

MIC 321 Fall 2011

The course is made up of seven didactic sections taught by faculty of the Department of Microbiology and Immunology, the Department of Pediatrics and the Department of Medicine at the Leonard M. Miller School of Medicine. A prerequisite for MIC321 is MIC301. An equivalent course from domestic or international institutions may satisfy this requirement under selected circumstances (please contact Roger Williams, the administrative director, for further information).

We strongly encourage you to prepare yourself for the lectures by studying in advance the assigned textbook pages (see curriculum) for a more interactive classroom experience and coherent understanding of the material. We encourage questions and discussions with the faculty and students.

Each section concludes with a unique day that begins with multiple-choice questions constructed by the honor students to prepare the class for the subsequent quiz. The class is encouraged to enter into a dialogue with the presenting students to solve the problem. Next, the students are asked to let the presenters know whether the question was understandable and useful. Afterwards, the written quiz will be taken. **Out of courtesy to your peers we ask that you remain seated until the professor has collected all quizzes.** If you are interested in the correct answers, you can stay until the lecturer has gone over the correct quiz answers.

You are **only permitted to receive a single quiz that must be returned at the time of the quiz collection.** All quizzes are numbered to ensure that these instructions are followed. The scores of your quiz will be posted on Blackboard without returning to you the graded quiz. You may request to look over your graded quiz with Roger Williams, the administrative director.

There are seven quizzes, each made up of 22 multiple-choice questions. The **five best scores of the first six quizzes** will count toward your cumulative score along with the score from the **mandatory quiz 7.**

The max total points are 132. Students are NOT graded on a curve but as follows:

≥115 pts = A- ≥120 pts = A ≥125 pts = A+
≥100 pts = B- ≥105 pts = B ≥110 pts = B+
≥85 pts = C- ≥90 pts = C ≥95 pts = C+
≥70 pts = D- ≥75 pts = D ≥80 pts = D+
69 pts or less = F

Class attendance may be taken periodically at the liberty of the lecturers. Please be prepared that we will check your attendance, especially later in the semester when you may have accumulated apparently sufficient points. Therefore, it is recommended that all students attend all classes.

Absences are excused only when you provide adequate documentation from your doctor, a police report, or death certificate of a family member to Roger Williams within two weeks of the missed lecture. Similarly, you will not be allowed to make up a quiz unless you provide the administrative director with the adequate documentation described above for absences. All

makeup quizzes will be administered on the date provided in the schedule. **Two points are subtracted when a class is missed unexcused.**

<u>DATE</u>	<u>LECTURER</u>	<u>TEXTBOOK ASSIGNMENT</u>
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Abbas/Lichtman; third updated edition

SECTION I: LICHTENHELD

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|----------------|---|----------------|
| Aug. 25 | Course introduction, historical perspective and basic concepts: Immunity – Thucydides; smallpox – Mary Wortley and Edward Jenner; pathogen attenuation – Louis Pasteur | pp 1-13; 18-22 |
| Aug. 30 | Historical perspective and basic concepts continued: Antibodies – Emil von Behring and Shibasaburo Kitasato; importance of cells (macrophages) – Elie Metchnikoff; the immune system can cause disease (anaphylaxis) – Charles Richet; antibody and complement work together – Jules Bordet; blood groups express tissue antigens – Karl Landsteiner; immunological tolerance to "self" and its generation – Macfarlane Burnet and Peter Medawar; H-2 (MHC) gene loci govern transplant rejection – George Snell and others | pp 1-13; 18-22 |
| Sept. 1 | Historical perspective and basic concepts continued: H-2 (MHC) gene loci also govern T-cell recognition – Rolf Zinkernagel and Peter Doherty; Generation of monoclonal antibodies – Milstein and Kohler; generation of diversity by recombination – Susumu Tonegawa; role of danger signals and receptors – Polly Matzinger and Charles Janeway | pp 1-13, 18-22 |
| Sept. 2 | Last day to register | |
| Sept. 6 | Solve multiple-choice questions prepared by honor students | Quiz I |

SECTION II: JURECIC

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| Sept. 8 | Tissues of the immune system and lymphocyte migration | 13-18 |
| Sept. 9 | Last day to drop course without a "W" | |
| Sept. 13 | Innate immunity continued | 23-43 |
| Sept. 15 | Innate immunity continued | 23-43 |
| Sept. 20 | Solve multiple-choice questions prepared by honor students | Quiz II |

SECTION III: PODACK

Sept. 22	Antigen capture and presentation	45-65
Sept. 27	Antigen capture and presentation continued; principles of antigen recognition	45-65; 67-76
Sept. 29	Antibody and T-cell receptor structure and recognition	67-76
Oct. 4	Solve multiple-choice questions prepared by honor students	Quiz III
Oct. 5	Academic alerts on MyUM	

SECTION IV: ANDREANSKY

Oct. 6	Repertoire generation and selection	76- 87
Oct. 11	T-cell activation and differentiation	89-111
Oct. 13	T-cell activation and differentiation continued	89-111
Oct. 14		Fall Recess
Oct. 16	Deadline for Writing Credit approval of literature	Lichtenheld
Oct. 18	Solve multiple-choice questions prepared by honor students	Quiz IV

SECTION V: DIAZ-MONTERO

Oct. 20	Effector mechanisms of cell-mediated immunity	113-129
Oct. 25	Effector mechanisms of cell-mediated immunity continued	113-129
Oct. 27	Biology of humoral immune response	131-141
Oct. 28	Last day to drop course	
Nov. 1	Solve multiple-choice questions prepared by honor students	Quiz V

SECTION VI: KHAN

Nov. 3	Isotype switching and affinity maturation	141-151
Nov. 8	Effector mechanisms of humoral immunity	153-171
Nov. 10	Tolerance and autoimmunity	173-187
Nov. 15	Solve multiple-choice questions prepared by honor students	Quiz VI

SECTION VII: STONE

Nov. 17	Tumor and transplantation immunology	189-204
Nov. 22	Hypersensitivity diseases	205-221
Nov. 24 – Nov 27		Thanksgiving Recess
Nov. 29	Immunodeficiencies including AIDS	223-237
Dec. 1	Solve multiple-choice questions prepared by honor students	Quiz VII

Dec. 6

**MAKE-UP OF MISSED QUIZ
LICHTENHELD / WILLIAMS
See course syllabus for eligibility**

Dec 7 – Dec 14 FINALS for classes other than MIC321

Dec. 15

**Deadline for Writing Credit
Hard copy and e-version are due**