

12/14/2020

Course: Introduction to Emergency Medicine	Course Number: EMED 2001
Department:	Emergency Medicine
Faculty Coordinator:	Christine Kulstad, M.D. Co-Director of Undergraduate Medical Education Mary McHugh, M.D. Co-Director of Undergraduate Medical Education
Assistant Faculty Coordinators:	Christine Kulstad, M.D., Mary McHugh, M.D.
Hospital: (Location of rotation)	Parkland Memorial Hospital ED Clements University Hospital ED
Periods Offered:	Period 1 through 12
Length:	2 weeks
Max # of Students:	4-UTSW Students per period (2 med students/2 PA students July-Dec)
First Day Contact:	Justin McClure , Educational Coordinator, first point of contact 214-648-7207
First Contact Time:	All students are required to attend orientation meeting on the first Monday of the rotation in E4 conference room at 0900.
First Day Location:	Main EM offices: E4.300 (reach by going through back elevators of library)
Prerequisites: None	

I. COURSE DESCRIPTION

This is a 2-week introductory course enabling the student to explore emergency medicine and experience care of the undifferentiated patient. The student will learn about the scope of practice, frequently encountered pathology/diagnoses, and specialty specific diagnostic procedures. Students will be an integral member of the EM team, learning emergency care for acutely injured or ill patients in the Emergency Departments (EDs) of Parkland Memorial Hospital and Clements University Hospital. Under the direct supervision of residents and faculty members, students will assess patients, formulate patient care plans, and implement such plans. In addition, they will observe, assist, and/or perform procedures as appropriate to care for their patients. This clerkship will include a mix of county-based ED shifts along with a university tertiary population to gain a more complete picture of Emergency Medicine as a specialty and the variety of delivery systems that exist. The purpose of the course is to allow the student the opportunity to explore a career in the specialty, and/or to acquire knowledge in the specialty regarding appropriate referrals, consults, etc. relevant to future career plans.

This course will be organized around an LMS with comprehensive resources and materials.

Goals	Objectives	Assessment methods
PATIENT CARE: ASSESSMENT AND MANAGEMENT		
1. Obtain essential and accurate histories.		

<ol style="list-style-type: none"> 2. <i>Perform accurate physical exams.</i> 3. <i>Discuss the appropriate indication for medical tests</i> 4. <i>Demonstrate appropriate interpretation of medical data (i.e. EKG, labs, and radiographs).</i> 5. <i>Fashion appropriate differential diagnosis.</i> 6. <i>Demonstrate effective clinical judgment and treatment based on sound investigatory & analytical thinking.</i> 7. <i>Participate with clerkship team in developing patient care management plans.</i> 8. <i>Understand patient care management plans.</i> 9. <i>Accept responsibility for and carry out patient care management plans.</i> 	<ol style="list-style-type: none"> 1. Identify appropriate testing based on chief complaint and patient characteristics (blood work, x-ray, EKG). For example: <ol style="list-style-type: none"> a. Indication for a Head CT for a patient with head trauma. b. Indication for a d-dimer in patient with dyspnea 2. Create and maintain accurate patient medical records. For example: <ol style="list-style-type: none"> a. Documentation is clear, concise, organized. b. Relevant medical problems are addressed. 3. Perform good procedural skills related to basic Emergency Medicine. For example: Students will not perform invasive procedures on patients with known HIV/AIDS or hepatitis as per policy of UTSW <ol style="list-style-type: none"> a. Basic airway intervention. b. IV access. c. Cardiac monitoring. d. Lumbar puncture. e. Wound care – to include suturing and I&D of abscesses. f. Utilize clinical information systems such as EPIC, McKesson and others to gather and interpret clinical and laboratory information. 	<p>End of shift evaluations, feedback on teaching resident shifts</p>
<p>MEDICAL KNOWLEDGE:</p>		
<ol style="list-style-type: none"> 1. <i>Explain the role and function of Emergency Medicine in health care.</i> 2. <i>Understand the concept of triage.</i> 3. Explain the process for resuscitation and stabilization of acutely ill or injured patient. For example: <ol style="list-style-type: none"> a. Airway management – need for intubation. b. Shock – process of resuscitation. 	<ol style="list-style-type: none"> 1. Demonstrate knowledge in the assessment, differential diagnosis, and management of emergency complaints. Examples: <ol style="list-style-type: none"> a. Cardiac and respiratory arrest. b. Chest pain. c. Abdominal pain. d. Critical and non-critical trauma. e. Poisonings. f. Altered mental status. g. Infectious disease emergencies 2. Demonstrate knowledge of disease pathophysiology of the acutely ill or injured patients. For example: <ol style="list-style-type: none"> a. Shock. b. Arrhythmia c. Sepsis. 	<p>End of shift evaluations, feedback on teaching resident shifts, case-based discussions with faculty during didactic sessions</p>

<p>c. Indications for intervention (e.g. chest tube).</p> <p>4. Understand the roles and responsibilities of prehospital providers (EMS) in emergency care, including their interface with physicians</p>	<p>3. Demonstrate knowledge in medical management of the acutely ill or injured patient. For example:</p> <ol style="list-style-type: none"> a. Fluid resuscitation parameters. b. Choice of vaso-active drips. c. Method of monitoring patient 	
INTERPERSONAL AND COMMUNICATION SKILLS:		
<p><i>Students must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients and their families.</i></p> <ol style="list-style-type: none"> 1. Give patient case presentations in a clear, concise, organized, and relevant manner. 2. Exchange information effectively with clerkship team and consultants. 3. Work effectively with clerkship team, consultants, and other health care providers (i.e. nurses and ancillary staff). 4. Communicate effectively with patients and their families 	<ol style="list-style-type: none"> 1. Demonstrate ability to convey concise HPI and relevant PE findings 2. Demonstrate ability to update patient with results 3. Demonstrate ability to discuss with other team members (e.g. nurse, respiratory therapist) about plan of care 	End of shift evaluations
PRACTICE BASED LEARNING AND IMPROVEMENT:		
<p><i>Students must be able to assimilate scientific evidence and improve their patient care</i></p> <ol style="list-style-type: none"> 1. Participate in rounds and conferences. (See below). 2. Medical students will be assigned reading from the MS3 EM curriculum prepared by SAEM. Review of this medical knowledge will occur by online 	<ol style="list-style-type: none"> 1. Demonstrate proper evidence-based decisions when describing evaluation plans for their patients. 2. Demonstrate appropriate use of education resources for self-education. For example: <ol style="list-style-type: none"> a. Medical literature review. b. On-line medical information. c. Self-Study materials provided <ol style="list-style-type: none"> i. CDEM curriculum for PreClerkship 	Participation in conferences, teaching resident shifts, small group sessions

<i>materials, peer and faculty directed didactic lectures</i>		
PROFESSIONALISM:		
<i>Students must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.</i>	<p>Demonstrate:</p> <ol style="list-style-type: none"> 1. Ethically sound decisions. 2. Professional behavior. For example: <ol style="list-style-type: none"> a. Maintain professional appearance. b. Be mature, reliable, and respectful of others. c. Attend rounds and conferences on time. 3. Respect for patient confidentiality. 4. Sensitivity to cultural, age, gender, and disability. 5. Treatment of patients in a caring and respectful manner 	<p>End of shift evaluations, Conference attendance</p>
SYSTEMS BASED PRACTICE:		
<ol style="list-style-type: none"> 1. <i>Become aware of the larger context and system of health care to provide care that is of optimal value.</i> 2. <i>Assist ED team in effectively calling on system resources to provide care that is of optimal value</i> 3. <i>Assist patients in dealing with system complexities.</i> 	<ol style="list-style-type: none"> 1. Understand the role of EMS/pre-hospital care. 2. Understand the role of the Emergency Department in a health care system in providing patient care. 3. Help ED team call consultant to see patient in the ED 4. Help ED team call consultant to arrange follow-up clinic appointments 5. Ensure patient understands clinic follow up. 	<p>Participation in conferences, teaching resident shifts, small group sessions</p> <p>End of shift evaluations</p>

II. METHODS OF INSTRUCTION:

A. DIDACTIC:

Orientation – begins at 9:00 am the first Monday of the rotation. **Attendance is mandatory for ALL medical students.**

Thursday afternoon lectures/Skill Labs- 1:00 PM –3:00 PM covering core topics in Emergency Medicine. Schedule may vary:

Week 1

- Assessment and Stabilization of Emergent Patient
- Presentation workshop

Week 2

- Wound care lab
- FAST exam ultrasound skills

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Thursday EM conference –7:30 to 11:30 in D1.502

Self-study reference materials covering core topics in EM outlined in D2L, and based on national EM curriculum for MS3s

Teaching shifts to occur on selected Thursday afternoons proctored by EM residents

B. CLINICAL

Parkland Memorial Hospital:

1. Clinical teaching for the rotation will be from Emergency Medicine faculty as well as Emergency Medicine and other UTSW residency house staff.
2. Clinical time during the rotation will be spent in the GME areas of the Emergency Department.
3. Shift length is 10 hours with days, nights, weekends, and holidays.
4. Students will be assigned to work with the EM residents. If there is an EM “teaching resident” present, the student may be assigned to work with this resident. Students are to carry no more than 2 active patients at a time, unless approved by the supervising resident. The student should initially present his/her patient to the supervising EM resident. After formulating a plan with this resident, the student will then give succinct presentation (including assessment and plan) to the EM faculty. Students are encouraged to follow critically ill patients with the EM residents, perform procedures (i.e. suturing, lumbar punctures, etc.), and spend time in triage or BioTel.

Clements University Hospital (CUH) ED

1. Clinical teaching will be from UTSW Department of EM faculty and residents.
2. Shift lengths will be 10 hours.
3. The goal of this ED experience is to understand the principles of EM in a community with extensive cardiac, transplant and tertiary center care populations.

Special Clinical Shifts:

Teaching Resident Shifts: students will spend time with senior residents discussing patient evaluation and management, documentation in more detail. Residents will teach and supervise minor procedures (eg suturing, performing I&D) if needed and appropriate.

Each student **MUST** have **smartphone mobile evaluations completed by the supervising EM faculty or resident before the end of each shift.** Each student must also complete the EM passport provided to the student regarding procedures and core patient complaints.

III. SCHEDULE

- A. Clinical shifts- students will complete 5 ten hour clinical shifts in a 2 week rotation. These will be days, nights, and/or weekends
- B. Teaching shifts- students will complete 1 eight hour teaching shift- M-F, 9a-5p

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- C. Didactics- Thursday morning students will attend the EM resident teaching conference. Thursday afternoon students will attend a focused didactic session.

IV. COURSE REQUIREMENTS

- A. Be on time for each shift –Evaluate patients, present to resident and/or faculty, reevaluate patients, follow up on all diagnostic studies and interventions, and manage care until discharged (under the supervision of resident and faculty).
- B. Evaluations of the students as daily shift evaluations will be done via a smartphone application. A minimum number of evaluations will be required to pass the course and comprise shifts at all facilities
- C. Interesting patient presentation must be submitted on D2L by the final Thursday teaching session.
- D. Attend and active participation in didactics and conferences with at least 85% attendance

IV. METHOD OF EVALUATION OF STUDENTS AND REQUIREMENTS:

- A. Completion of all required shifts with student evaluations
- B. Written presentation by each student
- C. Attendance and participation in lectures/conference
- D. Complete medical student evaluation of the course.
- E. Minimum threshold of end of shift evaluations by EM residents and faculty

V. Recommended Reading

- A. MS3 Emergency Medicine [Curriculum](#)
- B. Optional:
 - a. Emergency Medicine Secrets (available as an eBook at the library)
 - b. Emergency Medicine Case Files (available as an eBook at the library)