

SYLLABUS: Immunology
IMMU-2001-01SP15
Spring/Fall 2016

CONTACT INFORMATION:

Course Director

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Department Chair

John D. Clements,
Ph.D.

COURSE MATERIALS:

The optional text for the course is Immunology for Medical Students, 2nd edition (2007) by Roderick Nairn and Matthew Helbert (Mosby Elsevier). There will also be handouts of all lecture slides and notes.

COURSE DESCRIPTION:

The course Immunology is designed to provide a basis of terminology relevant to the basic concepts of immunology. It commences with the important components (cell, tissues; antibodies; immunoglobulin) involved in host defense against infectious agents. Introductory lectures serve to describe and differentiate between natural defense (innate) mechanisms and adaptive immunity mediated by functional B and T lymphocytes and their products. Subsequently, cellular interactions, especially the differentiation of helper T cells subsets and the production of relevant cytokines, will be described. This will include the mechanisms of T cell activation and regulation. Finally, clinical immunology will be discussed: autoimmunity and autoimmune diseases; hypersensitivity reactions, including atopic disorders and asthma; mechanisms of transplant rejection; and immunodeficiency disorders.

COURSE OBJECTIVES:

The overall objectives of the course are as follows:

- 1) Demonstrate a fundamental working knowledge of the basic principles of immunology
- 2) Explain how these principles are being applied to knowledge of immune function
- 3) Solve problems in clinical immunology by making use of the available resources, and through communication with colleagues.

To reach these goals, the following policies have been established for the Medical Immunology course:

- The course format consists of lectures and small group learning sessions. The

instructor for the course strongly suggests that students read the assigned chapters(s) prior to coming to class, since lectures will stress important but often complex immunological concepts. Due to the short duration of the course, new material will be presented in each lecture and each small group session.

- Small group learning in the form of "Patient Oriented Problem Solving" (POPS) will be an important component of this course. These exercises are not only designed to allow students the opportunity to apply knowledge of basic immunology to solve clinical problems, but also to promote interaction with colleagues. To achieve these goals, it is necessary that everyone participate in POPS. **Completion of the POPS group exercises and quizzes is mandatory.** The POPS exercises are designed to promote interaction between you and your colleagues to solve a clinical problem.
- There will be several occasions to interact with lecturers to ask questions concerning material presented in lecture and in POPS sessions. You may contact Dr. McLachlan at the end of lectures, after lectures, or by appointment. Please do not wait until the last minute to clarify any questions that you may have.

TEACHING PHILOSOPHY:

Lectures cover the main learning objectives for each section. It is strongly suggested that students read the assigned reading material prior to coming to class, since lectures will stress important but often complex immunological concepts. The first portion of each lecture will review material from the previous lecture in order to best reorient and introduce the new material. I believe this best reinforces learning of the material. I will use a combination of Socratic and didactic teaching methods and students should expect to be called upon to answer questions regarding the material.

Review Sessions: A Q&A review session will be held before each exam and will consist primarily of clicker questions and an interactive period. Students should come prepared with any questions they have concerning the relevant material. The session should last as long as is required to answer questions.

COURSE POLICIES:

Attendance policy/philosophy:

Professionalism is a major component of our medical curriculum. Students should conduct themselves appropriately in the various educational activities of the curriculum. This includes coming to educational activities on-time; using laptop computers only for course work, avoiding the use of cell phones during the educational activity; and not disrupting the class if late.

Attendance at formal lectures & end-of-block review sessions is not mandatory, but is highly encouraged. Completion of POPS sessions is mandatory (since group learning will be compromised if team members do not attend). Lack of attendance at POPS sessions will therefore negatively affect a student's grade as indicated below.

Excused Absence Policy

If a student has a legitimate reason for missing a required event (POPS, Exam), they should request an excused absence from the Dean For Academic Affairs (Dr. Marc Kahn) as soon as possible. If an excused absence is granted, lack of participation in the small group activity will not negatively affect their grade. It is the student's responsibility to request & obtain the excused absence in a timely manner, and to consult with classmates & the course director for any questions on the missed activity. Students should also notify the course director concerning their

excused absence ASAP since records are kept regarding absences at POPS & Exams. Exams missed with an excused absence will be made up in a timely manner.

Copy Statement

Some of the materials in this course are possibly copyrighted. They are intended for use only by students registered and enrolled in this course and only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the Teach Act (Section 110(1) of the Copyright Act) <http://www.copyright.gov/docs/regstat031301.html>.

GRADING/EVALUATION:

The grading policy established by the School of Medicine is:

Pass (P) 70-100

Failure (F) <70

The grades for the course will be calculated as follows:

SPRING (T1) EXAM 45%

FALL (T2) COMPREHENSIVE EXAM 45%

POPS participation 8%

Owl Club Survey 2%

There will be two examinations (50-60 questions). The material covered will translate to approximately 3 questions per lecture. The exam will consist of multiple-choice questions. Remember, 10% of the grade will consist of **mandatory** POPS participation (4% for each of two POPS) plus 2% for completing the Owl Club Course Survey. (Professionalism Score = 10%).

A zero will be given for an unexcused absence from an exam. A letter is required from Dr. Marc Kahn, Associate Dean of Student Affairs, to obtain an excused absence from an exam. Students with valid excuses will typically be required to take the exam within a week of the original date.

TULANE SCHOOL OF MEDICINE HONOR POLICY:

The Tulane University School of Medicine Honor Policy outlines the School of Medicine expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Honor Policy and for living up to their pledge **not** to violate the Honor Code.

- I. It shall be a violation of this Honor Code for a student to cheat.
- II. It shall be a violation of this Honor Code for a student to knowingly circumvent any course requirement.
- III. It shall be a violation of this Honor Code for a student to steal.
- IV. It shall be a violation of this Honor Code for a student to purposely impair another student's educational opportunity.
- V. It shall be a violation to act in a manner which is detrimental to the moral and ethical standards of the medical profession.
- VI. It shall be a violation for a student to knowingly deceive another student, faculty member, or professional associate with the intent to gain advantage, academic or otherwise, for said student or for any other student.
- VII. It shall be a violation for any student to fail to report any infraction of the

Honor System to an appropriate representative.

Tulane University School of Medicine Honor Policy can be found at:
<http://www.som.tulane.edu/student/honorcode/new.htm>

AMERICANS WITH DISABILITIES ACT:

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class. This syllabus and other class materials are available in alternative format upon request.
<http://erc.tulane.edu/AccomDefs.html>

For more information about services available to TUSOM student with disabilities, contact:
 The Goldman Office of Disability Services
 Center for Educational Resources and Counseling
 1st floor Mechanical Engineering Building
 Tulane University
 New Orleans, LA 70118-5698
 (504) 862-8433
 (504) 862-8435

SOM INSTITUTIONAL LEARNING GOALS/OBJECTIVES:

Knowledge (K=KNOWLEDGE)	Aligned with Course Learning Objective	Assessment Method
K1: basic scientific principles of cellular and molecular medicine	1	Exam, POPS
K3: scientific basis of modern therapeutics	ALL	Exam, POPS
K6: principles and application of scientific literature	3	Exam, POPS
K8: use of modern information technology	3	Exam, POPS
K9: basic principles and practice of medical ethics	3	Exam, POPS
K11: apply the basic science principles of normal and abnormal structure and function to clinical medicine	ALL	Exam, POPS
K12: apply the principles of clinical reasoning	ALL	Exam, POPS
K13: recognize and manage common medical problems	ALL	Exam, POPS
K14: recognize and respond to acute life-threatening problems	3	Exam, POPS
K16: apply the principles of evidence-based medicine	3	Exam, POPS
Attitude/Behavioral (AB=ATTITUDES/BEHAVIORS)	Aligned with Course Learning Objective	Assessment Method
AB1: act with integrity, honesty and candor	No formal LO	Peer evaluation
AB4: maintain confidentiality about patients, colleagues, faculty, etc.	No formal LO	Peer evaluation
AB5: practice humanism, courtesy, and social decorum	No formal LO	Peer evaluation
AB6: exhibit teamwork and collegiality	No formal LO	Peer evaluation
AB7: respect diversity	No formal LO	Peer evaluation
AB8: promote equity	No formal LO	Peer evaluation
AB9: work through ambiguity and uncertainty	No formal LO	Peer evaluation, Exam, POPS
AB10: altruism, honesty, ethical behavior, caring and compassion	No formal LO	Peer evaluation, Exam, POPS
AB11: use of adaptive mechanisms for dealing with stress	No formal LO	Peer evaluation, Exam, POPS
AB15: sensitivity to diversity	No formal LO	Peer evaluation
AB21: commitment to civic responsibilities	No formal LO	Peer evaluation
Skills (S=SKILLS)	Aligned with Course Learning Objective	Assessment Method
S5: communicate effectively in oral and written form	3	Peer evaluation, POPS
S6: work collaboratively in problem-solving	ALL	Peer evaluation, POPS

S7: navigate biomedical information resources	ALL	Peer evaluation, POPS
S8: use critical thinking	ALL	Exam, POPS
S10: use effective learning techniques	1, 2	Exam, POPS
S11: use learning resources, including mentors, effectively	1, 2	Exam, POPS
S12: evaluate and remedy personal deficiencies	ALL	Peer evaluation
S13: develop effective test-taking skills	1, 2	Exam
S14: manage time effectively	ALL	Exam, POPS
S15: balance personal and professional life	ALL	Peer evaluation
S17: order and interpret appropriate laboratory and diagnostic studies	3	Exam, POPS
S18: integrate history, physical examination and laboratory results	3	Exam, POPS
S21: recognize normal and abnormal findings across the life cycle	3	Exam, POPS
S23: use information and knowledge seeking skills necessary for life-long learning	No formal LO	Peer evaluation, Exam, POPS
S24: cope with ambiguity and uncertainty	No formal LO	Peer evaluation
S30: listen to and communicate information effectively to patients, families, and colleagues	3	Peer evaluation, POPS
S31: exercise conflict resolution	No formal LO	Peer evaluation,
S32: work effectively with others on the healthcare team	3	Peer evaluation, POPS

SOM INSTITUTIONAL COMPETENCIES:

From the list below, select the competencies that apply to your course/clerkship in the following outcome areas. Please delete those that do not apply to your course/clerkship. This can easily be done by placing the number of the learning objective that applies to the competency and listing how you plan to assess the outcome of the competency, by filling in the assessment method (see CurrMIT checklist).

PC=Patient Care	Aligned with Course Learning Objectives	Assessment Method
MK=Medical Knowledge		
MK1: Demonstrate an investigatory and analytic thinking approach to clinical situations.	3	Exam, POPS
MK2: Know and apply the basic and clinically supportive sciences, which are appropriate to their discipline.	ALL	Exam, POPS
ICS=Interpersonal and Communication Skills		
ICS2: Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.	No formal LO	POPS, Peer evaluation
ICS3: Work effectively with others as a member or leader of a health care team or other professional group.	No formal LO	POPS, Peer evaluation

SYLLABUS AND HANDOUT CHANGE POLICY:

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advanced notice. Additionally, handouts are subject to change at the instructor's discretion and any changes will be posted on Blackboard prior to the exam and students will be notified of the change via email.