 or #12 gauge over-the-needle catheter, chest decompression manikin or equivalent.
  4. **Audio-Visual Aids:**
    - a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)
  5. **Lesson Outline:**
    - a. Anatomy
    - b. Physiology
    - c. Assessment
    - d. Thoracic Trauma
    - e. Primary Survey
    - f. Simple Pneumothorax
    - g. Tension Pneumothorax
    - h. Blunt Cardiac Injury

**F. Lesson Six: Shock and Fluid Resuscitation**

1. **Learning outcomes:** Upon successful completion of this lesson student will:
  - a. Describe the pathophysiology of shock
  - b. Identify the types of shock
  - c. Differentiate between signs of compensated and decompensated shock
  - d. Discuss the role of hemorrhage control, hypothermia, PASG, and volume resuscitation in shock management
2. **Learning activities**
  - a. View visual aids or materials of patients with shock (C5)(F5)(F10)
  - b. Demonstrate proficiency in the management of shock in a practical skills testing station (C15)(C18)(C19)(F9)
3. **Equipment and Materials:**
  - a. Computer-projector set-up.
  - b. Instructor-prepared handouts
  - c. Exam gloves, eye protector, stethoscope, blood pressure cuff, penlight, IV equipment, supplemental oxygen equipment, PASG.
4. **Audio-Visual Aids:**
  - a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)
5. **Lesson Outline:**

- a. Shock
- b. Aerobic Metabolism
- c. Anaerobic Metabolism
- d. Staged Death
- e. Blood Loss
- f. Hemorrhagic Shock
- g. Compensatory Mechanism
- h. Other Types of Shock
- i. Decompensation
- j. Confounding Factors
- k. Airway/Oxygenation
- l. External Hemorrhage Control
- m. Internal Hemorrhage Control
- n. PASG
- o. Volume Resuscitation
- p. Complications

**G. Lesson Seven: Abdominal Trauma**

1. **Learning outcomes:** Upon successful completion of this lesson student will:
  - a. Relate kinematics to the assessment of a patient with abdominal trauma
  - b. Describe the assessment and management of blunt and penetrating abdominal trauma
  - c. Describe the differences in the assessment and treatment of the pregnant patient with abdominal trauma
2. **Learning activities**
  - a. View visual aids or materials of patients with abdominal trauma (C5)(F5)(F10)
  - b. Demonstrate proficiency in the management of patients with abdominal trauma in a practical skills testing station (C15)(C18)(C19)(F9)
3. **Equipment and Materials:**
  - a. Computer-projector set-up
  - b. Instructor-prepared handouts
  - c. Exam gloves, eye protectors, stethoscope, blood pressure cuff, penlight, IV equipment, supplemental oxygen equipment, PASG, dressing and bandaging material.
4. **Audio-Visual Aids:**
  - a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)
5. **Lesson outline:**
  - a. Abdominal Trauma
  - b. Pathophysiology
  - c. Assessment

- d. Scenarios
- d. Pelvic Fracture
- e. Impaled Objects
- f. Scenario

#### H. Lesson Eight: Head Trauma

1. Learning outcomes: Upon successful completion of this lesson student will:
  - a. Define primary and secondary brain injury
  - b. Discuss how assessment findings suggest traumatic brain injury
  - c. Discuss management of suspected traumatic brain injury
2. Learning activities
  - a. View visual aids or materials of patients with head injuries (C5)(F5)(F10)
  - b. Demonstrate proficiency in the management of head injury patients in a practical skills testing station (C15)(C18)(C19)(F9)
3. Equipment and Materials:
  - a. Computer-projector set-up.
  - b. Instructor-prepared handouts
  - c. Exam gloves, eye protector, stethoscope, blood pressure cuff, penlight, cervical collar, automobile, long spinal board with straps, extrication device, supplemental oxygen equipment.
4. Audio-Visual Aids:
  - a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)
5. Lesson outline:
  - a. Traumatic Brain Injury (TBI)
  - b. Anatomy
  - c. Pathophysiology
  - d. Secondary Brain Injury
  - e. Skull fractures
  - f. Intracranial Hematoma
  - g. Management
  - h. Airway management
  - i. Ventilatory support
  - j. Circulation
  - k. Disability
  - l. Transport
  - m. Intracranial Hypertension

#### I. Lesson Nine: Spinal Trauma

1. **Learning outcomes:** Upon successful completion of this lesson student will:
  - a. Identify life-threatening conditions associated with spinal trauma
  - b. Recognize the indications for spinal immobilization
  - c. Discuss the principles of spinal immobilization
  - d. Describe the use of rapid extrication
2. **Learning activities**
  - a. View visual aids or materials of mechanisms of injury resulting in spinal trauma (C5)(F5)(F10)
  - b. Demonstrate proficiency in the management of shock in a practical skills testing station (C15)(C18)(C19)(F9)
3. **Equipment and Materials:**
  - a. Computer-projector set-up.
  - b. Instructor-prepared handouts
  - c. Exam gloves, eye protector, stethoscope, blood pressure cuff, penlight, IV equipment, supplemental oxygen, automobile, cervical collar, extrication device, scoop stretcher, long spinal board with head immobilizer and straps equipment
4. **Audio-Visual Aids:**
  - a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)
5. **Lesson outline:**
  - a. Spinal Trauma
  - b. Anatomy
  - c. Pathophysiology
  - c. Primary Survey
  - d. Sensory Assessment
  - e. Ventilatory Impairment
  - f. Neurogenic Shock
  - g. Penetrating Trauma
  - h. Blunt Trauma
  - i. Concerning Mechanism of Injury
  - j. Distracting Injury
  - k. Inability to Communicate
  - l. Concerning Mechanism of Injury
  - m. Rapid Extrication
  - n. Cervical Collar
  - o. Spinal Immobilization

**J. Lesson Ten: Musculoskeletal Trauma**

1. **Learning outcomes:** Upon successful completion of this lesson student will:
  - a. Discuss the pathophysiology of musculoskeletal trauma

- b. Discuss the management of musculoskeletal trauma in isolated trauma and multisystem trauma
- 2. **Learning activities**
  - a. View visual aids or materials of patients with musculoskeletal trauma (C5)(F5)(F10)
  - b. Demonstrate proficiency in prioritizing treatment in patients with musculoskeletal trauma(C15)(C18)(C19)(F9)
  - c. Demonstrate proficiency in the management of patients with musculoskeletal trauma in a practical skills testing station .(C15)(C18)(C19)(F9)
- 3. **Equipment and Materials:**
  - a. Computer-projector set-up.
  - b. Instructor-prepared handouts
  - c. Exam gloves, eye protector, stethoscope, blood pressure cuff, penlight, IV equipment, supplemental oxygen equipment, PASG, splint kit, triangular bandages.
- 4. **Audio-Visual Aids:**
  - a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)
- 5. **Lesson outline:**
  - a. Musculoskeletal Trauma
  - b. Scenarios
  - c. Blood loss
  - d. Scenarios

**K. Lesson Eleven: Thermal Trauma: Injuries Produced by Heat and Cold.**

- 1. **Learning outcomes:** Upon successful completion of this lesson student will:
  - a. Identify, manage, and differentiate critical and non-critical burns
  - b. Identify how chemical and electrical burns differ from thermal burns
  - c. Discuss assessment and care of CO inhalation
  - d. Address the priorities for assessing and managing heat-related injuries
  - e. Discuss the priorities for assessing and managing cold-related injuries
- 2. **Learning activities**
  - a. View visual aids or materials of patients with thermal trauma. (C5)(F5)(F10)
  - b. Demonstrate proficiency in prioritizing patients with burns and associated injuries for treatment (C15)(C18)(C19)(F9)
- 3. **Equipment and Materials:**
  - a. Computer-projector set-up.
  - b. Instructor-prepared handouts

c. Exam gloves, eye protector, stethoscope, blood pressure cuff, penlight, IV equipment, supplemental oxygen equipment, dressing and bandaging material.

4. **Audio-Visual Aids:**

a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)

5. **Lesson outline:**

- a. Anatomy-The Skin
- b. Ventilatory Function
- c. Rule of Nines
- d. Depth of Burns
- e. Treatment
- f. Resuscitation
- g. Wound Management
- h. Pain Management
- i. Possible Associated Injuries
- j. Chemical Burns
- k. Electrical Burns
- l. Patients Requiring Burn Centers
- m. Environmental Injuries
- n. Heat-related Injuries
- o. Hypothermia

L. **Lesson Twelve: Considerations in Pediatric and Geriatric Trauma**

1. **Learning outcomes:** Upon successful completion of this lesson student will:

- a. Identify injury patterns common to geriatric and pediatric trauma patients
- b. Identify anatomic and physiologic differences in pediatric and geriatric patients
- c. Discuss the importance of obtaining history in pediatric and geriatric patients
- d. Discuss the management of pediatric and geriatric trauma patients

2. **Learning activities**

- a. View visual aids or materials of pediatric trauma patients (C5)(F5)(F10)
- c. View visual aids of materials of geriatric trauma patients (C5)(F5)(F10)
- b. Demonstrate proficiency in the management of pediatric trauma patient in a practical skills testing station (C15)(C18)(C19)(F9)

3. **Equipment and Materials:**

- a. Computer-projector set-up.
- b. Instructor-prepared handouts
- c. Exam gloves, eye protector, stethoscope, pediatric blood

pressure cuff, penlight, pediatric cervical collars, pediatric splints, supplemental oxygen, pediatric PASG, pediatric traction splint, scoop stretcher, supplemental oxygen, pediatric spinal immobilization equipment.

**4. Audio-Visual Aids:**

a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)

**5. Lesson outline:**

- a. Life Span Development
- b. Special Considerations
- c. Pediatric Trauma
- d. Mechanisms of Injury in Children
- e. Airway
- f. Breathing
- g. Circulation
- h. Disability
- h. Expose/Environment
- i. Pediatric Vital Signs
- j. Fluid Management
- k. Geriatric Trauma
- l. Airway and Breathing
- m. Circulation
- n. Disability
- o. Special Considerations in the Elderly

**O. Lesson Thirteen: Golden Principles of Pre-hospital Trauma Care**

**1. Learning outcomes: Upon successful completion of this lesson student will:**

- a. Describe the initial concerns upon arrival at an emergency scene
- b. Assess the scene of an emergency to determine the need for additional resources.
- c. Recognize the Kinematics that produce injuries
- d. Use the primary survey approach to identify life threatening conditions
- e. Provide appropriate management while maintaining cervical spine stabilization.
- f. Support ventilation and deliver oxygen to maintain SpO<sub>2</sub> ≥ 95%.
- g. Control significant external hemorrhage.
- h. Provide basic shock therapy
- i. Consider the use of the PASG in certain patients
- j. Maintain manual spinal stabilization until the patient is immobilized onto a long backboard
- k. Explain the criticalness of the “Platinum 10 minutes” in

- the management of a trauma patient
- l. Initiate warmed intravenous fluid replacement en route.
- m. Describe when to take a medical history and perform a secondary survey in the assessment of a trauma patient.
- n. Proceed down the Decision Making algorithm in the management of a trauma patient.
- o. List the fundamental principles of PHTLS
- 2. Learning activities
  - a. Demonstrate proficiency in the management of various types of trauma patients in practical skills testing stations. (C15)(C18)(C19)(F9)
  - b. Demonstrate proficiency in PHTLS by passing a written test with a score of 70% (C7)(F2)(F9)
- 3. Equipment and Materials:
  - a. Computer-projector set-up.
  - b. Instructor-prepared handouts
  - c. All of the medical equipment used in lessons 3-12..
- 4. Audio-Visual Aids:
  - a. PHTLS Basic and Advanced PHTLS Instructor's PowerPoint CD *Fifth Edition* (ISBN: 0323014925)
- 5. Lesson outline:
  - a. Scene Safety
  - b. Additional Resources
  - c. Recognizing the Kinematics that produced injuries
  - d. Primary Survey
  - f. Providing appropriate management while maintaining cervical spine stabilization.
  - g. Supporting ventilation and deliver oxygen to maintain SpO<sub>2</sub> ≥ 95%.
  - h. Controlling significant external hemorrhage.
  - i. Providing basic shock therapy
  - j. Use of the PASG
  - k. Spinal stabilization
  - l. Platinum 10 minutes
  - m. Initiate warmed intravenous fluid replacement en route.
  - n. Ascertain the patient's medical history and perform a secondary survey.
  - o. Decision Making.
  - p. Above all, do no further harm.
  - q. Fundamental Principles
  - r. PHTLS works