STUDENT EMERGENCY ROTATION LEARNING OBJECTIVES

1. Attend organised ED rounds and teaching sessions as outlined by your supervisor on day one of the Emergency Rotation
2. Present a “hot case” you have seen in the ED to an ED doctor including history, examination, provisional and differential diagnoses and initial investigations and management
3. Attend an informal session on “Principles of Performing Procedures in the Emergency Department”, using insertion of a chest drain as an example.
   a. Observe a common ED procedure such as lumbar puncture, joint relocation, cardiopulmonary resuscitation, defibrillation, chest drain
4. Attend a weekly 1hour group discussion. The student will have completed the mandatory materials in preparation for this session. The tutor will facilitate the session with the expectation that students will be able to complete the designated section of the workbook following completion of the session
5. Complete an evening shift during the term in the Emergency Department, the focus is to obtain an overview of how an ED systems, e.g. Trauma call, acute resuscitation system and MET calls.

STUDENT EMERGENCY ROTATION LEARNING TOPICS

1. Five key learning topics for students to complete.
2. Each learning topic will focus only on the fundamental aspects of essential knowledge.
3. Students will be required to complete mandatory learning materials by accessing embasics.com

LEARNING TOPIC 1- CHEST PAIN

Learning topic
Chest pain is one of the most common chief complains in emergency medicine. Students need to become proficient in the assessment and stabilization of patients presenting with chest pain to the ED. Chest pain has an extensive differential diagnosis. The focus is on chest pain requiring emergency care, such as acute coronary syndrome, pulmonary embolism, aortic dissection and pneumothorax.

Learning Objectives
1. List the critical diagnoses for chest pain.
2. Describe the initial actions that should be taken for patients with chest pain.
3. Review the role of the ECG
4. List non-emergent causes of chest pain
**Learning Resources:**
- Mandatory
  - Embasics.com- listen to the podcast on chest pain and complete the EM workbook section using the show notes

**LEARNING TOPIC 2- SHORTNESS OF BREATH**

*Learning Topic*
Shortness of breath is frequently the chief complaint in the emergency department (ED) and is commonly associated with hospital admission. Students need to become proficient in the assessment of these patients, as delayed diagnosis and treatment of underlying conditions can lead to substantial morbidity and mortality. The focus is on the common disorders: asthma, COPD, pneumonia, pulmonary oedema, pneumothorax, and pleural effusion.

*Learning Objectives*
1. List the life-threatening causes of shortness of breath with a focus on respiratory distress
2. Describe the initial approach to a patient with shortness of breath
3. Discuss the initial management plan for a patient with shortness of breath and respiratory distress

*Learning Resource*
- Mandatory
  - Embasics.com- listen to the podcast on shortness of breath and complete the EM workbook section using the show notes

**LEARNING TOPIC 3- ALTERED MENTAL STATE**

*Learning Topic.*
Diagnosing a patient with a change in mental status can be a daunting challenge in the ED. The differential diagnosis of AMS is exhausting. Students need to be proficient in distinguishing organic from non-organic causes of AMS. The focus will be on approaching AMS in terms of: primary CNS or structural, metabolic, toxic, pharmacologic, infectious disorders and considering other disorders such as mental or psychiatric related disease.

The student will also develop an approach to acute onset headache

*Learning Objectives*
1. Recognize the importance of historical factors in diagnosing causes of AMS
2. Identify dementia, delirium and psychosis as the three most common classifications of AMS
3. Articulate a differential diagnosis of AMS based on H&P findings
4. Construct an approach to the diagnostic workup and management of a patient with AMS
5. Describe initial management of many causes of AMS
6. Discuss the disposition of a patient with AMS

**AMS-Headache**
1. List the common causes and emergent differential diagnosis of headache
2. Explain the importance of a complete neurological exam in the evaluation of
3. Describe the time-sensitive treatment options for ischemic stroke
4. Explain the treatment of status epilepticus

**Learning Resource**
- Mandatory
  - Embasics.com - listen to the two podcasts one on AMS the other on headache, and complete the EM workbook section using the show notes

**LEARNING TOPIC 4- ABDOMINAL PAIN**

**Learning Topic**
- Abdominal pain is a common yet challenging complaint due to the large number of possible etiologies in conjunction with variable clinical presentations. While a specific diagnosis is frequently difficult to make in the emergency department, it is imperative that the emergency physician exclude time-dependent disease processes that if left undiagnosed could lead to morbidity or mortality. Students must recognize life and or organ threatening causes of abdominal pain in the ED. The focus is on common disorders: ectopic Pregnancy, Appendicitis, Abdominal Aortic Aneurysm (AAA), Pelvic Inflammatory Disease (PID)/Tuboovarian Abscess (TOA), Biliary Disease, Bowel Obstruction, Perforated Viscus, Mesenteric Ischemia, Testicular or Ovarian Torsion

**Learning Objectives**
1. Discuss the initial assessment and management of a patient presenting to the emergency department with abdominal pain
2. List the critical diagnoses for abdominal pain
3. Describe the classic historical and physical exam findings for the critical abdominal pain diagnoses
4. Discuss the utility of laboratory testing in the evaluation of abdominal pain
5. Discuss the advantages and limitations of different radiologic modalities used in the evaluation of abdominal pain
6. Discuss the treatment and disposition for the critical diagnoses for abdominal pain

**Learning Resource**
- Mandatory
  - Embasics.com - listen to the two podcast, one on abdominal pain and the other on abdominal pain in the female and complete the EM workbook section using the show notes

**LEARNING TOPIC 5- TRAUMA**

**Learning Topic**
Trauma is the leading cause of death in the first four decades of life in most developed countries. To this end, there are more than 5 million trauma-related deaths each year worldwide. Motor vehicle crashes cause over 1 million deaths per year. Injury accounts for 12% of the world's burden of disease.

**Learning Objectives**
1. Perform an accurate rapid assessment with focus on ABCDE’s
2. Resuscitate and stabilize by priority
3. Discuss secondary survey
4. Discuss appropriate labs and ancillary studies to the trauma injured patient
5. Learn disposition

**Learning Resources**

- Mandatory
  - Embasics.com- listen to the two podcasts on trauma and complete the EM workbook section using the show notes

**ASSESSMENT**

**Satisfactory Completion of Emergency Rotation**

1. The student will be assessed on adequacy of completion of the Emergency Medicine Workbook requirements and the above key objectives. Should these requirements not be fulfilled, the student will not receive a satisfactory completion of the Emergency Rotation. This may require the student to repeat the term.
2. Students are also required to have a satisfactory attendance record as set down by the relative clinical school for satisfactory completion of the rotation

**Formal Examinations**

1. Mandatory learning materials are examinable. Students are expected to have completed these materials as well as the ED workbook by the end of the Emergency Rotation.

**ADDITIONAL LEARNING RESOURCES**

1. Students may be directed to other learning resources. These are to supplement the mandatory learning materials. Students may be directed to this content by their tutor. These sites include:
   - emergencypedia.com; with practical emergency medicine clinical skills content
   - http://www.cdemcurriculum.org/; a case base learning resource

**REFERENCE SOURCE**

1. The definitive reference resource for this rotation is emergencypedia.com