MIC 321 Fall 2012

COURSE STRUCTURE:

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).

LECTURE DAYS:

We strongly encourage you to come prepared for the lectures and participate by studying in advance the assigned textbook pages (Lecture Schedule & Reading Assignments). We encourage questions and discussions with the faculty and students and, therefore, use of i>clickers is mandated. Failure to bring or use an i>clicker may be counted as absence and, as such, will result in loss of Bonus Points (see below).

ORGANIZATION OF QUIZ DAYS:

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. These questions will be e-mailed 24 hours prior to the quiz to all students. The class is encouraged to enter into a dialogue with the presenting students to solve the problem. Afterwards, the written quiz will be taken. Out of courtesy to your peers we ask that you remain seated until all quizzes have been collected. If you are interested in the correct answers, we ask you to stay for 5 minutes following the collection of all quizzes when the lecturer will go over the correct 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.

QUIZ SCORES AND GRADES:

There are seven quizzes, each made up of 25 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. Therefore, the maximum number of total points you can obtain from the quizzes is 150 points (6 x 25 points)!

Students are NOT graded on a curve but as follows:

 $\geq 135 \text{ pts} = \text{A} \ge 140 \text{ pts} = \text{A} \ge 145 \text{ pts} = \text{A} + \\ \geq 120 \text{ pts} = \text{B} - \ge 125 \text{ pts} = \text{B} \ge 130 \text{ pts} = \text{B} + \\ \geq 105 \text{ pts} = \text{C} - \ge 110 \text{ pts} = \text{C} \ge 115 \text{ pts} = \text{C} + \\ \geq 90 \text{ pts} = \text{D} - \ge 95 \text{ pts} = \text{D} \ge 100 \text{ pts} = \text{D} + \\ 89 \text{ pts} \text{ or less} = \text{F}$

Note that honor students are at risk to loose 4 points from their accumulated points for each time their group fails to prepare meaningful questions (as decided by the lecturer). See Honor Students Assignment Tab!

MISSING A QUIZ

Missing a quiz due to due to observance of religious holy days is permissible only if both the academic and administrative course director are notified by the student in writing by August 31, 2012.

Missing a quiz due to an interview for a post baccalaureate job or education opportunity will be excused only if the interview has been scheduled prior to the first day of the MIC321 class (August 23, 2012). You are required to provide a copy of your invitation to both the academic and administrative course director by August 31. In addition, you need to provide a copy of the stub for your airplane seat used on the return to Miami and email it to us within seven days of your interview.

Missing a quiz for reasons other than religious holy days can be excused only after you provide original documentation from your doctor, a police report, or death certificate of a family member to the administrative director Roger Williams within two weeks following the quiz. All makeup quizzes will be administered on the single date provided in the schedule at a location to be announced. You are permitted to make up a total of two excused quizzes for the entire semester.

BONUS POINTS:

In addition to the 150 points from the quiz, **you are eligible to receive up to 7 bonus points for regular attendance.** Attendance is monitored by circulating a signature sheet during class. Fraudulent signing for others than yourself is a violation of the honor code and will be result in dismissal from the course and notification of the dean's office. Because we support attendance with bonus points, your absence from a lecture will not be excusable for any reason and you will loose the bonus point. Note that absence from lectures is different from missing a quiz (see above). The bonus points are provided as follows

0 absence	=	7 bonus points
1 absence	=	6 bonus points
2 absences	=	5 bonus points
3 absences	=	4 bonus points
4 absences	=	3 bonus points
5 absences	=	2 bonus points
6 absences	=	1 bonus points
> 6 absences =		0 bonus points

DATE LECTURER TEXTBOOK PAGE ASSIGNMENT

SECTION I: LICHTENHELD

Aug. 23 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. 28 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

Aug. 30 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 dendritic cells and "danger" for immune activation - Ralph Steinman,

Jules Hoffman and Bruce Beutler (Polly Matzinger and Charles Janeway)

pp 1-13; 18-22

Aug. 31 Last day to register

Sept. 4 Solve multiple-choice questions prepared by honor students Quiz I

SECTION II: JURECIC

Sept. 6 Tissues of the immune system and lymphocyte migration 13-18

Sept. 7 Last day to drop course without a "W"

- Sept. 11 Innate immunity continued 23-43
- Sept. 13 Innate immunity continued 23-43
- Sept. 18 Solve multiple-choice questions prepared by honor students Quiz II

SECTION III: PODACK

- Sept. 20 Antigen capture and presentation 45-65
- Sept. 25 Antigen capture and presentation continued; principles

of antigen recognition 45-65; 67-76

- Sept. 27 Antibody and T-cell receptor structure and recognition 67-76
- Oct. 2 Solve multiple-choice questions prepared by honor students Quiz III
- Oct. 3 Academic Alerts on MyUM
- SECTION IV: ANDREANSKY
- Oct. 4 Repertoire generation and selection 76-87
- Oct. 9 T-cell activation and differentiation 89-111
- Oct. 11 T-cell activation and differentiation continued 89-111
- Oct. 14 Deadline for Approval of WC Literature by Dr. Lichtenheld
- See Writing Credit Tab for Requirements
- Oct. 16 Solve multiple-choice questions prepared by honor students Quiz IV
- SECTION V: DIAZ-MONTERO
- Oct. 18 Effector mechanisms of cell-mediated immunity 113-129
- Oct. 23 Effector mechanisms of cell-mediated immunity continued 113-129
- Oct. 25 Biology of humoral immune response 131-141
- Oct. 25 Last day to drop course
- Oct. 26 Fall Recess
- Oct. 30 Solve multiple-choice questions prepared by honor students Quiz V

SECTION VI: KHAN

- Nov. 1 Isotype switching and affinity maturation 141-151
- Nov. 6 Effector mechanisms of humoral immunity 153-171
- Nov. 8 Tolerance and autoimmunity 173-187
- Nov. 13 Solve multiple-choice questions prepared by honor students Quiz VI

SECTION VII: STONE

- Nov. 15 Tumor and transplantation immunology 189-204
- Nov. 20 Hypersensitivity diseases 205-221
- Nov. 22 25 Thanksgiving Recess
- Nov. 27 Immunodeficiencies including AIDS 223-237
- Nov. 29 Solve multiple-choice questions prepared by honor students Quiz VII
- Dec. 4 Make-Up of Missed Quiz
- See Syllabus Tab for Eligibility and Requirements
- Dec 5 –12 FINALS for classes other than MIC321
- Dec. 13 Hard Copy and E-version are due for WC
- See Writing Credit Tab for Requirements