UNIT TERMINAL OBJECTIVE
4-1 At the completion of this unit, the EMT-Critical Care Technician student will be able to apply the principles of kinematics to enhance the patient assessment and predict the likelihood of injuries based on the patient’s mechanism of injury.

COGNITIVE OBJECTIVES
At the completion of this unit, the EMT-Critical Care Technician student will be able to:

4-1.5 Define energy and force (kinetics) as they relate to trauma. (C-1)
4-1.6 Define laws of motion and energy and understand the role that increased speed has on injuries. (C-1)
4-1.7 Describe each type of impact and its effect on unrestrained victims (e.g., frontal impacts, lateral impacts, rear impacts, rotational impacts, rollover). (C-1)
4-1.8 Describe the pathophysiology of the head, spine, thorax, and abdomen that results from the above forces. (C-1)
4-1.9 Describe the organ collisions that occur in blunt trauma and vehicular collisions. (C-2)
4-1.10 Describe the effects that restraint systems (including seat belts, airbags, and child safety seats) have on the injury patterns found in motor vehicle crashes. (C-2)
4-1.11 List specific injuries and their causes as related to interior and exterior vehicle damage. (C-1)
4-1.12 Describe the kinematics of penetrating injuries. (C-1)
4-1.13 List the motion and energy considerations of mechanisms other than motor vehicle crashes. (C-1)
4-1.14 Define the role of kinematics as an additional tool for patient assessment. (C-1)
4-1.15 List seven types of accidents that can cause spinal injury. (C-1)
4-1.16 Describe the sign that an injury has been sustained between the 5th and 7th cervical vertebrae and the importance of the phrenic nerve in C3 to C5 injuries. (C-1)

AFFECTIVE OBJECTIVES
None identified for this unit.

PSYCHOMOTOR OBJECTIVES
None identified for this unit.