| Course Title: Prefix and Course Number: | General Traumatology EMS 214 |
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| Course Learning Outcomes: By the end of this course, a student should be able to: | |
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 Integrate the principles of kinematics and pathophysiology, to enhance the patient assessment and predict the likelihood of injuries based on the patients mechanism of injury, formulating a field impression and implementing a treatment plan for the trauma patient.

Course Outline: Traumatology

- I. List and describe the components of a comprehensive trauma system. (C-1)
- II. Describe the role of and differences between levels of trauma centers. (C-3)
- III. Describe the criteria for transport to a trauma center. (C-1) Describe the criteria and procedure for air medical transport. (C-1)
- IV. Define energy and force as they relate to trauma. (C-1)
- V. Define laws of motion and energy and understand the role that increased speed has on injuries. (C-1)
- VI. Describe each type of impact and its effect on unrestrained victims (e.g., down and under, up and over, compression, deceleration). (C-1)
- VII. Describe the pathophysiology of the head, spine, thorax, and abdomen that result from the above forces. (C-1)
- VIII. List specific injuries and their causes as related to interior and exterior vehicle damage. (C-1)
- IX. Describe the kinematics of penetrating injuries. (C-1)
- X. List the motion and energy considerations of mechanisms other than motor vehicle crashes. (C-1)
- XI. Define the role of kinematics as an additional tool for patient assessment. (C-1)
- XII. Describe the epidemiology, including the morbidity/mortality and prevention strategies for a patient with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue trauma. (C-1)
- XIII. Describe the anatomy and physiology of organs and structures related to head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-1)
- XIV. Predict head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries based on blunt and penetrating mechanisms of injury. (C-2)
- XV. Describe open and closed head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-1)
- XVI. Explain the pathophysiology of head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-1)
- XVII. Describe the assessment findings associated with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-1)
- XVIII. Identify the need for rapid intervention and transport of the patient with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries based on assessment findings. (C-1)
 - XIX. Describe the management of head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-1)
 - XX. Integrate the pathophysiological principles to the assessment of a patient with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injury. (C-3)

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- XXI. Differentiate between head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries based on the assessment and history. (C-3)
- XXII. Formulate a field impression for patients with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue trauma based on the assessment findings. (C-3)
- XXIII. Develop a patient management plan for patients with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue trauma based on the field impression. (C-3)
- XXIV. Describe the epidemiology, including the morbidity/ mortality and prevention strategies for solid organ injuries. (C-1)
- XXV. Explain the pathophysiology of solid organ injuries. (C-1)
- XXVI. Describe the assessment findings associated with solid organ injuries. (C-1)
- XXVII. Describe the treatment plan and management of solid organ injuries. (C-1)
- XXVIII. Describe the epidemiology, including the morbidity/ mortality and prevention strategies for hollow organ injuries. (C-1)
- XXIX. Explain the pathophysiology of hollow organ injuries. (C-1)
- XXX. Describe the assessment findings associated with hollow organ injuries. (C-1)
- XXXI. Describe the treatment plan and management of hollow organ injuries. (C-1)
- XXXII. Describe the epidemiology, including the morbidity/ mortality and prevention strategies for head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue vascular injuries. (C-1)
- XXXIII. Explain the pathophysiology of head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue vascular injuries. (C-1)
- XXXIV. Describe the assessment findings associated with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue vascular injuries. (C-1)
- XXXV. Describe the treatment plan and management of head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue vascular injuries. (C-1)
- XXXVI. Describe the epidemiology, including the morbidity/ mortality and prevention strategies for pelvic fractures. (C-1)
- XXXVII. Explain the pathophysiology of pelvic fractures. (C-1)
- XXXVIII. Describe the assessment findings associated with pelvic fractures. (C-1)
 - XXXIX. Describe the treatment plan and management of pelvic fractures. (C-1)
 - XL. Describe the epidemiology, including the morbidity/ mortality and prevention strategies for other related head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-1)
 - XLI. Explain the pathophysiology of other related head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-1)
 - XLII. Describe the assessment findings associated with other related head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-1)
 - XLIII. Describe the treatment plan and management of other related head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-1)
 - XLIV. Apply the epidemiologic principles to develop prevention strategies for head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-2)
 - XLV. Integrate the pathophysiological principles to the assessment of a patient with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-3)
 - XLVI. Differentiate between head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries based on the assessment and history. (C-3)
 - XLVII. Formulate a field impression based upon the assessment findings for a patient with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries. (C-3)
 - XLVIII. Develop a patient management plan for a patient with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue injuries, based upon field impression. (C-3)
 - XLIX. Advocate the use of a thorough assessment to determine a differential diagnosis and treatment plan for head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue trauma. (A-3)

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- L. Advocate the use of a thorough scene survey to determine the forces involved in head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue trauma. (A-3)
- LI. Value the implications of failing to properly diagnose head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue trauma and initiate timely interventions to patients with head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue trauma. (A-2)
- LII. Demonstrate a clinical assessment to determine the proper treatment plan for a patient with suspected head, face, neck, spine, thorax, abdominal, musculoskeletal and soft tissue trauma. (P-1)