

## 630D Advanced Emergency Medicine

**Course Description:** The objectives of the Emergency Medicine course are to introduce students to principles of acute care medicine. Students have the opportunity to evaluate patients and formulate effective testing and treatment strategies. Active participation in patient care and procedural skills are emphasized. The course consists of experiences in patient care, assigned readings from emergency medicine references, weekly conferences, and simulation session.

**Department:** Emergency Medicine

**Prerequisites:** Successful completion of 1st to 3rd year curriculum.

**Restrictions:** Extramural students must be in the final year of undergraduate medical education.

**Course Director:** Wirachin Hoonpongsimanont, M.D. UC Irvine Medical Center, Department of Emergency Medicine, 101 The City Drive South, Building 1A, Room 1009, Rt. 128, Orange, CA 92868, (714) 456-5239, [whoonpon@uci.edu](mailto:whoonpon@uci.edu)

**Assistant Course Director:** Alisa Wray, M.D. UC Irvine Medical Center, Department of Emergency Medicine, 101 The City Drive South, Building 1A, Room 1009, Rt. 128, Orange, CA 92868, (714) 456-7916, [awray@uci.edu](mailto:awray@uci.edu)

**Instructing Faculty:** Isbael Algaze, MD, Michael Burns, MD, Bharath Chakravarthy, MD, Carrie Chandwani, MD, Chris Fox, MD, Wirachin Hoonpongsimanont, MD, Warren Wiechmann, MD, MBA Robert Katzer, MD, Kristi Koenig, MD, Mark Langdorf, MD, Shahram Lotfipour, MD, Eric McCoy, MD, Megan Osborn, MD, Scott Rudkin, MD, Sangeeta Sakaria, MD, Jeffrey Suchard, MD, Andrew Wong, MD, Erik Barton, MD, Faried Banimahd, MD, Shadi Lahham, MD

**Who to Report to on First Day:** Typically scheduled on the 1<sup>st</sup> Monday of your rotation with the Program Coordinator

**Location to Report on First Day:**

Orientation – City Tower: 333 City Blvd. West, Suite 640, Floor 6, Orange, CA 92868  
You should also view the [orientation of our ED](#) by visit this link.

**Time to Report on First Day:** 8:00 a.m.

**630D Site Coordinator:** Jessica Holland, UC Irvine Medical Center, 101 The City Drive South, Bldg. 1A, Rt. 128, 714-456-5922, [jmhollan@uci.edu](mailto:jmhollan@uci.edu)

**Rotation Site:** The Emergency Department at the University of California Irvine, Medial Center

**Scheduling Coordinator:** UC Irvine students please email [comsched@uci.edu](mailto:comsched@uci.edu) or call (714) 456-8462 to make a scheduling appointment

**Periods Available:** Every 4 weeks

**Duration:** All 630D Students must attend 4 consecutive weeks

**Number of Students:** Variant throughout the academic year. Please contact registrar for more information

**Course Objectives:** Students are expected to conduct thorough but directed histories and physicals, and formulate a plan for workup and care of the patients that they see.

Procedural skills (such as suturing, paracentesis, etc. ) are taught and supervised on a case by case base as needed based on the patient's complaints and need for evaluation.

All students are expected to introduce themselves as student physicians, and conduct themselves in a professional manner.

These expectations are communicated to the students on the in-person orientation. However, by their fourth year of school, students are already conscious of these expectations. Students interact on a one to one basis with residents and faculty; therefore, their progress is monitored during each shift.

**Key Topics:**

- Ability to take directed history and do complete physical examination
- Formulate plan of workup and treatment
- Present cases directly to senior resident and attending physicians
- Learn techniques to improve procedure skills
- Follow patients from initial exam until disposition from the Emergency Department

**Competencies:**

- The ability to competently conduct a medical interview and counseling to take into account patient health beliefs, patient agenda and the need for comprehensive medical and psychosocial assessment
- The ability to competently perform a complete and organ-system-specific examination including a mental health status examination
- The ability to articulate a cogent, accurate assessment and plan, and problem list, using diagnostic clinical reasoning skills in all the major disciplines
- The ability to search the medical literature, including electronic databases, and to locate and interpret up-to-date evidence to optimize patient care
- The ability to practice effective preventive medicine by identifying, addressing and advocating for strategies to maintain health and wellbeing, to identify and treat disease early where appropriate and to advise on lifestyle practices
- The ability to function effectively within the context of complexity and uncertainty in medical care

**Attitudes & Commitments:**

- Honesty and integrity reflecting the standards of the profession, in interacting with colleagues, patients, families and professional organizations
- Professional behaviors reflecting compassion and respect for patient privacy, altruism and a commitment to comprehensive, holistic medical care
- Sensitivity and awareness of diverse cultures, health beliefs and social factors impacting patient health and illness
- The commitment to seek knowledge and skills to better serve the needs of the underserved in their communities

**Roles & Responsibilities:**

- Students are expected to attend/arrive on time to all mandatory activities: orientation, onsite orientation, task training, all assigned shifts, Wednesday conferences/SIM Sessions/MS SIM Sessions, Flipped Classrooms, and TBLs.
- Students are expected to complete all assigned case logs, procedures logs, alternative tasks, evaluations, and department exercises.
- Emergency medicine is the practice of medicine in an acute and sub-acute setting. The emergency physician's role is to assess; treat, admit, or discharge any patient that seeks medical attention at any time of day or night.
- It is the emergency physician's job to take a full history, perform a physical exam, and obtain the tests that will elucidate the cause of the patient's complaint. Upon doing so, the physician must either treat the patient or refer him/her to the appropriate follow up care. A trained emergency physician is able to handle not only traumas, but also almost every other imaginable acute and non-acute problem. Because most hospital admissions come through the Emergency Department (ED), it is imperative that the Emergency Medicine (EM) physician have a good grasp of most fields of medicine.
- The ED is an extremely exciting and vibrant setting. One patient may have a laceration or broken bone while in the next bed over, a patient may be suffering an acute MI. Because of this variety, the Emergency Physician receives training in a wide diversity of procedures (central lines, lumbar punctures, chest tubes, ultrasound, etc.). This training and ability is what keeps the scope of practice lively and ever-changing.

**Prior to your First Day:**

You will receive an email from Jessica Holland with details and links to all information you will need to successfully complete this course. Please review and complete prerequisites prior the rotation start date. Read this syllabus and browse some of the reading material. External 630D students, please note that there is an "Extramural Medical Student Clerkship Orientation Packet" available to you on google drive.

**Attire:**

- Clean scrubs. Visiting students can use matching scrubs from their institution and school ID badge
- White coat and stethoscope
- No hoodies
- We recommend professional attire for conference
- You can also use UC Irvine SOM scrubs purchased from the UCIbookstore

## SCHEDULING

**Rotation Shifts:** You are expected to be available to work in the ED for any shifts assigned to you during your four week rotation (Rotations start on Monday morning and end on Sunday night)

- Students on rotations with direct patient care, such as emergency medicine, **work the exact schedule the team works**. Therefore, anyone who does **not want to be on call the night before a specific holiday, or on a specific holiday**, should make sure to not schedule an emergency medicine rotation during that time.
- Approximately two(2) weeks before the start of rotation, clerkship students receive an email from the clerkship coordinator detailing their schedules. All students must complete eight(8)day and eight(8) night shifts.
- Shift swaps are allowed if both parties approve [and it does not violate duty hours]. The swap request must be e-mailed to the coordinator and director at least two days in advance and is subject to approval.
- If a conflict occurs midway through a scheduled rotation, shifts can be swapped with another student. But the change must be made on the schedule. The attendings have access to this schedule from any computer and expect the students to adhere to this.
- Before you miss a shift for medical reasons please call the attending physician on duty at 714-456-5705 [in addition to emailing the clerkship coordinator and director of your absence]. All absences will be documented and grades will be withheld until the absence is made up.

**Shift Changes:** As stated above, students may exchange shifts with peers. However, please keep the following in mind when considering schedule changes

- All educational sessions require attendance by students.
- Students cannot take more than one shift a day and cannot follow an evening shift with a morning shift.
- There must be - at minimum - eight(8) hours in between shifts/educational activities.
- Shift change requests need to be e-mailed to the clerkship coordinator and are subject to approval.

**On shift Activities & Workflow:** This is a brief overview of how patients should flow through the emergency department (ED) & your responsibilities in the department.

Log into EPIC and assign yourself the patient with the red-boxed column. Type your name in medical student column when you initially pick up the patient and note the vital signs.

Inform the attending before seeing the patient. Example: "Hey Dr. Wray, I see a patient with Chest Pain, can I assign them to myself?"

Students will work under the direct supervision of EM attendings, it is intended that the students participate actively in the evaluation and management of patient cases assuming more responsibility as their level of comfort and expertise develops. Students are not to be observers on this rotation. There are no minimum or maximum numbers of patients to be seen in a typical clinical session. This should be determined by the student's abilities, time, and their supervising physician.

**Patient Sign-Out:** Patient sign outs from the medical student go directly to the attending and not to the oncoming student

**End of Shift:** When appropriate, the attending will indicate when you may leave.

It is your responsibility to ensure you allocate time to complete all work-up with your patients and ensure a final disposition (admit, discharge, transfer, etc.) has been made.

Before you leave your shift, make sure that:

1. You log all cases and procedures at the end of each shift.
2. You print out at least one(1) medical documentation and review it with the attending. Give the documentation and the score card back to attending to be placed in Dr. Hoon's ED mailbox.
3. Attending evaluate you and complete your end-of-shift evaluation using Qualtrix link in EPIC. It is recommended to ask the attending to complete the evaluation two hours before your shift ends.

## MANDATORY ATTENDANCE

**Shift Times:** You are expected to be available to work in the ED for any shifts assigned to you during your four week rotation (Rotations start on Monday morning and end on Sunday night)

**Grand Rounds:** All students are required to attend the weekly [Wednesday] Conferences/SIM sessions held at:

- Conference: City Tower - 333 City Boulevard West, Suite 640, Orange, CA 92868
- Sim Center: Irvine Campus - Building 836 Simulation Center, Health Sciences Road, 2nd Floor

Team-Based Learning/Education Sessions		
Week	Time	Subject
Week 1	10:00am – 12:00pm	Task Training:
Week 1	12:00p – 1:00pm	TBL: Approach to Shock
Week 1	1:00pm – 2:00pm	Flipped Classroom: Chest Pain
Week 2	12:00pm – 1:00pm	TBL: Altered Mental Status
Week 2	1:00pm – 2:00pm	Flipped Classroom: General & Lower Abdominal Pain
Week 3 (630D Students)	7:30am – 9:00am	Task Training: Intubation & Ventilation Management (Optional for all students, but highly encourage for 630D students)
Week 4 (630D Students)	7:30am – 9:00am	Task Training: EKG & Radiology Interpretation (Optional for all students, but highly encourage for 630D students)

### Medical Student Simulation Session:

You will attend at least one simulation session during your rotation. The session is held at the Medical Education Building in the UCI campus. Date and time will be determined and informed during the orientation.

### Journal Club:

Attendance is optional, but strongly encouraged.

Journal Club is usually scheduled on the third Thursday of the month from 6pm-10pm. The location varies and is usually the house of an ED attending or resident.

You are excused from your shift to attend Journal Club but need to return to your shift as soon as it has ended.

If you are interested in attending please RSVP so the clerkship coordinator can send you the article packet. You will need to have read the articles prior to attendance.

### Medical Student Lightning Talks [Honors Project]

Project is optional, but necessary to be eligible for Honors Grade.

Honors grade will be given for superior performance (top 15%) based on clinical performance and education session participations. For 630D, students give a five(5) minute slideshow case presentation in order to be eligible for an honors grade. The slideshow case presentation will require an appropriate review of the literature and must be completed before the end of the rotation and presented to an attending. The course director is available by email or in person to help you prepare for the case presentation. All presentations must be e-mailed to the course director for credit.

- Performance – earn exceed expectation (more that 50%)of all evals
- Student must achieve “exceeds expectation” in over half the specified categories; averaged from all faculty evaluations of student.

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## TEXTS & READING

**Suggested:** Below are suggested education links

- <http://www.uptodate.com/home> (Links to an external site.)Links to an external site.
- <https://www.aliem.com> (Links to an external site.)Links to an external site.
- <https://cdemcurriculum.com> (Links to an external site.)Links to an external site.
- <https://lifeinthefastlane.com> (Links to an external site.)Links to an external site.
- <http://embasic.org> (Links to an external site.)Links to an external site.
- <http://emedicine.medscape.com/> (Links to an external site.)Links to an external site.

### Supporting & Review:

Texts include: "The Clinical Practice of Emergency Medicine," fourth edition, by Ann Harwood-Nuss et al., "Emergency Medicine, A Comprehensive Study Guide," fifth edition, by Judith E Tintinalli et al., "Clinical Procedures in Emergency Medicine," third edition, by Roberts & Hedges et al., "The Radiology of Emergency Medicine," fourth edition, by John H Harris, et al.

**Assigned Readings:** Emergency Medicine References are required & available for Clerkship Students during the rotation

- Acute Abdominal Pain [Download Acute Abdominal Pain.pdf](#)
- Altered Mental Status [Download Altered Mental Status.pdf](#) Basic Resuscitation [Download Basic Resuscitation.pdf](#)
- Chest Pain-Cardiac or not [Download Chest Pain-Cardiac or not.pdf](#)
- Emergency Care of Children [Download Emergency Care of Children.pdf](#)
- Nausea and Vomiting [Download Nausea and Vomiting.pdf](#)
- Pediatric Fever [Download Pediatric Fever.pdf](#)
- Respiratory Distress [Download Respiratory Distress.pdf](#)
- Seizure [Download Seizure.pdf](#)
- Septic Shock [Download Septic Shock.pdf](#)
- Syncope [Download Syncope.pdf](#)
- Trauma in Adults [Download Trauma in Adults.pdf](#)
- Trauma in Children [Download Trauma in Children.pdf](#)
- Vaginal Bleeding in Pregnancy [Download Vaginal Bleeding in Pregnancy.pdf](#)
- Vertigo [Download Vertigo.pdf](#)
- Wound Care [Download Wound Care.pdf](#)
- Chest Pain Chapter, from Cardiovascular Emergencies, ACEP 2015 [Download Chest Pain Chapter, from Cardiovascular Emergencies, ACEP 2015.pdf](#)
- The Neurologic Examination in the ED [Download The Neurologic Examination in the ED.pdf](#)

### Additional Resources:

Board Review Questions

<https://www.emra.org/Resources/Board-Review-Questions/> (Links to an external site.)Links to an external site.

UCI iTunesU Emergency Department

<https://itunes.apple.com/us/itunes-u/emergency-medicine-lectures/id429668393?mt=10> (Links to an external site.)Links to an external site.

Recommended Blogs and Podcasts

<https://www.emra.org/Resources/Recommended-Blogs-and-Podcasts/> (Links to an external site.)Links to an external site.

## OFFICIAL GRADING POLICY

### Student Overview:

1. Orientation
2. ED Onsite Orientation
3. Task Training [Orientation]
4. Hand Hygiene and Fall Prevention Videos: Must view the Hand Hygiene and Fall Prevention videos available.
5. Grand Rounds [Wednesday Conference/Simulation Center]: Please note that attendance and participation is required and will be reflected in your final grade. First three(3) hours are joint conference with residents; remaining two(2) hours are team-based learning/education sessions with a faculty attending. If you cannot attend the Wednesday conference, please inform the clerkship director and arrange the make-up attendance with clerkship coordinator.
6. Education Sessions/Flipped Classrooms: Please note that attendance and participation [unless otherwise indicated] is required and will be reflected in your final grade. Attendance is recorded via completion of all video-viewings, quizzes, and evaluations.
7. iTunes Summarized Pearls: Completion of assignment, is required due to cancelled conference. The clerkship director will select the iTunes pearls and email out the assignment to students [through the coordinator].
8. Patient Case Diagnosis Logs [New Innovations]: All patient case diagnosis logging will be completed electronically in New Innovations. You need to log all 7 required cases. 100% completion of case logging, real patients or alternative method, is a requirement of the rotation. Consult with Dr. Hoonpongsimanont if you feel you may not be able to fulfill the requirements and an alternative method assignment will be given. This is required to pass the rotation.
9. Patient Procedure Logs: There is a recommended amount of procedures to complete by the end of the rotation. Students should take the initiative, whenever an opportunity presents itself, where there is a procedure to be done. These are logged on paper. This form must be turned into the coordinator after the completion of your rotation in the ED.
10. Assigned shifts: Satisfactory completion of shifts is required to pass the rotation and prompt attendance is required. At the end of each shift, students must remind the attending to complete an evaluation, as this will be how students' shifts are recorded. The attending needs to complete, sign, and date the form in Qualtrix on EPIC at the end of each shift. This is required to pass the rotation.
11. A.1 Communications Assessment Tool: Must be handed out [by student] and collected [by faculty attending] to at least one(1) patient per shift.
12. Medical Student Documentation Checklist: Each shift you are expected to print an H&P [Medical Student Documentation Checklist] and one of your charts from that day and present them to your attending to review with you to help you improve your medical documentation, clinical reasoning and decision making skills. Staple your chart and H&P checklist together and turn them into Dr Hoon's mailbox in the ED workroom.
13. End of Rotation Evaluations: You will be required to submit an anonymous End of Rotation Evaluation in New Innovations. Please fill out the evaluation within two(2) weeks of your rotation ending. We appreciate your feedback and take it very seriously for future improvements.
14. MS Evaluation of Faculty: You will be required to submit an anonymous Attending Evaluation for each attending that you work with during your rotation. Please fill out the evaluation within two(2) weeks of your rotation ending. We appreciate your feedback and take it very seriously for future improvements.
15. Honors grade: Honors grade will be given for superior performance (top 15%) based on clinical performance and education session participations. For 630D, students give a five(5) minute slideshow case presentation in order to be eligible for an honors grade. The slideshow case presentation will require an appropriate review of the literature and must be completed before the end of the rotation and presented to an attending. The course director is available by email or in person to help you prepare for the case presentation. All presentations must be e-mailed to the course director for credit.
  - a. Performance – earn exceed expectation (more that 50%)of all evals
  - b. Student must achieve “exceeds expectation” in over half the specified categories; averaged from all faculty evaluations of student.
16. Rotation feedback: The course director is available and encourages every student to meet with her on Wednesdays after conference [every week] for mid-clerkship evaluation.

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**Grading Breakdown:** Grades will remain incomplete if you fail to complete/turn in all required documentation for the rotation

70% of your grade reflects your clinical performance as reflected by shift evaluations.

30% reflects

- 10% attendance and participation at the weekly student conference
- 5% of medical student SIM
- 10% complete assignments before medical student educational sessions
- 5% complete student lightning talk

**Grades will remain incomplete if you fail to complete/turn in all required documentation for the rotation.**

**Grading Scale:** Medical Students are graded using the following scale: Honors (H), Pass (P), and Fail (F). or for the MS I courses Pass (P), and Fail (F).

Medical Student Grading Scale	What this means
H	Exceptional performance – approximately top 15% of the class (score 86 or higher out of 100)
P	Average score; approximately 85% of the class (score between 67 and 85)
F	Unacceptable performance - you must pass all elements of the clerkship to receive a passing grade
I	Incomplete - all elements of the clerkship/course have not been completed

For the assignment of grades, the average and distribution of scores of only the medical students will be used to establish the score range for each grade. The score of any medical students who has previously taken this Clerkship or any portion will not be included in the calculation of these statistics.

You have 30 days from the date of the grade to appeal any aspect of this grade. Please contact your Clerkship Director should you have any questions

The decision to participate in any research conducting in the emergency department has no effect on your grade. You will receive the same education experience regardless of your decision to participate in research. If you have any concerns regarding research conduct, you can report to the IRB as stated in the study information sheet.

## GRADING

Final grades are comprised of

- Orientation Attendance
- ED Onsite Orientation Attendance
- Task Training [total: 3]
- Review of Hand Hygiene and Fall Prevention Videos
- Resident Conference/Simulation Center Attendance [total: 4; one a week]
- Education Sessions/Flipped Classrooms Attendance (including evaluations/quizzes/videos) [total: 4]
- iTunes Assignment [if assigned in lieu of cancelled conference/SIM]
- Patient Case Diagnosis Logs [total: 7]
- Procedure Logs
- Shift Attendance - Shift Evaluations [total: 16]
- A.1 Communications Assessment Tool [total: 16]
- Medical Student Documentation Checklist [total: 16]

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- End of Rotation Evaluations
- MS Evaluation of Faculty
- End of Rotation Exam - NBME [630D students ONLY]
- Journal Club (Optional)
- Honors Case Presentation (Optional)

#### **REMEDATION**

Remediation, if needed will be designed by the Clerkship/course Director to suit the issue at hand. This can include repeat the rotation or shifts, create presentation or take and pass the assigned exam.

#### **INCOMPLETES**

You will not be issued a grade until all elements of the clerkship/course have been completed.

**Must include the following statement:** The student's final grade will be submitted on the standard UC Irvine elective form. If the student fails the elective a grade of "F" will be permanently recorded on his/her transcript. The student can repeat the course for a second grade; however, the "F" will not be removed from the transcript.