

**UNIVERSITY OF CALIFORNIA, SAN DIEGO MEDICAL CENTER
EMED 420: EMERGENCY MEDICINE CLERKSHIP**

COURSE SYLLABUS

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The Emergency Medicine 4th-year clerkship is designed to give medical students rigorous exposure to the practice of Emergency Medicine in an urban setting. Through functioning as a “sub-intern” on varied clinical shifts, engaging in weekly interactive small group learning activities, and participating in weekly specialty specific lectures/conferences, rotating medical students will be exposed to the wide diversity of cases and experiences that Emergency Medicine offers. Regardless of which medical specialty that a medical student ultimately pursues, the knowledge, skills, and attitudes acquired during this rotation should be invaluable in managing acutely ill patients with undifferentiated conditions. Additionally, this rotation should assist those students considering a career in Emergency Medicine in deciding if the specialty is an appropriate fit. The emphasis of this clerkship is on clinical experience within the UCSD Emergency Department (ED). Clinical experiences generally vary, given the inherent variability in volume and cases seen on any given ED shift. Through actively seeking a diversity of chief complaints and procedures on multiple shifts at different times, engagement in interactive learning exercises, and additional relevant reading, students should experience a relatively standardized curriculum that will expand upon and fill in for the inherently variable clinical experiences on any one clinical shift.

Course Objectives:

By the completion of the four-week emergency medicine clerkship, the senior medical student will be able to:

1. Demonstrate proficiency in performing focused medical interviews and physical examinations.
2. Demonstrate proficiency in organizing and encapsulating information so that it is communicated clearly and accurately in case presentations (both verbal and written) and in medical record notes, according to standard formats.
3. Succinctly describe rationales for diagnostic impressions and treatment plans in all verbal and written reports.
4. Demonstrate proficiency in accomplishing tasks with efficiency and organization, which is critical to the delivery of care in an emergency department.

5. Describe & perform the following procedures:
 - a. Basic Airway Management
 - b. Intravenous access (including ultrasound-guided)
 - c. Cardiac Lead Placement & Automated External Defibrillator Use
 - d. Laceration repair
 - e. Foley catheter placement
 - f. Cervical spine clearance
 - g. Lumbar puncture
 - h. Thoracostomy tube placement
6. Accurately interpret the following tests:
 - a. ECG & cardiac monitoring
 - b. Radiology studies (including plain radiographs & bedside ultrasounds)
 - c. Laboratory studies (eg. chemistry, hematology, blood gas, and urinalysis)
7. Describe the EM approach to the evaluation of a patient with an acute, undifferentiated complaint
8. Identify potential life-threatening etiologies, which must be considered in any emergency setting, of the following acute clinical presentations:
 - a. Chest Pain
 - b. Shortness of Breath
 - c. Abdominal Pain/ Pelvic Pain
 - d. Headache & Dizziness
 - e. Altered Mental Status
 - f. Back Pain
 - g. Vision Complaints
 - h. Trauma, including Orthopedic injuries
 - i. Gastrointestinal Bleeding
 - j. Vaginal Bleeding
 - k. Pediatric illness & injuries
 - l. Sepsis

Elements of the four-week clerkship:

1. **Clinical shifts: The emphasis of the clerkship is on rigorous clinical experience in the UCSD Emergency Department.** During the rotation you will work at minimum: twelve 9-10 hour shifts, which must include at least 2 overnight shifts and multiple weekend shifts. You will evaluate patients with a wide diversity of acute medical & traumatic complaints and be responsible for performing & documenting: accurate histories & physical examinations, EM-focused differential diagnoses, and developing independent diagnostic and therapeutic plans. The supervision, teaching, and evaluation of your cases and procedures will be performed by board-certified EM attending physicians, fellows, and senior residents. Your clinical performance, as rated by UCSD Department of Emergency Medicine attending physicians, fellows, & residents (visible online at <https://medschool.ucsd.edu/som/emergency-med/Pages/default.aspx>), will contribute 85% toward your final grade.

2. **Emergency Medicine Conferences:** You must attend all weekly (Tuesday) morbidity and mortality, and core curriculum lectures for EM faculty, residents & students.
3. **Small group case-based learning:** You must participate in all weekly (Thursday) interactive, case-based, small group learning sessions.
4. **Simulated Procedure Lab:** You will be required to attend a hands-on procedure lab, typically held on the first Thursday of the 4-week clerkship at the UCSD Simulation Center on the School of Medicine Campus, covering a variety of EM procedures, and taught by EM trained faculty, fellows & residents.
5. **Additional Reading:** Recommended reading is from the handbook: The Chief Complaint by Feier. This was written expressly for students taking a 4th year clerkship and/or EM interns. Additionally, a highly recommended comprehensive resource (particularly for those applying to EM) is Introduction to Clinical Emergency Medicine, 2nd edition, by Mahadevian. Also highly recommended is the website www.mdcalc.com (under the Emergency Medicine tab), for use of validated real-time evidence-based clinical decision making rules, as well as the following weblink, which describes how to perform optimally in any senior emergency medicine clerkship:
https://saem.org/docs/default-source/cdem/emergency-medicine-clerkship-primer.pdf?sfvrsn=44c50bfd_2&sfvrsn=44c50bfd_2
6. **Final Examination:** All rotating students must take a web-based, nationally administered final examination on the last Thursday of the rotation. Your final exam score will contribute 15% toward your final course grade.
7. **Course evaluation:** This clerkship is graded as Honors (>88%), Near Honors (80-87.99%), Pass (66-79.99%); Low Pass (50-65.99%); or Fail (49.99% or less), as based upon the following contribution to the final grade: 85% stems from the overall clinical performance and 15% stems for the final examination grade. Clinical performance will be based upon required shift evaluations of students by supervising UCSD Department of Emergency Medicine faculty, fellows & residents (who are listed online at <https://medschool.ucsd.edu/som/emergency-med/Pages/default.aspx>). A minimum of 12 shift evaluations (one evaluation per clinical shift, on average) must be submitted in order to obtain a passing grade, as well as meeting all course requirements as outlined in this syllabus. A minimum of 17 shift evaluations must be received in order to obtain an honors grade. Furthermore, medical students must complete course and faculty evaluations of this and all School of Medicine courses in order to receive a grade: note, the identity of individual students will not be shared with the course instructors. Mid-rotation feedback of each rotating student's performance will be sent by email to each rotating student, and final course grades will be submitted via the UCSD SOM online evaluation system (currently Oasis; transitioning to MedHub in 2020). Notably, final grades as reported on Oasis and on the UCSD School of Medicine transcript, are limited to Honors, Pass, or Fail, per UCSD School of Medicine policies for 4th year clinical rotations.

8. Optional Activities:

a. Case Presentations: Anyone has the option to give a final case presentation at the end of the clerkship; however, to be considered for the grade of honors, this is a requirement. The presentation will be given at the end of the clerkship rotation, typically on the last Thursday after morning lectures. The presentation should be on an interesting case seen., or a topic of your choice that is pertinent to EM. You will present to the Clerkship Director and other rotating students. The presentation should be approximately 5 minutes in length. PowerPoint vs. paper handouts are acceptable. To receive a grade of Honors, you must earn it (by performing at an honors level overall on your combined clinical and final examination score) give a final presentation.

b. Paramedic ride-along: If desired, a paramedic ride-along shift can be arranged and which would count as an optional experience, in addition to all course requirements outlined above.