# Spring, 2017-Syllabus MCB 250 M/W 9:30-11 Lecture 125 LKS

## Instructor Information

Instructors Names: Professors David Raulet, Ellen Robey and Bill Sha Office Locations: 485 LSA (Raulet), 471 LSA (Robey), 547 LSA (Sha) Office Hours (Time and Day): Mondays, 11-noon E-mail: raulet@berkeley.edu; erobey@berkeley.edu; bsha@berkelely.edu

## **Course Description**

Molecular and cellular analysis of the immune response emphasizing concepts and methodology. Innate immunity, pathogen sensors, antibodies and T cell receptors, lymphocyte activation, tolerance and selection. Antigen processing, T cell subtypes, and T regulatory cells. NK cells, tumor surveillance, and AIDS.

Prerequisites: Graduate status, or 100, 110, 140, 150 and consent of instructor

### **Course Resources**

- Required Text: Readings from literature
- Website/Online Resources: bCourse website will be used for providing course materials and lecture Powerpoint uploads
- Recommended Texts & Other Readings: Murphy, Janeway's Immunobiology, 9th Edition, Garland, 2016

## Policies & Grading

### How to Succeed in this Course

Monitor whether you are following the material. If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. Attend Faculty office hours; bring your questions and think about those from other students.

#### **Course Requirements**

- Lecture and Discussion Attendance: Students are expected to attend all class sessions and discussion sessions, as listed on the course calendar, attendance will be taken.
- Participation: Student participation is an essential component of the course and will be monitored by instructor primarily during discussion sessions, We check whether you attend and "encourage" participation when it is not forthcoming

- The course grade is determined by two exams and the participation in the discussions and classes as described in the Grading Policy below.
- Research papers, lecture powerpoints, and assignments will be posted on bCourse. Before the exams, we will provide an old exam ahead of a discussion session where we will go over the answers.
- Exam dates, times, and locations are listed in the lecture schedule

#### **Course Policies**

I. Safe, Supportive, and Inclusive Environment:

Whenever a faculty member, staff member, post-doc, or GSI is responsible for the supervision of a student, a personal relationship between them of a romantic or sexual nature, even if consensual, is against university policy. Any such relationship jeopardizes the integrity of the educational process.

Although faculty and staff can act as excellent resources for students, you should be aware that they are required to report any violations of this campus policy. If you wish to have a confidential discussion on matters related to this policy, you may contact the Confidential Care Advocates on campus for support related to counseling or sensitive issues. Appointments can be made by calling (510) 642-1988.

The classroom, lab, and work place should be safe and inclusive environments for everyone. The Office for the Prevention of Harassment and Discrimination (OPHD) is responsible for ensuring the University provides an environment for faculty, staff and students that is free from discrimination and harassment on the basis of categories including race, color, national origin, age, sex, gender, gender identity, and sexual orientation. Questions or concerns? Call (510) 643-7985, email ask\_ophd@berkeley.edu, or go to <a href="http://survivorsupport.berkeley.edu/">http://survivorsupport.berkeley.edu/</a>.

#### II. DSP Students

**Ex:** Inform your instructor of any accommodations needed during the first week of the course.

#### III. Cheating

Cheating will not be tolerated. UC Berkeley's cheating policy (http://bulletin.berkeley.edu/academic-policies/#studentconductappealstext) will be followed. Test papers are photocopied before they are handed back and answers are analyzed using plagiarism detection software. If an alteration is found on an exam question for which a correction is requested the student will automatically be assigned a zero for that entire test and the Office of Student Conduct will be notified. Copying another's answers during an exam and other forms of cheating including plagiarism will result in the same penalties.

#### IV. Incomplete Policy

**Ex:** Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if instructors have been apprised in real time of any issues leading to the incomplete. All incomplete course assignments must be

completed within 1 month.

#### V. Late Work Policy

Be sure to pay close attention to the schedule. There will be no make up exams because you scheduled travel or other activities that prevent you being there during a scheduled exam. A serious and compelling reason and instructor approval will be required for any special scheduling of exams.

#### VI. Letters of Recommendation

Any of the three instructors may be approached for a letter of recommendation. Consistent contributions to the paper discussions sections and during lecture is the best way to become known to the instructors. You should provide the instructor a copy of your complete transcript, and your CV.

#### VII. Grading Policy

Points	Description
200	Two exams (weighted equally)
100	Discussion (and class) participation
300	Total Points Possible

### **Grade Determination**

We generally grade on a curve. As it is a graduate level course with well qualified students, the average grade is in the B+ range, but we may adjust the average up or down some if we assess that the overall student performance in a given year is unusually strong, or weak, respectively.

## **Course Structure**

- The course emphasizes experimental underpinnings of modern immunology. The primary teaching mode will be lectures describing the evolution of the field from an experimental perspective. The lectures are interactive, with conventional lecturing interspersed with questions directed to students and discussion of the responses based on those interactions. The instructors welcome questions from students as well.
- There is no required textbook, but we list readings in a leading textbook (Janeway's Immunobiology) for students who desire to bolster their background preparation.
- There is a required discussion section each week where we have a round table discussion of a single selected research paper concerning an important immunological topic. We dissect the issue the paper addresses, the methodology and logic employed to

address the question, the strengths and weaknesses of the results in addressing the problem, and the implications. We emphasize methodological, conceptual and practical aspects of the paper and the field. Student participation in discussion sections is an essential component of the course and is required.