

627A Emergency Medicine Ultrasound

This course is available to UC Irvine and VSLO students.

Elective at a Glance		
Available to: ☐ UCI MS3 students ☐ UCI MS4 students ☐ Extramural Students through VSLO		
Duration: MS4 students must take four weeks. Only MS3 students are eligible to take this elective as a two-week elective.	Number of Students: Six to eight students per block	Grading: H / P / F
Periods available: The time of the course must be pre-approved by the elective director at least three months prior to the start of the course. No exceptions.		

1. Course Director, Coordinator and General Administrative Information

FACULTY AND STAFF

Name	Office Location	Phone	Email
Course Director: Edmund Hsu, MD	3800 W. Chapman Ave. Suite 3200 Orange, CA.	(949) 824-3837	Edhsu@hs.uci.edu
Course Faculty: Megan Guy, MD	3800 W. Chapman Ave. Suite 3200 Orange, CA.		guym@hs.uci.edu
Course Faculty: John Christian Fox	3800 W. Chapman Ave. Suite 3200 Orange, CA.		jfox@hs.uci.edu
Course Coordinator: Jessica Nevin	3800 W. Chapman Ave. Suite 3200 Orange, CA.	(949) 824-6786	jnevin@hs.uci.edu

DESCRIPTION

Students are required to complete enough shifts to perform a minimum of 75 ultrasounds per week on ED patients. Indications, limitations, Knobology, and image acquisition will be emphasized in the following areas: cardiac, lung, ocular,

intestinal, gallbladder, renal, aorta, endovaginal, trauma, DVT and procedural guidance.

PREREQUISITES

This course is intended for third and fourth-year students enrolled in the undergraduate medical education program at UCI School of Medicine.

RESTRICTIONS

This course is intended for third and fourth-year students enrolled in the undergraduate medical education program at UCI School of Medicine.

COURSE DIRECTOR

Dr. Hsu is the current course director. He is the emergency department ultrasound director. Dr. Hsu has completed both a simulation fellowship and an ultrasound fellowship. He is mentored by Dr. Fox who is the previous course director. Dr. Fox has worked in higher education since 2001. Through two consecutive grants from the UniHealth Foundation Dr. Fox developed and published a unique four-year integrated point-of-care ultrasound curriculum for UCI medical students, making UCI the second medical school in the United States to integrate ultrasound into medical education. The curriculum he developed has been emulated and repurposed at over thirty medical schools throughout the nation. Dr. Fox is a Professor of Clinical Emergency Medicine and is the chair of the UCI School of Medicine, Department of Emergency Medicine.

INFORMATION FOR THE FIRST DAY

Who to Report to on First Day: You will be emailed an orientation packet and canvas course page once you have been confirmed for the course. You will report to Dr. Hsu by zoom or during the scheduled Quality Assurance (QA) meeting during the first week of your rotation elective unless stated otherwise in the orientation email that you will receive at minimum two weeks prior to your start date.

The first quality assurance meeting will be on the first Monday of your rotation. Meetings are mandatory in person and only on zoom as a last resort.

Location to Report on First Day: Zoom or Department of Emergency Medicine, 3800 W. Chapman Ave. Suite 3200, Orange, CA 92868, 714-456-5239 (Dr. Fox's Office)

Time to Report on First Day: On Zoom or During the QA scheduled meeting

SITE: UCI Medical Center — Emergency Department. UCI Campus in Irvine, CA (for ultrasound clinical foundation teaching sessions to underclassmen)

DURATION: MS4 students must take four weeks. Only MS3 students are eligible to take this elective as a two-week elective.

Scheduling Coordinator: UC Irvine students please email comsched@hs.uci.edu to make a scheduling appointment.

Periods Available: The time of the course must be pre-approved by the elective director at least three months prior to the start of the course. No exceptions.

NUMBER OF STUDENTS ALLOWED: six to eight

WHAT STUDENTS SHOULD DO TO PREPARE FOR THE COURSE

- [Download and watch Dr. Fox's podcasts on iTunes.](#)
- Go to www.ultrasoundpodcast.com and find topics of your liking. There are many to choose from.
- Alternatively: Review the textbook entitled "Emergency Ultrasound" by Ma and Mateer (3rd edition). A copy is in the resident workroom, and [here it is on amazon.](#)

COMMUNICATION WITH FACULTY

Questions about logistics should be directed to the Course Coordinator. Direct questions, comments, or concerns about the course to the Course Director. Contact information and office location are at the beginning of this document.

The Course Director is also available to meet in person. Please email coordinator to arrange an appointment. To ensure that your email will not be lost in the large volume of email received, please use the following convention for the subject line: SUBJECT: COURSE NAME, your last name, your issue (e.g. XXX, Smith, Request for appointment)

2. Course Objectives and Program Objective Mapping

The following are the learning objectives for the 627A course. Students are expected to demonstrate proficiency in these areas in order to satisfactorily complete the course. In addition, the extent of a student's mastery of these objectives will help guide the course evaluation and grade.

Course Objective	Mapped UCI School of Medicine Program Objective	Sub Competency	Core Competency
Knowledgeable in the structure and function of the major organ systems	A-1. Knowledge of the structure and function of the major organ	Structure and Function of Organ	Knowledgeable / Skillful

including the heart, kidneys, vascular, soft tissue, lung, ocular, intestinal, hepatobiliary, splenic, and genitourinary. Students will also be routinely expected to diagnose disease states commonly found in the emergency department using their skills of bedside ultrasound.	systems, including the molecular, biochemical and cellular mechanisms for maintaining homeostasis B-3. The ability to articulate a cogent, accurate assessment and plan, and problem list, using diagnostic clinical reasoning skills in all the major disciplines	Systems / Patient Management	
Integrate the results of their bedside ultrasound into the patient's clinical scenario in order to affect a treatment or disposition. This often involves using the information derived from the ultrasound to necessitate an emergency lifesaving procedure, or medications.	B-5. The ability to practice effective preventive medicine by identifying, addressing and advocating for strategies to maintain health and well-being, to identify and treat disease early where appropriate and to advise on lifestyle practices	Patient Management	Skillful
Knowledgeable and skillful of bedside ultrasound that has far reaching possibilities to enhance the needs of underserved patients locally, nationally and internationally.	C-4. The commitment to seek knowledge and skills to better serve the needs of the underserved in their communities	Cultural and Social Awareness	Altruistic

3. Course Resources

TEXTS AND READINGS: SUGGESTED

- Navigate to your podcast app.
- Search for “fox ultrasound” – You will then come to his Collection of podcasts.
- Go to www.ultrasoundpodcast.com and find topics of your liking. There are many to choose from.

- Alternatively: Review the textbook entitled "Emergency Ultrasound" by Ma and Mateer (3rd edition). A copy is in the resident workroom, and [here it is on amazon](#).
- [UCI Ultrasound iBooks](#) (only available on Apple products)

4. Major Exams, Assignments and Grading

MANDATORY SESSIONS

Session Title	Location
Emergency Department - Scan Shifts	UC Irvine Medical Center 101 The City Drive South, Orange, CA. 92868
Weekly Quality Assurance meeting	3800 W. Chapman Ave. Suite 3200, Orange, CA 92868
Clinical Foundation Ultrasound Sessions	836 Medical Education building, Irvine CA 92697 2nd Floor Clinical Skills Center
Journal Club	TBD

MAJOR ASSIGNMENTS AND EXAMS

GRADING

Medical Students are graded using the following scale: Honors (H), Pass (P), Fail (F), and Incomplete (I). For further information, please review the Grading Policy.

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

If you are unable to make a mandatory session (QA and CF Teaching) then you will have to use a voucher or make up the mandatory session before your grade is released. See Attendance Policy Below.

The student will receive a grade of Honors, Pass or Fail. For current UCI students: the student's final grade will be submitted on the standard UCI elective form. For non UCI (external students): please have your school's credentialing coordinator email your school's evaluation form to be completed by Edmund Hsu, MD to edhsu@uci.edu. The student will be evaluated by Edmund Hsu, MD, attendings and residents in the areas of ultrasound competency and performance.

Requirements for "Pass":

To receive a grade of Pass, students must demonstrate successful performance in all the following areas:

- Knowledge
- Patient Care
- Practice-Based Learning
- Interpersonal & Communication Skills
- Professionalism
- Systems-Based Practice

Requirements for “Honors”:

To receive a grade of Honors, student must complete a quality improvement or research project and must demonstrate exceptional performance all the following areas:

- Knowledge
- Patient Care
- Practice-Based Learning
- Interpersonal & Communication Skills
- Professionalism
- Systems-Based Practice

Grounds for “Incomplete”: You will not be issued a grade until all elements of the course have been completed.

REMEDIATION

Remediation, if needed will be designed by the Course Director to suit the issue at hand.

Grounds for “Fail”: You will receive a grade of "Fail" if the requirements for passing the course have not been met. Please refer to the [Grading Policy](#) for the impact of the "Fail" grade to the transcript.

ATTENDANCE

[ATTENDANCE \(CLINICAL\): 001: UCISOM Office of Medical Education](#)

Absences and making up clinical time

Students will be required to make up clinical time for any absence, e.g., illness, personal voucher, or academic voucher.

- **For four-week clerkships, students will be required to make up clinical time after two missed days.**
- **For six-week clerkships, students will be required to make up clinical time after three missed days**

- For eight-week clerkships, students will be required to make up clinical time after four missed days.

The clerkship director and coordinator will determine the appropriate make up activities to ensure that the student will have an equivalent clinical experience and can fulfill the clerkship requirements and objectives.

Time Off for Interviews

All students are blocked off for interviews from November-December and based on your specialty, either October or January will also be restricted months. Interviewing is an essential component of the search for a residency program. A student must adhere to the following guidelines:

1. Rotations are not permitted to be scheduled during interview season. Refer to the "Important Dates and Deadlines" on the Introduction to the MS4 Year page for specific dates by academic year.
2. Any rotations scheduled during your restricted months must be approved by the Associate Dean for Clinical Science Education. Students must provide their full list of scheduled interviews. Core acting internships, ICU, and Emergency Medicine rotations are not permitted during the interview season. However, non-clinical electives may be permitted in some cases.

One emergency interview voucher is permitted if an unexpected interview occurs during a pre-approved scheduled rotation. Use of this emergency interview voucher must be approved by the Associate Dean for Clinical Science Education and the Course Director. Students must submit the name of the institution and residency program where the interview will be scheduled when requesting use of the emergency interview voucher. An emergency interview voucher is not permitted to be used during your acting internship, ICU, or Core Emergency Medicine rotations.

Alternatively, you can make up your absences to have your grade released.