

655B Blood Banking

This rotation is not accepting international students.

Course Name Blood Banking

Course Director Robert A. Edwards, MD, PhD

Elective at a Glance		
Available to: <input checked="" type="checkbox"/> UCI MS3 students <input checked="" type="checkbox"/> UCI MS4 students <input checked="" type="checkbox"/> Extramural Students		
Duration: 2 weeks min.	Number of Students: 2	Grading: H / P / F
Periods available: Throughout the year		

1. Course Director, Coordinator and General Administrative Information

FACULTY AND STAFF

Name	Office Location	Phone	Email
Course Director: Robert A. Edwards, MD, PhD	Medical Sciences D449	949-824-8576	redwards@hs.uci.edu
Course Coordinator: Ashley Dunicliffe	Medical Sciences D440	949-824-5367	pathelectives@hs.uci.edu

DESCRIPTION

Students will actively participate in the day-to-day activities of a busy transfusion medicine/blood bank service. Activities will include interaction with ordering clinicians regarding indications for blood and blood components, evaluation and management of patients for whom therapeutic apheresis is considered, and the workup and management of transfusion reactions. Students will develop an understanding of transfusion medicine laboratory testing, including antibody screens, direct and indirect antiglobulin tests, red cell antigen typing, cross-matching, HLA and platelet antibody testing, and the use of these testing principles in the workup and management of platelet and red cell alloimmunization, hemolytic and serologic transfusion reactions, neonatal alloimmune thrombocytopenia, and hemolytic disease of the fetus and newborn. Students will gain an understanding of the coagulation-related aspects of transfusion medicine including interpretation of test results and how they pertain to rational blood component ordering and utilization of transfusion alternatives. Students will also be exposed to blood component collection and care of the donor throughout the donation process. Donor screening, reactions to blood donation, and interpretation of infectious disease tests as they relate to transfusion medicine will be covered during this rotation. Students will spend time both at the UCIMC fixed-site blood donor center, UCI Campus Blood Donor Center, and at off-site collection events.

PREREQUISITES

UCI students must have successfully completed the basic science curriculum. Extramural students must be in the final year of undergraduate medical education and have completed course work equivalent to UCI's Clinical Pathology and General Pathology courses.

RESTRICTIONS

Students must obtain permission from faculty prior to enrollment. This rotation is not accepting international students.

COURSE DIRECTOR: Robert A. Edwards, MD, PhD

Instructing Faculty: Minh-Ha Tran, DO, & staff

Elective Coordinator: Ashley Dunicliffe

INFORMATION FOR THE FIRST DAY

Who/Location/Time to Report to on First Day: Contact site coordinator

SITE: UCI Medical Center, Douglas Hospital, 3rd Floor, Room 3431 (follow signs to Blood Bank)

DURATION: 2 weeks minimum

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

Extramural students enrolled at a U.S. LCME medical school must use VSAS to apply. To apply please refer to the [Visiting Student Learning Opportunities](#) website.

Periods Available: Throughout the year. 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: 2

WHAT STUDENTS SHOULD DO TO PREPARE FOR THE COURSE

Contact the instructor the week prior to starting in order to receive journal club articles or other reading assignments.

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 pathelectives@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. 655B, Smith, Request for appointment)

2. Course Objectives and Program Objective Mapping

The following are the learning objectives for the 655B 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
Discuss the risks and benefits of blood component therapy			
Understand the importance of properly identifying specimens, donors, and recipients.			
Demonstrate a basic understanding of routine blood bank serology, indications for blood component therapy, and apheresis – both donor and therapeutic.			
Interpret basic coagulation test results and describe how blood component ordering may be guided by these results			
Understand principles of blood collection, processing, storage, and issue, including the interpretation of pretransfusion test results			

Key Topics: Serologic testing, hemolytic anemia, indications for blood component therapy and therapeutic apheresis, donor screening, blood component manufacture, coagulation testing and application of results, see above for further details.

Attitudes & Commitments: All interested students who are committed to learning and actively participating in their education are invited to participate.

Clinical Responsibilities of the Student: Communicating with clinicians, gathering information from patients and patient charts, interacting with donors, patients, and laboratory staff.

3. Course Resources

TEXTS AND READINGS: SUGGESTED

Selected in accordance with case material.

4. Major Exams, Assignments and Grading

MANDATORY SESSIONS

Conference/Lecture/Small Group Sessions: Daily

Course Hours Weekly Summary: 40 hours/week

MAJOR ASSIGNMENTS AND EXAMS

Patient Care Responsibilities: Variable, dependent upon the workload at the time.

Percentage of Time Student will Participate in Ambulatory Setting: Blood Bank/Mobile Collection Event~20%

Procedures to be Learned by the Student: None; however, there are many diagnostic procedures performed by laboratory staff. It is expected that students observe and develop an understanding of these procedures.

GRADING

The student will receive a grade of Honors, Pass or Fail. The student's final grade will be submitted on the standard UCI elective form. Based upon attendance, initiative and course knowledge. If the student fails the elective, a grade of "F" will be permanently recorded on his/her transcript. The student can repeat the course for a second grade; however, the "F" will not be removed from the transcript.

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.