

**LAST REVIEW: 2009-2010**  
*(i.e. 2003-2004)*

**NEXT REVIEW: 2014-2015**  
*(i.e. 2008-2009)*

**STATUS: A**  
*(A, I, D)*

**COURSE TITLE: Paramedic Science III Lab**

**COMMON COURSE NUMBER: EMS2634L**

**CREDIT HOURS: 1**

**CONTACT HOUR BREAKDOWN**

**CLOCK HOURS:**  
*(Voc. Course ONLY)*

Lecture: 0                      Lab: 32  
Clinic: 0                        Other: 0

**PREREQUISITE(S):** EMS 2632, EMS 2633, EMS 2632L, EMS 2641, EMS 2651

**COREQUISITE(S):** EMS 2634, EMS 2635, EMS 2642, EMS 2652

**PRE/COREQUISITE(S):**

**COURSE DESCRIPTION:**

**Skills lab dealing with topics of trauma care, medical emergencies, and special care considerations related to obstetrics, neonatology, pediatrics, geriatrics, abuse and assault, patients with special challenges and acute interventions for the chronic care patient. Material includes U.S. Department of Transportation (DOT), National Paramedic Curriculum objectives for Module 4, Module 5, Units 3-14 and Module 6, Units 1-6.**

**UNIT TITLES:**

**Trauma**

1. Hemorrhage and shock
2. Soft tissue
3. Burns
4. Spinal
5. Thoracic
6. Abdominal
7. Musculoskeletal

**Medical Emergencies**

8. Neurology
9. Hematology
10. Infectious and communicable disease
11. Behavioral and psychiatric disorders
12. Gynecology
13. Obstetrics

**Special Considerations**

14. Pediatrics
15. Geriatrics
16. Abuse and assault
17. Acute interventions for the chronic care patient

**Scenarios for selected Patient Care Situations**

**EVALUATION:**

All skills checklists must be completed within the three attempts allowed and returned to the course instructor at the end of the term in order to receive your grade. End of semester skill evaluations will also be required.

GRADING: Pass - Skills completed and completion of Adult Mega Code Management.

Fail – Skills not completed. Unsuccessful end of semester skill evaluation.

(see Final Lab Testing Information).

A grade of PASS is required in order to successfully complete the course.

"Incomplete" grades **will not** be awarded for failure to achieve all required lab skills; the student will have to re-register for the course the following term.

**Common Course Number:**

**UNITS**

**UNIT TERMINAL OBJECTIVE**

4-2 the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with shock or hemorrhage.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

- 4-2.45 Demonstrate the assessment of a patient with signs and symptoms of hemorrhagic shock. (P-2)
- 4-2.46 Demonstrate the management of a patient with signs and symptoms of hemorrhagic shock. (P-2)
- 4-2.47 Demonstrate the assessment of a patient with signs and symptoms of compensated hemorrhagic shock. (P-2)
- 4-2.48 Demonstrate the management of a patient with signs and symptoms of compensated hemorrhagic shock. (P-2)
- 4-2.49 Demonstrate the assessment of a patient with signs and symptoms of decompensated hemorrhagic shock. (P-2)
- 4-2.50 Demonstrate the management of a patient with signs and symptoms of decompensated hemorrhagic shock. (P-2)
- 4-2.51 Demonstrate the assessment of a patient with signs and symptoms of external hemorrhage. (P-2)
- 4-2.52 Demonstrate the management of a patient with signs and symptoms of external hemorrhage. (P-2)
- 4-2.53 Demonstrate the assessment of a patient with signs and symptoms of internal hemorrhage. (P-2)
- 4-2.54 Demonstrate the management of a patient with signs and symptoms of internal hemorrhage. (P-2)

**UNIT TERMINAL OBJECTIVE**

4-3 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement the treatment plan for the patient with soft tissue trauma.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

4-3.53 Demonstrate the assessment and management of a patient with signs and symptoms of soft tissue injury, including: (P-2)

- |                                |                   |
|--------------------------------|-------------------|
| 1. Contusion                   | 6. Hematoma       |
| 2. Crushing                    | 7. Abrasion       |
| 3. Laceration                  | 8. Avulsion       |
| 4. Amputation                  | 9. Impaled object |
| 5. Penetration/ puncture Blast |                   |

**UNIT TERMINAL OBJECTIVE**

4-4 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement the management plan for the patient with a burn injury.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

4-4.78 Take body substance isolation procedures during assessment and management of patients with a burn injury. (P-2)

4-4.79 Perform assessment of a patient with a burn injury. (P-2)

4-4.80 Perform management of a thermal burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)

4-4.81 Perform management of an inhalation burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)

4-4.82 Perform management of a chemical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)

4-4.83 Perform management of an electrical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)

**UNIT TERMINAL OBJECTIVE**

4-6 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with a suspected spinal injury.

### **PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to: 4-6.29 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected traumatic spinal injury. (P-1)

4-6.30 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected non-traumatic spinal injury. (P-1)

4-6.31 Demonstrate immobilization of the urgent and non-urgent patient with assessment findings of spinal injury from the following presentations: (P-1)

Supine, Prone, Semi-prone, Sitting, Standing

4-6.32 Demonstrate documentation of suspected spinal cord injury to include: (P-1)

- a. General area of spinal cord involved
- b. Sensation
- c. Dermatomes
- d. Motor function
- e. Area(s) of weakness

4-6.33 Demonstrate preferred methods for stabilization of a helmet from a potentially spine injured patient. (P-1)

4-6.34 Demonstrate helmet removal techniques. (P-1)

4-6.35 Demonstrate alternative methods for stabilization of a helmet from a potentially spine injured patient. (P-1)

4-6.36 Demonstrate documentation of assessment before spinal immobilization. (P-1)

4-6.37 Demonstrate documentation of assessment during spinal immobilization. (P-1)

4-6.38 Demonstrate documentation of assessment after spinal immobilization. (P-1)

### **UNIT TERMINAL OBJECTIVE**

4-7 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for a patient with a thoracic injury.

### **PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

4-7.49 Demonstrate a clinical assessment for a patient with suspected thoracic trauma. (P-1)

4-7.50 Demonstrate the following techniques of management for thoracic injuries: (P-1)

- a. Needle decompression
6. Fracture stabilization
7. Elective intubation
8. ECG monitoring
9. Oxygenation and ventilation

**UNIT TERMINAL OBJECTIVE**

4-8 At the completion of this unit, the paramedic student will be able to integrate pathophysiologic principles and the assessment findings to formulate a field impression and implement the treatment plan for the patient with suspected abdominal trauma.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

4-8.41 Demonstrate a clinical assessment to determine the proper treatment plan for a patient with suspected abdominal trauma. (P-1)

4-8.42 Demonstrate the proper use of PASG in a patient with suspected abdominal trauma. (P-1)

4-8.43 Demonstrate the proper use of PASG in a patient with suspected pelvic fracture. (P-1)

**UNIT TERMINAL OBJECTIVE**

4-9 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement the treatment plan for the patient with a musculoskeletal injury.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

4-9.43 Demonstrate a clinical assessment to determine the proper treatment plan for a patient with a suspected musculoskeletal injury. (P-1)

4-9.44 Demonstrate the proper use of fixation, soft and traction splints for a patient with a suspected fracture. (P-1)

**UNIT TERMINAL OBJECTIVE**

5-3 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with a neurological problem.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

5-3.77 Perform an appropriate assessment of a patient with coma or altered mental status. (P-3)

5-3.78 Perform a complete neurological examination as part of the comprehensive physical examination of a patient with coma or altered mental status. (P-3)

5-3.79 Appropriately manage a patient with coma or altered mental status, including the administration of oxygen, oral glucose, 50% dextrose and narcotic reversal agents. (P-3)

5-3.80 Perform an appropriate assessment of a patient with syncope. (P-3)

5-3.81 Appropriately manage a patient with syncope. (P-3)

5-3.82 Perform an appropriate assessment of a patient with seizures. (P-3)

- 5-3.83 Appropriately manage a patient with seizures, including the administration of diazepam or lorazepam. (P-3)
- 5-3.84 Perform an appropriate assessment of a patient with stroke and intracranial hemorrhage or TIA. (P-3)
- 5-3.85 Appropriately manage a patient with stroke and intracranial hemorrhage or TIA. (P-3)
- 5-3.86 Demonstrate an appropriate assessment of a patient with a chief complaint of weakness. (P-3)

**UNIT TERMINAL OBJECTIVE**

- 5-9 At the completion of this unit, the paramedic student will be able to integrate the pathophysiological principles of the hematopoietic system to formulate a field impression and implement a treatment plan.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

- 5-9.24 Value the sense of urgency for initial assessment and interventions for patients with hematologic crises.
- 5-9.25 Perform an assessment of the patient with hematologic disorder. ( P-1)

**UNIT TERMINAL OBJECTIVE**

- 5-11 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a management plan for the patient with infectious and communicable diseases.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

- 5-11.60 Demonstrate the ability to comply with body substance isolation guidelines. (P-2)
- 5-11.61 Perform an assessment of a patient with an infectious/ communicable disease. (P-2)
- 5-11.62 Effectively and safely manage a patient with an infectious/ communicable disease, including airway and ventilation care, support of circulation, pharmacological intervention, transport considerations, psychological support/ communication strategies, and other considerations as mandated by local protocol. (P-2)

**UNIT TERMINAL OBJECTIVE**

- 5-12 At the end of this unit, the paramedic student will be able to describe and demonstrate safe, empathetic competence in caring for patients with behavioral emergencies.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

- 5-12.1 Demonstrate safe techniques for managing and restraining a violent patient. (P-1)

**UNIT TERMINAL OBJECTIVE**

- 5-13 At the end of this unit, the paramedic student will be able to utilize gynecological principles and assessment findings to formulate a field impression and implement the management plan for the patient experiencing a gynecological emergency.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

- 5-13.10 Demonstrate how to assess a patient with a gynecological complaint. (P-2)
- 5-13.11 Demonstrate how to provide care for a patient with: (P-2)

10. Excessive vaginal bleeding
  - a. Abdominal pain
  - b. Sexual assault

**UNIT TERMINAL OBJECTIVE**

5-14 At the completion of this unit, the paramedic student will be able to apply an understanding of the anatomy and physiology of the female reproductive system to the assessment and management of a patient experiencing normal or abnormal labor.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

- 5-14.27 Demonstrate how to assess an obstetric patient. (P-2)
- 5-14.28 Demonstrate how to provide care for a patient with: (P-2)
  11. Excessive vaginal bleeding
  12. Abdominal pain
  13. Hypertensive crisis
- 5-14.29 Demonstrate how to prepare the obstetric patient for delivery. (P-2)
- 5-14.30 Demonstrate how to assist in the normal cephalic delivery of the fetus. (P-2)
- 5-14.31 Demonstrate how to deliver the placenta. (P-2)

**UNIT TERMINAL OBJECTIVE**

6-2.1 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the pediatric patient.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

- 6-2.91 Demonstrate the appropriate approach for treating infants and children. (P-2)
- 6-2.92 Demonstrate appropriate intervention techniques with families of acutely ill or injured infants and children. (P-2)
- 6-2.93 Demonstrate an appropriate assessment for different developmental age groups. (P-2)
- 6-2.94 Demonstrate an appropriate technique for measuring pediatric vital signs. (P-2)
- 6-2.95 Demonstrate the use of a length-based resuscitation device for determining equipment sizes, drug doses and other pertinent information for a pediatric patient. (P-2)
- 6-2.96 Demonstrate the appropriate approach for treating infants and children with respiratory distress, failure, and arrest. (P-2)
- 6-2.97 Demonstrate proper technique for administering blow-by oxygen to infants and children. (P-2)
- 6-2.98 Demonstrate the proper utilization of a pediatric non-rebreather oxygen mask. (P-2)
- 6-2.99 Demonstrate proper technique for suctioning of infants and children. (P-2)
- 6-2.100 Demonstrate appropriate use of airway adjuncts with infants and children. (P-2)
- 6-2.101 Demonstrate appropriate use of ventilation devices for infants and children. (P-2)
- 6-2.102 Demonstrate endotracheal intubation procedures in infants and children. (P-2)
- 6-2.103 Demonstrate appropriate treatment/ management of intubation complications for infants and children. (P-2)
- 6-2.104 Demonstrate appropriate needle cricothyroidotomy in infants and children. (P-2)
- 6-2.105 Demonstrate proper placement of a gastric tube in infants and children. (P-2)

- 6-2.106 Demonstrate an appropriate technique for insertion of peripheral intravenous catheters for infants and children. (P-2)
- 6-2.107 Demonstrate an appropriate technique for administration of intramuscular, inhalation, subcutaneous, rectal, endotracheal and oral medication for infants and children. (P-2)
- 6-2.108 Demonstrate an appropriate technique for insertion of an intraosseous line for infants and children. (P-2)
- 6-2.109 Demonstrate appropriate interventions for infants and children with a partially obstructed airway. (P-2)
- 6-2.110 Demonstrate age appropriate basic airway clearing maneuvers for infants and children with a completely obstructed airway. (P-2)
- 6-2.111 Demonstrate proper technique for direct laryngoscopy and foreign body retrieval in infants and children with a completely obstructed airway. (P-2)
- 6-2.112 Demonstrate appropriate airway and breathing control maneuvers for infant and child trauma patients. (P-2)  
Demonstrate appropriate treatment of infants and children requiring advanced airway and breathing control. (P-2)
- 6-2.114 Demonstrate appropriate immobilization techniques for infant and child trauma patients. (P-2)
- 6-2.115 Demonstrate treatment of infants and children with head injuries. (P-2)
- 6-2.116 Demonstrate appropriate treatment of infants and children with chest injuries. (P-2)
- 6-2.117 Demonstrate appropriate treatment of infants and children with abdominal injuries. (P-2)
- 6-2.118 Demonstrate appropriate treatment of infants and children with extremity injuries. (P-2)
- 6-2.119 Demonstrate appropriate treatment of infants and children with burns. (P-2)
- 6-2.120 Demonstrate appropriate parent/ caregiver interviewing techniques for infant and child death situations. (P-2)
- 6-2.121 Demonstrate proper infant CPR. (P-2)
- 6-2.122 Demonstrate proper child CPR. (P-2)  
Demonstrate proper techniques for performing infant and child defibrillation and synchronized cardioversion. (P-2)

### **UNIT TERMINAL OBJECTIVE**

- 6-2 At the completion of this unit, the paramedic student will be able to integrate the pathophysiological principles and the assessment findings to formulate and implement a treatment plan for the geriatric patient.

### **PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

- 6-3.95 Demonstrate the ability to assess a geriatric patient. (P-2)
- 6-3.96** Demonstrate the ability to adjust their assessment to a geriatric patient. (P-3)

### **UNIT TERMINAL OBJECTIVE**

- 6-4 At the completion of this unit, the paramedic student will be able to integrate the assessment findings to formulate a field impression and implement a treatment plan for the patient who has sustained abuse or assault.

### **PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

- 6-4.25 Demonstrate the ability to assess a spouse, elder or child abused patient. (P-1)
- 6-4.26** Demonstrate the ability to assess a sexually assaulted patient. (P-1)

**UNIT TERMINAL OBJECTIVE**

6-5 At the completion of this unit, the paramedic student will be able to integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the acute deterioration of a chronic care patient.

**PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the paramedic student will be able to:

6-6.42 Observe for an infected or otherwise complicated venous access point. (P-1)

6-6.43 Demonstrate proper tracheotomy care. (P-1)

6-6.44 Demonstrate the insertion of a new inner cannula and/ or the use of an endotracheal tube to temporarily maintain an airway in a tracheostomy patient. (P-1)

6-6.45 Demonstrate proper technique for drawing blood from a central venous line. (P-1)

6-6.46 Demonstrate the method of accessing vascular access devices found in the home health care setting. (P-1)