660S Pediatric Critical Care & Pulmonary Physiology (PICU)

This rotation is not accepting international students.
This rotation fulfills the ICU requirement for UCI Students.
All students must get prior approval for all CHOC-based rotations.

Course Name  Pediatric Critical Care & Pulmonary Physiology (PICU)
Course Director  Glenn Levine, MD (MCH)
Course Director  Juliette Hunt, MD (CHOC)

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: Glenn Levine, MD</td>
<td></td>
<td></td>
<td><a href="mailto:glevine@memorialcare.org">glevine@memorialcare.org</a></td>
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<tr>
<td>Director: Juliette Hunt, MD</td>
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<td><a href="mailto:JHunt@choc.org">JHunt@choc.org</a></td>
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<tr>
<td>Coordinator: Frank Cruz</td>
<td>505 S. Main St., Ste. 525</td>
<td>714-456-5650</td>
<td><a href="mailto:fcruz@hs.uci.edu">fcruz@hs.uci.edu</a></td>
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DESCRIPTION
This is a four-week rotation offered at Miller’s Children’s and Women’s Hospital or CHOC. ICU is offered in medicine, surgery and pediatrics. Students function as sub-interns, becoming integral members of the ICU team, and serve as primary caregivers under supervision.

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. Hunt is the course director for the 660S course.
Dr. Glenn Levine is also the course director for the 660S course.

Frank Cruz is the course coordinator for the 660S course. Frank Cruz is the course coordinator for the 660G course. Frank Cruz has been working as Student Coordinator for the UCI School of Medicine for 10+ Years. In addition to his Student Coordinator duties he also works as an assistant coordinator for the UCI-CHOC Pediatric Residency.

INFORMATION FOR THE FIRST DAY
Who/Location/Time to Report on First Day: Frank Cruz student coordinator will contact students with further details. fcruz@hs.uci.edu (714) 456-5650

SITE: Miller Children’s and Women’s Hospital or CHOC

DURATION: 4 weeks

Scheduling Coordinator: UCI 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 three months prior to the start of the course. No exceptions.

NUMBER OF STUDENTS ALLOWED: 1 per site, per rotation block

WHAT STUDENTS SHOULD DO TO PREPARE FOR THE COURSE
An orientation packet outlines the everyday activities, conferences and responsibilities of the medical student and residents.
The PICU manual, which has essential information for critical care topics, is emailed to the student prior to rotation and is online.

Other References for Reading:
- Rogers' Textbook of Pediatric Intensive Care: 4th Edition : David G. Nichols (Editor), Alice D Ackerman (Editor), Joseph A Carcillo (Editor), Heidi J Dalton (Editor), Niranjan "Tex" Kissoon (Editor)
- Pediatric Cardiology for Practitioners: 5th Edition: Myung K. Park MD

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 fcruz@hs.uci.edu 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 660S 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>
<thead>
<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>Assess patient’s overall status and recognized critically ill children – ABC’s.</td>
<td>B-1. 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</td>
<td>Medical Interview</td>
<td>Skillful</td>
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<tr>
<td>Understand and recognize the variety of ways that patients can present with critical illness.</td>
<td>A-2. Knowledge of the pathogenesis of diseases, interventions for effective treatment, and mechanisms of health maintenance to prevent disease</td>
<td>Disease Pathogenesis and Treatment</td>
<td>Knowledgeable</td>
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<tr>
<td>Improve basic skills in chest radiograph review, order writing, and oral case presentation.</td>
<td>B-4. The ability to search the medical literature, including electronic databases, and to locate and interpret up-to-date evidence-based medicine</td>
<td>Evidence-Based Medicine</td>
<td>Skillful</td>
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<tr>
<td>Activity</td>
<td>Level</td>
<td>Knowledge Area</td>
<td>Competency Level</td>
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<tr>
<td>Interpret and manage hemodynamic variables.</td>
<td>B-3</td>
<td>Patient Management</td>
<td>Skillful</td>
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<tr>
<td>Evidence to optimize patient care</td>
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<tr>
<td>Interpret normal and abnormal ECGs.</td>
<td>B-3</td>
<td>Patient Management</td>
<td>Skillful</td>
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<td>Assess adequacy of ventilation/oxygenation and treat dysfunction.</td>
<td>A-2</td>
<td>Disease Pathogenesis and Treatment</td>
<td>Knowledgeable</td>
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<tr>
<td>Understand fluid, electrolyte, and acid-base management.</td>
<td>B-3</td>
<td>Patient Management</td>
<td>Skillful</td>
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<tr>
<td>Recognize and manage shock and shock states.</td>
<td>A-2</td>
<td>Disease Pathogenesis</td>
<td>Knowledgeable</td>
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<tr>
<td>Understand blood product transfusion indications and concerns.</td>
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<tr>
<td>Understand fluid, electrolyte, and acid-base management.</td>
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<tr>
<td>Recognize and manage shock and shock states.</td>
<td>A-2</td>
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<tr>
<td>Recognize and manage single and multiple organ dysfunction.</td>
<td>A-2. Knowledge of the pathogenesis of diseases, interventions for effective treatment, and mechanisms of health maintenance to prevent disease</td>
<td>Disease Pathogenesis and Treatment</td>
<td>Knowledgeable</td>
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<tr>
<td>Understand inherent post-operative changes and problems.</td>
<td>B-6. The ability to function effectively within the context of complexity and uncertainty in medical care</td>
<td>Patient Management</td>
<td>Skillful</td>
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<tr>
<td>Understand sedation and pain management skills.</td>
<td>B-6. The ability to function effectively within the context of complexity and uncertainty in medical care</td>
<td>Patient Management</td>
<td>Skillful</td>
</tr>
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<td>Understand social and ethical aspects of critically ill patient care and end-of-life issues.</td>
<td>C-3. Sensitivity and awareness of diverse cultures, health beliefs and social factors impacting patient health and illness</td>
<td>Cultural and Social Awareness</td>
<td>Altruistic</td>
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<td>Understand ventilator management and modes.</td>
<td>A-4. Knowledge of population health, epidemiology principles and the scientific basis of research methods relevant to healthcare</td>
<td>Population Health and Epidemiology</td>
<td>Knowledgeable</td>
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<tr>
<td>Understand code situations and PALS.</td>
<td>A-4. Knowledge of population health, epidemiology principles and the scientific basis of research methods relevant to healthcare</td>
<td>Population Health and Epidemiology</td>
<td>Knowledgeable</td>
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3. Course Resources

TEXTS AND READINGS: SUGGESTED
Your syllabus is the FCCS, the main text provided by the Society of Critical Care Medicine for medical students. You are required to study it during your 4-week rotation, discuss any questions with your faculty, and will be tested based on it on your end-of-rotation written MCQ exam. Contact your site clerkship coordinator to collect the book at the beginning of the rotation, and make sure you return it at the end. For additional recommended reading please see:

- Handbook of Critical Care - Jesse B. Hall (September 2009)
- Irwin and Rippe’s Intensive Care Medicine 6th edition - Richard S Irwin and James M. Rippe (August 2007)
- The ICU Book, 3rd Edition - Paul L. Marino (September 2006)

4. Major Exams, Assignments and Grading

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.

Your final grade is a composite based on your end-of-rotation written MCQ exam (usually administered on the Friday of week 4) and your clinical evaluations. Clinical evaluations are based on motivation, knowledge of clinical medicine, clinical skills, and personal characteristics. A passing grade requires daily attendance at rounds, attendance and participation in lectures, discussions, and clinical assignments, as well as satisfactory scores for the categories listed in the clinical evaluations. Absences will be excused only upon approval by the course director. Comments will be made available for your Dean’s Letter. The written examination consists of 50 multiple-choice questions which are derived directly from the FCCS content. Students can be eligible for Honors if they receive a satisfactory score on all clinical evaluation categories, score at least 90% on the MCQ examination, have perfect attendance, and show exceptional skills in a number of clinical categories and prepare a relevant presentation. Students who receive a failing grade will meet with the course director to discuss options for re-evaluation that may include additional time in the MICU along with a written reexamination. A score of 70% or greater is required on the MCQ exam in order to pass the course.
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.

**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 in 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.