

**Immunology (Fall 2018) Syllabus**  
**MBIO 4100**  
**11:00 - 11:50 AM, M-W-F**  
**Room: Dorothy & Bill Bizzini 108**

Instructor: Choong-Min Kang, Ph.D.

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Office hours: Tue & Thr, 12:00 PM - 1:00 PM,  
Other hours may be scheduled on an individual basis.

Course Description: A survey of basic immunological principles is presented for the student to provide a general orientation to immunology. Certain concepts and the major effectors of immune responses are introduced and more detailed discussions are held later in the course. Central aspects of innate and humoral immune responses will be covered. Exploration of special topics in immunology such as autoimmunity and immunodeficiency will be held as group study and presentations. Immunologic principles of laboratory diagnosis of human disease will also be discussed.

Immunology is a technical and vocabulary-heavy subject and most of the material taught may be entirely new to you. It is one of the difficult scientific disciplines. It is imperative that you keep up with the reading and review the lecture material after each class. Learning will be cumulative, meaning that early concepts will re-emerge and be expanded upon throughout the semester. Thus, 'cramming' for an exam is not a very good idea.

Course Credits: This is a 3-credit course

Course Prerequisites: Students are required to have completed BIOL 3310 or BIOL 3350 or MBIO 3010 or CHEM 4400 or consent of instructor. Those who managed to enroll in this course without satisfying this prerequisite will probably not succeed in this course and for this reason will be required to drop it. Students who have questions about these prerequisites should see the instructor.

Textbook & lecture slides:

**Janeway's Immunobiology**, 9th edition, 2017, Kenneth Murphy.

Every effort will be made to provide the lecture slides on Blackboard a day or more before class. However, not all the slides from each lecture will be provided on Blackboard and some slides may only be shown in class.

Exams & Grades: A total of 700 points are possible for the course. Each exam will follow a similar format. You will be required to answer multiple choice, short answer, and short essay-type questions.

Grading summary:

5 Regular Exams	600 points
<u>Homework + iClicker</u>	<u>up to 100 points</u>
<b>Total points possible</b>	<b>700 points</b>

Missed exams due to illness or extenuating family circumstances will require formal written documentation. Make-up exams may be offered on a case-by-case basis.

Exam corrections: When each exam is returned, you will have **ONE WEEK** to correct errors in grading or challenge a question on the exam. Corrections and inquiries about specific exam questions must occur in person during office hours.

Final Course Grade: The final grade for this course will be derived from the total points earned divided by the total number of points possible for the course. This numerical value will be converted to a percentage.

The course grade will be derived from the following scale:

A = 90 - 100%  
B+ = 85 - 89%  
B = 80 - 84%  
C+ = 75 - 79%  
C = 70 - 74%  
D+ = 65 - 69%  
D = 60 - 64%  
F = 0 - 59%

Lecture Policy: Every effort will be made to begin and end lectures on time. Please try to be in your seats when class starts and do not leave class prematurely.

Students who insist on talking during class will be asked to leave if they continue to disturb the lecture. Questions and other dialog with the instructor are, of course, encouraged.

Cheating Policy: Any individuals caught cheating will automatically receive a grade of "F" for the course.

You must arrive on time for the exam. Students who arrive after the first student has finished with the exam and left the room will not be allowed to take the exam.

Students will not be allowed to leave the room during an exam. Once a student has left the room, he or she will not be allowed to return.

Absolutely no talking among students will be tolerated during the exam.

Course Outline: The lecture topics listed below are tentative and subject to change.

Week	Date	Chapter	Topic
1	8/22	1	Basic concepts in immunology
	8/24	1	Basic concepts in immunology
2	8/27	1	Basic concepts in immunology
	8/29	1	Basic concepts in immunology
	8/31	1	Basic concepts in immunology
3	9/3		<b>Labor Day</b>
	9/5	1	Basic concepts in immunology
	9/7	2	Innate immunity
4	9/10	2	Innate immunity
	9/12		<b>Exam 1</b>
	9/14	3	The induced responses of innate immunity
5	9/17	3	The induced responses of innate immunity
	9/19	3	The induced responses of innate immunity
	9/21	4	Antigen recognition by B-cell and T-cell receptors
6	9/24	4	Antigen recognition by B-cell and T-cell receptors
	9/26	4	Antigen recognition by B-cell and T-cell receptors
	9/28	4	Antigen recognition by B-cell and T-cell receptors
7	10/1	5	The generation of Lymphocytes antigen receptors
	10/3		<b>Exam 2</b>
	10/5	5	The generation of Lymphocytes antigen receptors
8	10/8	5	The generation of Lymphocytes antigen receptors
	10/10	5	<b>Non-Instructional Day - No class</b>
	10/12	6	Antigen presentation to T lymphocytes
9	10/15	6	Antigen presentation to T lymphocytes
	10/17	6	Antigen presentation to T lymphocytes
	10/19	6	Antigen presentation to T lymphocytes
10	10/22	7	Signaling through immune-system receptors
	10/24	7	Signaling through immune-system receptors
	10/26		<b>Exam 3</b>
11	10/29	7	Signaling through immune-system receptors
	10/31	8	The development and survival of lymphocytes
	11/2	8	The development and survival of lymphocytes
12	11/5	8	The development and survival of lymphocytes
	11/7	8	The development and survival of lymphocytes
	11/9		The development and survival of lymphocytes
13	11/12	8	<b>Veteran's Day - no class</b>
	11/14	9	T-cell mediated immunity
	11/16	9	T-cell mediated immunity
14	11/19	9	<b>Exam 4</b>
	11/21	9	T-cell mediated immunity
	11/23		<b>Thanksgiving</b>
15	11/26	10	The humoral immune response
	11/28	10	The humoral immune response
	11/30	10	The humoral immune response
16	12/3	12	The mucosal immune system
	12/5	12	The mucosal immune system
	12/7	12	The mucosal immune system
17	12/10	12	The mucosal immune system
18	12/12		<b>Exam 5 (11:15 AM)</b>