615A MEDICAL SIMULATION

This course is available to UC Irvine 4th year students only
Students must obtain permission from the course coordinator who will obtain faculty approval based on availability prior to enrollment in this course

Course Description: This medical simulation experience allows students to gain experience in curriculum development in medical simulation under the guidance of a faculty simulation instructor. Students will observe simulations, perform literature review, develop a unique simulation course, and teach using simulation technology.

Department: Office of Medical Education

Prerequisites: Successful completion of 1st, 2nd and 3rd year curriculum.

Restrictions: Pre-Approval by Keith Beaulieu kbeaulie@uci.edu

Elective Director: Cameron Ricks, MD

Instructing Faculty: Cameron Ricks, MD

Course Website: www.medsim.uci.edu

Who to Report to First Day: Keith Beaulieu

Location to Report on First Day: Medical Education Simulation Center, room 2118, 2nd floor Building 836

Time to Report on First Day: 8:30

Site Coordinator: Keith Beaulieu kbeaulie@uci.edu

Site: UC Irvine SOM

Periods Available: January-December

Duration: 4 weeks

Number of Students: 1 per month

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

Course Objectives:

- The student will be able to gain knowledge on the role of medical simulation technology in graduate medical education as well as undergraduate medical education.
- The student will be able to understand how to develop new educational curricula.
- The student will understand how to teach colleagues using simulation technology.
- The student will gain exposure to research studies and literature in medical simulation.

Key Topics:

- Medical simulation
- Simulation technology
- Medical education
- Crisis resource management

Competencies:
- **Student as educator**
- **Curriculum design**

**Attitudes and Commitments:** Students will gain an appreciation of the role of simulation in medical education and contribute to the development and enhancement of simulation programs at UC Irvine.

**Educational Activities:** Medical students will have the opportunity to observe and/or participate in all simulation program activities at the UC Irvine Medical Education Simulation Center. Medical students will be involved with creating and developing new simulation curricula or programs. Medical students will work closely with the Director, Associate Director and simulation faculty to integrate simulation into various pre-clinical courses and clinical courses. Medical students will also have the opportunity to teach using simulation technology either in community outreach programs or other activities in the UC Irvine Medical Education Simulation Center.

**What Students Should do to Prepare for the Rotation:** Students will need to read the required articles for the rotation in advance.

**Clinical Responsibilities of the Student:** This is not a clinical rotation

**Patient Care Responsibilities:** This is not a clinical rotation

**Call Schedule of the Student:** None, however students will be expected to teach in occasional evening or weekend simulation programs.

**Procedures to be Learned by the Student:** This is not a clinical rotation

**Percentage of Time Student will Participate in Ambulatory Setting:** This is not a clinical rotation

**Conference/Lecture/Small Group Sessions:**

<table>
<thead>
<tr>
<th>Session</th>
<th>Format</th>
<th>Duration</th>
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<tbody>
<tr>
<td>History of Medical Simulation</td>
<td>Lecture</td>
<td>1 hour</td>
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<tr>
<td>Debriefing</td>
<td>Lecture</td>
<td>1 hour</td>
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<tr>
<td>Educational Theories</td>
<td>Lecture</td>
<td>1 hour</td>
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<tr>
<td>Cognitive Errors</td>
<td>Lecture</td>
<td>1 hour</td>
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<tr>
<td>Contingency Planning</td>
<td>Lecture</td>
<td>1 hour</td>
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**Course Hours Summary:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>40</td>
<td>Small Groups (Simulation)</td>
</tr>
<tr>
<td>120</td>
<td>Other (Developing curricula)</td>
</tr>
<tr>
<td>160</td>
<td>Total</td>
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**Required Reading:**


**Recommended Reading:**

3/31/2016
• The American Board of Anesthesiology Maintenance of Certification in Anesthesiology website: http://www.theaba.org/anesthesiology-maintenance.shtml
• The American Society of Anesthesiologists simulation education website: http://www.asahq.org/SIM/homepage.html

Official Grading Policy: The student will receive a grade of Honors, Pass or Fail.

Students will be given a grade of Pass in medical simulation if the following requirements are fulfilled:
1. Observe and assist in teaching at least 40 hours of simulation courses during the month in a variety of specialties (at least 2 resident simulations or high-fidelity team training simulations).
2. Develop a new educational program utilizing simulation technology to contribute to the at UC Irvine School of Medicine curriculum. The course may be a new course involving simulation or may integrate simulation into an existing course in the medical school curriculum. Effort spent in developing and writing the curriculum should involve at least 120 hours of the month, or the remaining hours in the month, assuming 8 hour days.

The student will receive an Honors grade if the following requirements are fulfilled:
1. Prepare a manuscript, scenario or abstract to submit for publication or presentation at a regional or national scientific meeting (e.g. MedEd Portal, Simulation in Healthcare, AAMC, or other simulation or
medical education meetings).
2. Acceptance of the presentation at a scientific meeting is not a requirement for the Honors grade, however, the final project must be finalized and ready for submission in the format required by the specific meeting or journal. The final product must be of publication quality. The faculty mentor will be available to review the student’s writing and provide input throughout the rotation as needed to assist the student with accomplishing this project.