Advanced Emergency Medicine
Course ID: 997AH
Discipline: Surgery
Prerequisites: CMU Students: Successful completion of EM Clerkship
VSAS: Completion of comparable 3rd year core rotations
Available Sites: Saginaw
Duration: 4 weeks

Rationale for Elective:
The Emergency Medicine (EM) rotation is a unique opportunity in medical education where students can be the first to examine then develop an evaluation and treatment plan for the patient with an undifferentiated complaint. The Emergency Department (ED) has patients with complaints across all of disciplines of the medical field and requires diagnostic test interpretation of all kinds (including laboratory, ECG, and radiologic studies) as well as treatment plans in which the practitioner must be understanding of medication, procedural techniques and accessing resources from elsewhere in the medical system.

Learning Objectives:
During the Emergency Medicine elective, the student will:
- Obtain a concise, accurate history and physical exam focused on the chief complaint
- Recognize immediately life-threatening conditions based on the initial complaint and assessment
- Develop a differential diagnosis that includes both “most likely” and “worst-case” diagnoses
- Develop an evaluation and treatment plan for the undifferentiated complaint, common diagnoses, and life-threatening presentations
- Understand the indications, costs, risks, and evidence behind commonly performed emergency department studies and procedures
- Present cases (to resident, attending, admitting and/or consultant physicians) in a concise and organized fashion
- Monitor the response to interventions and communicate findings with the treatment team
- Communicate effectively with patients, their family members, and emergency department personnel in ways that demonstrate respect, compassion, honesty, and collegiality
- Formulate disposition and follow-up plans for discharged patients with regard to their access to medical resources and available social support
- Provide patients and families anticipatory guidance related to presenting complaint, and assess their comprehension of discharge instructions prior to disposition

Instructional Method(s):
Rotating in the Covenant HealthCare and St. Mary’s of Michigan Emergency Departments, students will be paired individually with one supervising EM faculty member and often a senior Emergency Medicine resident who will instruct them in the use of pattern recognition and clinical gestalt to evaluate patients and differentiate patients who are “sick” versus those who are “not sick.” You
will learn how to apply that information in the context of evidence-based medicine to determine appropriate plans of management for acutely ill patients. One-on-one observation and instruction in the ED provides an outstanding learning environment that allows for individualized teaching and feedback.

In our didactic program, the students will participate in the EM conference series and the student-specific educational sessions. The instructional methods will be quite varied to allow for the best educational methods for a variety of learning styles including standard lectures, large group discussions, small group discussions, experience in simulated cases, hands-on procedural skills instruction and oral-boards case-based teaching. Students who have previously attended the student lectures series during another EM rotation at CMU will be excused from the student-specific sessions.

Orientation to Elective:
There is an orientation session on the first day of each rotation for the students. This is administered by the EM clerkship director, additional core faculty members, and CMU EM residents. The session will be approximately 3 hours in length and includes an overview of the practice of emergency medicine, details about the students’ role and responsibilities on the rotation, the requirements for successful completion of the rotation with specific details about the scheduling of shifts and didactics. At this time, the students are provided with a handbook containing pertinent information regarding the details of the rotation. Finally, students will be introduced to the available online resources, curriculum, and repository of clerkship-related official documents kept on our New Innovations site. The day will also include skills sessions on suturing, splinting, and an introduction to ED bedside ultrasonography. The orientation session is held in the task trainer room of the SIM center at the Saginaw CMED Education Building and correspondence about this to the students is through our medical student coordinator, Sheila Allen.

Requirements for Credit:
The fourth-year medical student rotating in Emergency Medicine shall meet the following minimum criteria to receive a passing grade on the elective:

- He/she must have been present at all scheduled shifts in accordance with the sick leave policy.
- He/she must have participated in patient care and clinical activities while on duty in the Emergency Department in a satisfactory manner.
- He/she must have attended at least 75% of the scheduled clerkship conferences.
- He/she must have completed all the required clerkship paperwork.
- None of the following behavior shall have been observed by the faculty:
  - Lying, deliberately misleading or falsifying information
  - Intentionally disobeying attending physicians in a manner that could adversely affect patient care
  - Disrespectful or abusive behavior toward patients, staff and consultants
  - Routine tardiness
The Emergency Medicine Program Director or Clerkship Director may consider exceptions to this policy in individual circumstances.

**Prerequisites:**
Students must have successfully completed all the core third year rotations (family medicine, internal medicine, surgery, pediatrics, OB/GYN, psychiatry) or their school’s equivalent experience before starting their EM elective. CMU College of Medicine students must have successfully completed the required fourth year EM clerkship.

**Method(s) for Assessing Learner:**
The medical student will be assessed throughout the month on the rotation. The primary format for assessment of the clinical shifts is through a daily assessment forms completed online by their shift supervisor (senior EM resident or EM faculty). These assessments are completed and oral feedback provided to the student at the end of each shift. The assessment form includes six general competency categories with most containing multiple sub-categorical scoring points. These assessment forms are then maintained securely by the clerkship administration team.

At the conclusion of the clerkship, the clerkship director will complete the course evaluation and grading of the medical student’s performance. This will be a composite evaluation heavily weighted towards the overall student’s assessments from the daily shift evaluation forms, but will also include their preparation for, participation in and understanding of the required lectures, as well as their completion of the required paperwork and clinical tasks. The student will be assessed based on their performance in all of the activities listed with the discussion of that student’s performance level in comparison to the standard level of competency expected of a 4th year student in the six general competencies. Direct comments and examples from the daily shift evaluation sheets will be used to support the scoring.

It has been the policy in Saginaw that the 4th year elective rotation grades are Pass/Fail and this will be indicated on the assessment form. If a student’s school has a specific assessment form that they require for electives, we will be happy to use that format if it is compatible with our normal assessment practice. This may include giving the student a graduated rating or a specific grade if required by the visiting student’s medical school.

**Method(s) of evaluating elective:**
The medical students will be asked to evaluate the Emergency Medicine clerkship based on their experiences throughout the month. At the conclusion of the clerkship, the student will complete an evaluation form regarding the effectiveness of communication with the EM office, the teaching skills of the EM residents and faculty and the opportunity for the students’ involvement in patient clinical care.

**If applicable, sponsoring faculty/organizations and/or students responsible for implementing course:**
The faculty from the CMU Division of Emergency Medicine will be the sponsoring faculty. The primary point of contact is Sheila Allen, EM Medical Student Coordinator: sheila.allen@cmich.edu
Registration:
Visiting students will submit their request for registration through the visiting student application service (VSAS) through the American Association of Medical Colleges (AAMC). Capacity for visiting students varies, and CMED students are given first preference.

Required/Recommended Resources:
The primary curriculum for the course will be the CDEM Year 3 and 4 Curriculum online, found at https://cdemcurriculum.com/. A link to this site is also provided on the New Innovations course site. The student will also be offered a copy of the following textbook for their use during the 28-day rotation:


The students are also provided other recommended resources including, but not limited to, access to SAEM question banks. Additionally, the students will be provided the suturing and splinting equipment by the Department of Emergency Medicine, through our normal coordinated process with the Simulation Center.

Elective Outline:
The rotation educational activities are divided into three components: patient care shifts in the ED, participation in the weekly emergency medicine conference and special educational hands-on and didactic session for the students.

<table>
<thead>
<tr>
<th>Topic/Activities</th>
<th>Name of presenter</th>
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<tbody>
<tr>
<td>Patient care: The medical students and interns will be required to complete their assigned shifts in the Emergency Department, each scheduled from 8-10 hours in duration. The students may occasionally need to stay after the scheduled shift time to complete patient care, though. The students will be supervised directly by both the senior emergency medicine residents and board-certified/board-prepared emergency physicians.</td>
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<td>EM conference: The students will attend the weekly 5-hour emergency medicine conference. The sessions include all aspects of the EM core curriculum and there is an emphasis on interactive educational sessions. Visiting professors in emergency medicine from all over the country present an average of twice per month. One conference monthly is an interactive and &quot;out of your seat&quot; educational day dedicated to small group and simulation sessions with a focus including procedural skills, ultrasound training, imaging review and practice oral boards cases.</td>
<td>N/A</td>
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Student-focused didactics: The students participate in small group discussion sessions, led by faculty and senior EM residents, focused on the basic, important EM topics. There is also hands-on practice and instruction on suturing and splinting skills.

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<thead>
<tr>
<th>Topic</th>
<th>Instructor(s)</th>
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<tbody>
<tr>
<td>Emergency Department patient care</td>
<td>Clerkship director, Senior EM residents</td>
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<tr>
<td>EM Conference *= (lectures, discussion, simulation)</td>
<td>All EM board-prepared / certified faculty</td>
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<tr>
<td>Suturing skills (hands on)</td>
<td>Dr. Jonathan Deibel and EM</td>
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<tr>
<td>Splinting skills (hands on)</td>
<td>Dr. Jonathan Deibel and EM</td>
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<tr>
<td>Bedside FAST Ultrasound Training</td>
<td>Clerkship Director/Senior EM resident</td>
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<td>Simulated Patient Code Scenarios</td>
<td>Clerkship Director/EM teaching Faculty</td>
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