627A Emergency Medicine Ultrasound

Course Name EM Ultrasound
Course Director J. Christian Fox, MD

Academic Year 2020-2021

1. Course Director, Coordinator and General Administrative Information

FACULTY AND STAFF

<table>
<thead>
<tr>
<th>Name</th>
<th>Office Location</th>
<th>Phone</th>
<th>Email</th>
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<tbody>
<tr>
<td>Director: J. Christian Fox, MD</td>
<td>City Tower, Ste. 640, Rt 128-01</td>
<td>949-824-1132</td>
<td><a href="mailto:jfox@uci.edu">jfox@uci.edu</a></td>
</tr>
<tr>
<td>Coordinator: Nora Perez-Moreno</td>
<td>Medical Education Bldg. #2100</td>
<td>949-824-1132</td>
<td><a href="mailto:nperezmo@uci.edu">nperezmo@uci.edu</a></td>
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<tr>
<td>Coordinator: Brenda Nash</td>
<td>Medical Education Bldg. #2100</td>
<td>949-824-1132</td>
<td><a href="mailto:nashb@uci.edu">nashb@uci.edu</a></td>
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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 3rd and 4th-year students enrolled in the undergraduate medical education program at University of California, Irvine School of Medicine (UCISOM).

RESTRICTIONS
This course is intended for 3rd and 4th-year students enrolled in the undergraduate medical education program at University of California, Irvine School of Medicine (UCISOM).

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. Professor of Clinical Emergency Medicine and has been appointed chair of the University of California, Irvine School of Medicine, Department of Emergency Medicine.

Nora Perez-Moreno and Brenda Nash are the course coordinators for 627A course.

INFORMATION FOR THE FIRST DAY

Who to Report to on First Day: You will be emailed an orientation packet and attending schedule once you have been confirmed for the course. You will report to Dr. Fox during the scheduled QA meeting during the first week of your rotation elective.

Location to Report on First Day: Department of Emergency Medicine, 333 City Boulevard, Suite 640, Orange, CA 92868, 714-456-5239 (Dr. Fox’s Office)

Time to Report on First Day: This will be provided in your welcome email.

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

DURATION: 4 weeks MS4 students must take a consecutive 4-weeks Only MS3 students are eligible to take as a 2-week elective.

Scheduling Coordinator: UC Irvine students please call (714) 456-8462 to make a scheduling appointment.

Periods Available: The time of the course must be pre-approved by the elective director at least 3 months prior to the start of the course. No exceptions.

NUMBER OF STUDENTS ALLOWED: 6 per block (4 UCI, 2 non-UCI)

WHAT STUDENTS SHOULD DO TO PREPARE FOR THE COURSE

- Download and watch Dr. Fox’s podcasts on iTunes: https://itunes.apple.com/us/itunes-u/ms4-ultrasound-in-meded/id429668966?mt=10
- 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:
  - http://www.amazon.com/Ma-Mateers-Emergency-UltrasoundSET/dp/0071792155/ref=sr_1_fkmr0_1?ie=UTF8&qid=1463200637&sr=8-1-fkmr0&keywords=ma+mateer+blaivas
COMMUNICATION WITH FACULTY
Questions about logistics should be directed to the Course Coordinator. Direct questions, comments, or concerns about the course can be directed 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 Nora Perez-Moreno 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.

<table>
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<tr>
<th>Course Objective</th>
<th>Mapped UCI School of Medicine Program Objective</th>
<th>Sub Competency</th>
<th>Core Competency</th>
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<tr>
<td>Knowledgeable in the structure and function of the major organ systems 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.</td>
<td>A-1. Knowledge of the structure and function of the major organ systems, including the molecular, biochemical and cellular mechanisms for maintaining homeostasis</td>
<td>Structure and Function of Organ Systems</td>
<td>Knowledgeable</td>
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<td></td>
<td>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</td>
<td>Patient Management</td>
<td>Skillful</td>
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Integrate the results of their bedside ultrasound into the patient’s clinical scenario in order to effect 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**

- Download and watch Dr. Fox's podcasts on iTunes:
  - Directions to the podcast
    - Go to iTunes
    - 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:
    - http://www.amazon.com/Ma-Mateers-Emergency-UltrasoundSET/dp/0071792155/ref=sr_1_fkmr0_1?ie=UTF8&qid=1463200637&sr=8-1-fkmr0&keywords=ma+mateer+blaivas
  - UCI Ultrasound iBooks: *(only available on Apple products)*
4. Major Exams, Assignments and Grading

MANDATORY SESSIONS

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<tr>
<th>Session Title</th>
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<tr>
<td>Emergency Department - Scan Shifts</td>
<td>UC Irvine Medical Center 101 The City Drive South, Orange, CA. 92868</td>
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<tr>
<td>Weekly Quality Assurance meeting</td>
<td>333 City Boulevard, Suite 640, Orange, CA 92868 (subject to change)</td>
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<tr>
<td>Clinical Foundation Ultrasound Sessions</td>
<td>836 Medical Education building, Irvine CA 92697 2nd Floor Clinical Skills Center</td>
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<td>Journal Club</td>
<td>TBD (email will be sent out)</td>
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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 any aspect of this grade. Please contact your Clerkship/course Director should you have any questions.

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 UC Irvine elective form. For non UCI (external students): please have your school’s credentialing coordinator email your school’s evaluation form to be completed by Dr. Chris Fox, MD to jfox@uci.edu. The student will be evaluated by Chris Fox, 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, students 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.

**REMEDICATION**  
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.