

# 660S Pediatric Critical Care & Pulmonary Physiology (PICU)

This course is available to UC Irvine students only

**Course Name** Pediatric Critical Care & Pulmonary Physiology (PICU)

**Course Director** Glenn Levine, MD (MCH)

**Course Director** Juliette Hunt, MD (CHOC)

<b>Elective at a Glance</b>		
<b>Available to:</b> <input type="checkbox"/> UCI MS3 students <input checked="" type="checkbox"/> UCI MS4 students <input type="checkbox"/> Extramural Students		
<b>Duration:</b> 4 weeks	<b>Number of Students:</b> 1 per site, per rotation block	<b>Grading:</b> H / P / F
<b>Periods available:</b> 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: Glenn Levine, MD		N/A	<a href="mailto:glevine@memorialcare.org">glevine@memorialcare.org</a>
Course Director: Juliette Hunt, MD		N/A	<a href="mailto:jhunt@choc.org">jhunt@choc.org</a>
Course Coordinator: Frank Cruz	505 S. Main St., Ste. 525	714-456- 5650	<a href="mailto:fcruz@hs.uci.edu">fcruz@hs.uci.edu</a>

### 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

UCI students must have successfully completed all required third year requirements

### RESTRICTIONS

This course is intended for fourth-year students enrolled in the undergraduate medical education program at UCI School of Medicine. Extramural students must be in their final year of undergraduate medical education at the time of their

rotation. Applications are accepted through VSLO. This rotation does not accept international students.

### **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 to on First Day:*

Who/Location/Time to Report on First Day: Frank Cruz student coordinator will contact students with further details. [fcruz@hs.uci.edu](mailto: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 email [comsched@hs.uci.edu](mailto: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:** 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), Niranjana "Tex" Kissoon (Editor)
- Pediatric Cardiology for Practitioners: 5th Edition: Myung K. Park MD
- Nelson Textbook of Pediatrics: 19th edition : Robert M. Kliegman, MD, Bonita M.D. Stanton, MD, Joseph St. Geme, Nina Schor, MD, PhD and Richard E. Behrman, 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](mailto: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.

<b>Course Objective</b>	<b>Mapped UCI School of Medicine Program Objective</b>	<b>Sub Competency</b>	<b>Core Competency</b>
Assess patient’s overall status and recognized critically ill children – ABC’s.	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	Medical Interview	Skillful
Understand and recognize the variety of ways that patients can present with critical illness.	A-2. Knowledge of the pathogenesis of diseases, interventions for effective treatment, and mechanisms of health maintenance to prevent disease	Disease Pathogenesis and Treatment	Knowledgeable
Improve basic skills in chest radiograph review,	B-4. The ability to search the medical literature, including	Evidence-Based Medicine	Skillful

order writing, and oral case presentation.	electronic databases, and to locate and interpret up-to-date evidence to optimize patient care		
Interpret and manage hemodynamic variables.  Interpret normal and abnormal ECGs.	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  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	Patient Management  Patient Management	Skillful  Skillful
Assess adequacy of ventilation/oxygenation and treat dysfunction.	A-2. Knowledge of the pathogenesis of diseases, interventions for effective treatment, and mechanisms of health maintenance to prevent disease	Disease Pathogenesis and Treatment	Knowledgeable
Understand fluid, electrolyte, and acid-base management.	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	Patient Management	Skillful
Understand blood product transfusion indications and concerns.	A-2. Knowledge of the pathogenesis of diseases, interventions for effective treatment, and mechanisms of health maintenance to prevent disease	Disease Pathogenesis and Treatment	Knowledgeable

Recognize and manage shock and shock states.	A-2. Knowledge of the pathogenesis of diseases, interventions for effective treatment, and mechanisms of health maintenance to prevent disease	Disease Pathogenesis	Knowledgeable
Recognize and manage single and multiple organ dysfunction.	A-2. Knowledge of the pathogenesis of diseases, interventions for effective treatment, and mechanisms of health maintenance to prevent disease	Disease Pathogenesis and Treatment	Knowledgeable
Understand inherent postoperative changes and problems.	B-6. The ability to function effectively within the context of complexity and uncertainty in medical care	Patient Management	Skillful
Understand sedation and pain management skills.	B-6. The ability to function effectively within the context of complexity and uncertainty in medical care	Patient Management	Skillful
Understand social and ethical aspects of critically ill patient care and end-of-life issues.	C-3. Sensitivity and awareness of diverse cultures, health beliefs and social factors impacting patient health and illness	Cultural and Social Awareness	Altruistic
Understand ventilator management and modes.	A-4. Knowledge of population health, epidemiology principles and the scientific basis of research methods relevant to healthcare	Population Health and Epidemiology	Knowledgeable
Understand code situations and PALS.	A-4. Knowledge of population health, epidemiology principles	Population Health and Epidemiology	Knowledgeable

	and the scientific basis of research methods relevant to healthcare	
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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)
- Critical Care Medicine: The Essentials - John J. Marini and Arthur P Wheeler (November 2009)
- The Washington Manual of Critical Care - Marin H Kollef, Timothy J Bedient, Warren Isakow, and Chad A Witt (October 2007)
- 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

#### MANDATORY SESSIONS

#### 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 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.