Course: Introduction to Emerg	gency Medicine	Course Number: 2101			
Department:	Emergency Medic	ine			
Faculty Coordinator:	Christine Kulstad,	M.D.			
	Co-Director of Undergraduate Medical Education				
	Mary McHugh, M.D.				
	Co-Director of Undergraduate Medical Education				
Assistant Faculty	Ava Piece, M.D., Jeff Van Dermark, M, D., Samuel McDonald, M.D.				
Coordinators:	oordinators:				
Hospital: (Location of	Parkland Memorial Hospital ED				
rotation)	Clements University Hospital ED				
Periods Offered:	Period 1 through 12				
Length:	4 weeks				
Max # of Students:	4-UTSW Students per period				
First Day Contact:	Justin McClure Educontact 214-648-7	ducational Coordinator, Supervisor and first point of 207			
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

The focus of this clerkship will be the introduction to the care of the undifferentiated patient. This category of patient presentation with its broad differential and actions is unique in the body of medical education. 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 needed 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.

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

Goals		Objectives		Assessment		
				methods		
PA	PATIENT CARE: ASSESSMENT AND MANAGEMENT					
1.	Obtain essential and					
	accurate histories.	1.	Obtain blood work, x-ray, EKG). For example:			
2.	Perform accurate physical		a. Indication for a Head CT for a patient			
	exams.		with head trauma.			
3.	Discuss the appropriate	2.	Create and maintain accurate patient medical			
	indication for medical tests		records. For example:			
4.	Demonstrate appropriate		a. Documentation is clear, concise,			
	interpretation of medical		organized.			
	data (i.e. EKG, labs, and		b. Relevant medical problems are			
	radiographs).		addressed.			

- 5. Fashion appropriate differential diagnosis.6. Demonstrate effective clinical judgment and treatment based on sound
- thinking.
  7. Participate with clerkship team in developing patient care management plans.

investigatory & analytical

- 8. *Understand patient care management plans.*
- 9. Accept responsibility for and carry out patient care management plans.

- 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
  - a. Basic airway intervention.
  - b. IV access.
  - c. Cardiac monitoring.
  - d. Defibrillation.
  - e. Lumbar puncture.
  - f. Wound care to include suturing and I&D of abscesses.
  - g. Utilize clinical information systems such as EPIC, McKesson and others to gather and interpret clinical and laboratory information.

## **MEDICAL KNOWLEDGE:**

- 1. Explain the role and function of Emergency Medicine in health care.
- 2. *Understand the concept of triage.*
- 3. Explain the process for resuscitation and stabilization of acutely ill or injured patient. For example:
  - a. Airway management need for intubation.
  - b. Shock process of resuscitation.
  - c. Indications for intervention (e.g. chest tube).
- 4. Understand the roles and responsibilities of prehospital providers (EMS) in emergency care, including their interface with physicians

- 1. Demonstrate knowledge in the assessment, differential diagnosis, and management of emergency complaints. Examples:
  - 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:
  - a. Shock.
  - b. Arrhythmia
  - c. Sepsis.
- 3. Demonstrate knowledge in medical management of the acutely ill or injured patient. For example:
  - a. Management of ventilator.
  - b. Management of vaso-active drips.
  - c. Method of monitoring patient

# INTERPERSONAL AND COMMUNICATION SKILLS:

Students must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients and their families.

<ol> <li>Give patient case presentations in a clear, concise, organized, and relevant manner.</li> <li>Exchange information effectively with clerkship team and consultants.</li> <li>Work effectively with clerkship team, consultants, and other health care providers (i.e. nurses and ancillary staff).</li> <li>Communicate effectively with patients</li> </ol>		
and their families		
PRACTICE BASED LEARNIN	IG AND IMPROVEMENT:	
Students must be able to assimilate scientific evidence and improve their patient care  1. Participate in rounds and conferences. (See below).  2. Medical student manual – supplemental reading. A SAEM standardized exam will be given during the last week of the rotation covering key concepts covered in the manual, online materials, peer and faculty directed didactic lectures	<ol> <li>Demonstrate proper evidence based decisions.</li> <li>Demonstrate appropriate use of education resources for self-education. For example:         <ul> <li>a. Medical literature review.</li> <li>b. On-line medical information.</li> <li>c. Self-Study materials provided</li> <li>i. Rosen's Emergency Medicine 8th edition https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20101679059 Selected chapters</li> <li>ii. CDEM curriculum for PreClerkship</li> </ul> </li> </ol>	
PROFESSIONALISM:		
Students must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.	Demonstrate:  1. Ethically sound decisions. 2. Professional behavior. For example:  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.  Treatment of patients in a caring and respectful manner	Observations of faculty and staff

SYSTEMS BASED PRACTICE:						
1.	Become aware of the larger context and	1.	Understand the role of EMS/pre-hospital care.	Observations of faculty and staff		
	system of health care to	2.	Understand the role of the Emergency	Reflection essay		
	provide care that is of optimal value.		Department in a health care system in providing patient care.	Group discussion		
2.	Assist ED team in effectively calling on	3.	Help ED team call consultant to see patient in the ED			
	system resources to provide care that is of	4.	** 1 75			
	optimal value	5.	Ensure patient understands clinic follow			
3.	Assist patients in dealing with system complexities.		up.			
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## II. METHODS OF INSTRUCTION:

## A. DIDACTIC:

Orientation – begins at 1100 am the first Monday of the rotation. <u>Attendance is mandatory for ALL medical students.</u>

Wednesday morning lectures/Skill Labs- 9:00 AM -12:00 PM covering core topics in Emergency Medicine. Schedule may vary:

# Week 1

Assessment and Stabilization of Emergent Patient Simulation Lab Airway, LP, IO Adult Peds Sim

#### Week 2

Team Based Learning Chest pain/Abd pain/AMS.

Wound care lab

## Week 3

Shock

Point of Care Ultrasound in the Emergent Patient

## Week 4

Exam

Interesting patient write-up review

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

Self-study reference materials covering core topics in EM distributed to each student prior to rotation

Peer teaching to occur on selected Wednesdays mornings proctored by EM faculty and 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 4 GME Pod 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.

Special Clinical Shifts:

Teaching Resident Shifts: (as above) proctored by core Teaching Faculty

**Multidisciplinary Shifts**: 1-2 shifts will be spent performing routine procedures such as IV insertion, NG,

Foley insertion, ECG performance, splinting and other core procedures. Proctoring will be dedicated nurse educators, teaching residents, EM residents and or EM faculty.

**Prehospital Medicine**: with approval at least one shift will be based at closest EMS unit to a given's student home location. This student will be able to observe different levels of EMS system personnel in the delivery of Prehospital policies and procedures with the undifferentiated patient.

## **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 and approximate the R2 EM resident schedule.
- 3. The goal of this university based ED experience is to understand the principles of EM in a community with extensive cardiac, transplant and tertiary center care populations.

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

- 1. 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).
- 2. 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
- 3. Written review of interesting patient Module. This are required by end of rotation where they will be reviewed in final Wed didactic session
- 4. Passing grade on written final examination on SAEM exam. Practice exams and topics available on <a href="http://saemtests.org/">http://saemtests.org/</a>
- 5. Attend and active participation in appropriate didactics and conferences with at least 85% attendance

# III. OVERVIEW OF STUDENT RESPONSIBILITIES

- 1. 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).
- 2. 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
- 3. Written review of interesting patient Module. This are required by end of rotation where they will be reviewed in final Wed didactic session
- 4. Passing grade on written final examination on SAEM exam. Practice exams and topics available on <a href="http://saemtests.org/">http://saemtests.org/</a>
- 5. Attend and active participation in appropriate didactics and conferences with at least 85% attendance

# IV. METHOD OF EVALUATION OF STUDENTS AND REQUIREMENTS:

- 1. Completion of all required shifts with student evaluations
- 2. Written presentation by each student
- 3. Attendance and participation in lectures/conference
- 4. Completion and passing of final written examination
- 5. Complete medical student evaluation of the course.
- 6. Minimum threshold of real time student evaluations by EM residents and faculty