EMERGENCY MEDICINE
EMS 710

Course Department, Number & Title: EMS 710, Emergency Medicine

Course length: 2-4 Weeks

Course Director and contact information: Beth Toppins, MD; toppinsbeth@yahoo.com 304-972-6698

Course Coordinator: Glenna Michael, michael@marshall.edu; 304-691-1191

Course Location: Cabell Huntington Hospital, St. Mary’s Hospital or other approved Hospitals

Course Mode: This is a pass/fail course.

Brief Course Description: This elective will expose medical students to the evaluation of patients and formulation of effective testing and treatment strategies. Active participation in patient care and procedural skills is required.

Students will be assigned to see patients under the direct supervision of faculty preceptors. Scheduling of the students' shifts is to be at the convenience of the preceptors who work with the students. Midnight and weekend shifts are required.

INSTITUTIONAL AND COURSE OBJECTIVES

Basic Science Course Objective
The student will be able to describe the pathophysiology of the diseases in the patient encounters below in the Patient Care objective.

Basic Science Outcome Measure
The student will discuss with the attending the pathophysiology of the disease process of the patient encounters below in the Patient Care objective, including:

- What causes the disease
- How these changes affect normal physiology resulting in the disease
- What are the underlying mechanisms of disease
- How these changes result in the clinical manifestations of the disease in the patient, including:
  - Symptoms of the disease
  - Physical exam findings
  - Radiographic findings
  - Laboratory abnormalities

Basic Science Course Objective
The student will be able to review the normal physiology as it relates to the organ or system involved in the disease process in the patient encounters below in the Patient Care objective.
**Basic Science Outcome Measure**
The student will discuss with the attending basic physiologic principles in at least two of the patient encounters mentioned below in the Patient Care objective. For example, if the patient is hypertensive, the student will review systemic vascular resistance including

- What factors maintain vascular tone
- What factors affect vascular tone to change systemic vascular resistance

**Institutional Objectives** addressed by this course include:

**Patient Care:** *Students must demonstrate the ability to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.*

**Course Objective**
The student will demonstrate the ability to obtain a focused history on a chief complaint and to develop efficient diagnostic tests and procedures to arrive at a final diagnosis and appropriate treatment plan.

**Outcome Measure**
The student will orally present to the faculty member at least five patient encounters from the following list (one patient encounter will be randomly selected by the faculty member). The student must also orally demonstrate the ability to formulate a working differential diagnoses, and an efficient investigation plan, with appropriate, cost-effective use of laboratory and radiological studies.

- Abnormal Uterine Bleeding
- Acute psychosis / delirium
- Acute pulmonary embolus
- Acute Chest Pain
- Acute stroke
- Adrenal crisis
- Airway obstruction
- Anaphylaxis
- Acute abdomen
- Bronchitis (including pneumonia)
- Cardiac arrest
- Cauda equina syndrome
- CNS Bleeds
- Diabetic ketoacidosis
- Dissecting aortic aneurysm
- Drug Overdose
- Ectopic pregnancy / placental abruption
- Hypo / hyperthermia
- Meningitis
- Myocardial infarction / Unstable angina
- Pneumothorax
- Seizures
- Sepsis
Shock
Splenic rupture
Threatened Abortion
Transfusion reactions
Toxic exposures
Traumatic injuries, life-threatening

**Course Objective**
The student will successfully perform procedural skills pertaining to Emergency Medicine.

**Outcome Measure**
The student will be directly observed by faculty performing the following procedural skills (minimum number indicated):

a. Foley Catheter Insertion – Female (3)
b. Foley Catheter Insertion – Male (3)
c. Intravenous Line Placement (5)
d. Venipuncture Performance (6)
e. ABG Collection (3)

**Institutional Objective**

**Medical Knowledge-** Students must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.

**Course Objective**
The student will demonstrate knowledge in field, including investigatory and analytic thinking and knowledge and application of the basic and clinical sciences.

**Outcome Measure**
The student will be able to orally prioritize to the faculty the care of three patients presenting to the Emergency Room.

**Institutional Objective**

**Interpersonal and Communication Skills-** Students must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

**Course Objective**
The student must demonstrate the ability to create therapeutic relationships, employ good listening skills and work effectively as part of a health care team.

**Outcome Measure**
The student must demonstrate to a faculty member the ability to create a therapeutic relationship with at least three (3) patients, employ listening skills and work effectively as part of a health care team.

**Institutional Objective**
**Professionalism** - **Students must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.**

**Course Objective**
The student will behave in an ethical, responsible, reliable and dependable manner and be able to accept constructive feedback to improve performance.

**Outcome Measure**
The student will be directly observed by faculty and peer evaluation to determine ethical behavior, reliability and level of dependability of the student and the student’s ability to accept criticisms or suggestions.

**COURSE SPECIFIC INFORMATION**

**PROFESSIONALISM EXPECTATIONS OF STUDENTS**

Students are expected to:

1. Display professional behavior at all times.

2. Be punctual and reliable for all clinical shifts.

3. Make advance arrangements for any scheduling requests. Once posted, changes in a student’s assigned schedule will be made only in case of an emergency (e.g. illness or death of a relative). Failure to arrange leave time in advance will result in a 2-1 make-up penalty.

4. Complete all assigned shifts. If a student cannot come due to illness or other emergent reason, call the E.D. (526-2200) & notify the attending. Missed shifts must be made-up before a grade can be assigned. No changes in the assigned schedule are permitted unless ADVANCE approval is given by Dr. Charles.

5. Complete assigned reading and other assignments.

6. Dress appropriately. White Coat and name tag are required. A student should dress the way he/she would for other rotations. (Shirts/ties for males, slacks or skirts for females). However, other acceptable attire, i.e. scrubs, may be specified by the Course Director.

Excessive or habitual violations of professionalism may result in lowering of the final grade or failure.

**STUDENT INVOLVEMENT LEVEL:** A useful distinction is often made between three levels of student involvement in patient care as follows:

1. Student may initially observe the preceptor’s approach to emergency care.
2. Students may later assist the preceptor by seeing patients first, obtaining a patient history, performing a focused physical exam, and presenting patient data to the preceptor for decision-making.

3. Upon demonstrating sufficient clinical maturity, the student may be allowed to manage all or part of the patient encounter by independently evaluating the patient, formulating a diagnostic/therapeutic plan for the preceptor’s approval, and then presenting the approved plan to the patient.

While students are to obtain as much patient care experience as possible, the amount of such care is left to the discretion of the preceptor to make a determination about the level of patient responsibility each student can appropriately handle.

Self-Directed Learning
As a medical student, you are encouraged to use any unstructured time as a time to read about your patients, research questions that arise during the day, prepare for case conferences, and prepare for student-faculty rounds. Preceptors have been specifically asked to look for evidence that you have read articles and books between clinic sessions. Use this time to build your knowledge of medicine and learn from your patients.

COURSE POLICIES

MUJCESOM Policies: All medical students taking this course will comply with School of Medicine policies given at http://musom.marshall.edu/students/policies. Individual policies can be found at the following websites:

Student Infectious Material Exposure:
http://musom.marshall.edu/ups/postexposure.asp

MS-IV Attendance:
https://musom.marshall.edu/students/documents/policies/Yr4attendance.pdf

Academic Dishonesty Policy:

Academic Standards Policy:
https://musom.marshall.edu/students/documents/Policies/ASC-FINAL-POLICY.pdf

Policy for Students with Disabilities:
https://musom.marshall.edu/students/documents/Guidelines.pdf

University Computing Services’ Acceptable Use Policy:
http://www.marshall.edu/ucs/CS/acceptuse.asp

Affirmative Action Policy:
pp. 16-17
http://www.marshall.edu/catalog/Graduate/S2008/gr_sp08.pdf
Inclement Weather Policy:
https://musom.marshall.edu/students/documents/policies/MUSOM-Inclement-Weather-Policy.pdf
Notification of delays and cancellations of classes are posted on the Medical Education Home Page when Marshall University Main Campus is not in session
https://musom.marshall.edu/weather

ASSESSMENT METHODS

Mid Point Evaluation
In accordance with LCME standard ED-30, the Course Director will evaluate student performance at mid-point to review the student’s professional, clinical and academic performance up to that point. The formative evaluation must be reviewed with the student and the student will have an opportunity to discuss with the Course Director. The form must be signed by the student and returned to the Course Director. The Course Director shall then forward a copy of the form to the Office of Academic Affairs. The form will NOT however be included in the student’s official academic record. For two-week electives, oral feedback will be provided at the end of the first week.

Preceptor Evaluation - Grading Pass/Fail

The preceptor evaluation final grade will be calculated in the following manner:

Ability to orally present to a faculty member at least five patient encounters from the list noted above. The student must also orally demonstrate the ability to formulate a working differential diagnosis and an efficient investigation plan, with appropriate, cost-effective use of laboratory and radiological studies.

Ability to demonstrate an understanding of the concept of triage and prioritization of care in the management of multiple patients simultaneously.

Ability to perform the following procedural skills pertaining to Emergency Medicine:

- Foley Catheter Insertion – Female –
- Foley Catheter Insertion – Male -
- Intravenous Line Placement -
- Venipuncture Performance -
- ABG Collection –

Professionalism. Student must demonstrate reliability and dependability.

The preceptors’ evaluation will be based, but are not limited to, upon the following factors:

- Attendance and participation
- Conference attendance
- Maturity and Professionalism
- Oral Case Presentation/Patient Workup
• The demonstration of basic knowledge of patient care during clinic