

## MCB150 SPRING 2021: MOLECULAR IMMUNOLOGY

### Syllabus

MCB150 is a course in current molecular immunology. It is geared towards students with strong backgrounds in basic biology, biochemistry, molecular biology and cell biology. We will focus on basic concepts in immunology with emphasis on the experimental approaches that have led to our current understanding of the development and function of the immune system. In addition, we will consider controversial topics and areas of current investigation in immunology. We expect students to also become familiar with immunologic techniques that are used in many scientific disciplines as well as clinical medicine.

### Professors:

<b>Ellen Robey</b> <a href="mailto:erobey@berkeley.edu">erobey@berkeley.edu</a>  Office Hours: Tues 12-1 <a href="https://berkeley.zoom.us/j/94041095233?pwd=dzFvbEtac24yVmxybEY1cmdHajVjUT09">https://berkeley.zoom.us/j/94041095233?pwd=dzFvbEtac24yVmxybEY1cmdHajVjUT09</a> Meeting ID: 940 4109 5233 Passcode: 693847	<b>Laurent Coscoy</b> <a href="mailto:lcoscoy@berkeley.edu">lcoscoy@berkeley.edu</a>  Office Hours: Tues 12-1 <a href="https://berkeley.zoom.us/j/93958497169pwd=RENONFd5cHhyNm9lWVY2eGVhd3c4Zz09">https://berkeley.zoom.us/j/93958497169pwd=RENONFd5cHhyNm9lWVY2eGVhd3c4Zz09</a> Meeting ID: 939 5849 7169 Passcode: 921225
--	---

### Graduate Student Instructors:

- Victoria Rael [victoriarael@berkeley.edu](mailto:victoriarael@berkeley.edu)
  - Office Hours Tuesdays 11:30am-12:30pm
  - Link: <https://berkeley.zoom.us/j/6794120047?pwd=UVQ3Z3d6WFp0dTBXWGICanQ5ZmJWQT09>
  - Meeting ID: 679 412 0047
  - Passcode: VRMCB150
- Elizabeth Turcotte [eaturcotte@berkeley.edu](mailto:eaturcotte@berkeley.edu)
  - Office Hours Wednesdays 4:00pm-5:00pm
  - Link: <https://berkeley.zoom.us/j/93149175010?pwd=dkRwdVN5R2UrQk5JcW1HdXJKbGY4UT09>
  - Meeting ID: 931 4917 5010
  - Passcode: 739182
- Tim Campbell [tcampbell@berkeley.edu](mailto:tcampbell@berkeley.edu)
  - Office Hours Wednesdays 10:00am-11:00am
  - Link: <https://berkeley.zoom.us/j/98211458679?pwd=TWdWVzBRSW9RWWthTEJWZX A5RFBRQT09>
  - Passcode: MCB150.OH

### Lectures:

Tuesday/Thursday: 9:30-11:00 AM, via Zoom

For lectures 1-18:

<https://berkeley.zoom.us/j/99597309074?pwd=REpTRGd3QmMwcWU2eGNreURiTVo5QT09>

Meeting ID: 995 9730 9074

Passcode: 126860

For lectures 19-26:

<https://berkeley.zoom.us/j/98604755495?pwd=YjFrUEhFNTZYMM0wWlI1ZUhSYjIXdz09>

Meeting ID: 986 0475 5495

Passcode: 654758

### Discussion Sections

There are 6 discussion sections for this course:

---

DIS 101	24927	F 9:00A	Victoria
---------	-------	---------	----------

---

DIS 102	22977	F 10:00A	Tim
---------	-------	----------	-----

---

DIS 103	22978	F 11:00A	Tim
---------	-------	----------	-----

---

DIS 104	24928	F 12:00P	Victoria
---------	-------	----------	----------

---

DIS 105	22980	Th 1:00P	Elizabeth
---------	-------	----------	-----------

---

DIS 106	22979	Th 2:00P	Elizabeth
---------	-------	----------	-----------

Attendance at a discussion section is required. The purpose of these sections is to allow you to ask questions and to clarify the material presented in the lectures and the text. When appropriate, the discussion leader may present short reviews of difficult material as well as material not covered in lecture. Discussion sections will begin in the first week of class. You will be awarded 2 points for each discussion section for a maximum of 20 points.

### Problem sets

Problem sets will be assigned each week and should be submitted via bCourses by Thursday at 1pm the following week (before the first discussion section meets). The purpose of these problem sets is to help you evaluate your understanding of the material we have covered. Problem sets will be scored for completeness, but not correctness. You will be awarded 2 points for each problem set for a maximum of 20 points.

### Reading

The required textbook for this course is *Janeway's Immunobiology*, by Murphy et al, 9th Edition. It is available at the ASUC Bookstore, other local bookstores or could be obtained online, and we advise that you each purchase a copy. Reading assignments for each lecture will refer to this text. To get the most out of the lectures, you should skim the essential reading before each lecture.

One of the challenges in studying immunology is that the immune system is a complex network, and it is difficult for the beginner to read about any part of it without encountering reference to other totally unfamiliar parts. There is no alternative but to plunge in and to work

through perhaps some initial confusion until the parts begin to fall into place. Frequent references to the overview (Chapter 1), and appropriate questions to your instructors and discussion leaders will help minimize the confusion. Do not hesitate to ask questions - all too often a particular term may mean one thing to the layman, and another to the professional immunologist. The only way to clear up the problem is to ask, **promptly**, when something doesn't seem to make sense!

### **In class participation**

There will be some in-class polls and breakout room discussions. These will be scored based on participation only. You can earn 1 point/lecture for a maximum of 20 points.

### **Getting Help**

If you have questions at any time during the course, promptly ask one of the instructors or your discussion leader. Office hours are a great place to ask questions. Historically, students who attend office hours do better in this course. Immunology is a cumulative subject, and a few minutes spent clarifying points of confusion early in the course can save you much time and trouble later. To understand the medically related material discussed in the last part of the course, you need to be thoroughly familiar with the basic material on the function of the immune system presented in the first part of the course.

You can also submit questions to your GSI via the "MCB150 Question Repository" google sheet:

<https://docs.google.com/spreadsheets/d/1Xjf9quJX6I3efMPAQw53HTZI9lyEd3pKwmy31O7KBak/edit?usp=sharing>.

### ***On line Teaching Evaluations:***

*Teaching evaluations can be entered on line for the last 2 weeks of each group of lectures. We will provide 10 minutes in class near the end of each group of lectures to complete the faculty online evaluation.*

### **Examinations and Grading:**

There will be two midterms and one final examination. The examinations will be primarily of short-answer type and will cover material presented in the lectures in the essential reading and the problem sets. **The examinations are cumulative, but place a greater emphasis on the more recently taught material.**

Your grade for the course will be based upon the following factors:

Midterm I: 150 points

Midterm II: 150 points

Final Examination: 150 points

Discussion section attendance: 20 points

Problem sets: 20 points

In class participation: 20 points

**Schedule of exams:**

Midterm I (lectures 1-9): Tuesday, February 23rd 9a-11am

Midterm II (lectures 10-18): Tuesday, April 1st 9a-11am

Midterm III (lectures 19-26): Exam group 10: Wed, May 12, 2018, 1130AM-230 PM

**There are NO make-up midterm exams.**

**Additional 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](mailto:ask_ophd@berkeley.edu), or go to <http://survivorsupport.berkeley.edu/>.

**II. DSP Students**

Please inform your instructor and your GSI 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.