University of Colorado Anschutz Medical Campus School of Medicine IMMU 7630 IMMUNOLOGY

Term: Fall 2011 Course dates/times: Tuesdays 1-3 PM Course location: Ed2 South Room 2305 Office Hours: By appointment, call or (better) email Professor/Course Director: J. John Cohen, MDCM, PhD Office location: Barbara Davis Center, Room 4603B Phone: 303-724-3998 Email address: john.cohen@ucdenver.edu

Purpose

<u>Catalogue Description</u>: An overview course in immunology for non-Immunology-program graduate students. The focus is human relevance and the practical use of immunology in a variety of fields. Students gain experience applying immunological knowledge to their own area of interest.

<u>Instructor Description:</u> This is an immunology course providing two semester-hours of credit in the Graduate School. It is lecture-based, with time allowed for discussion of interesting topics. The intention is to provide an overview of basic and clinical immunology as it applies to humans. We begin by considering the innate immune system and then see how that can lead to the activation of adaptive immunity. That is the immunity of T and B cells, which we consider in some detail, although our approach is to discuss principles rather than memorize details. Once we have a basis for it, we consider immunization and resistance to infection, and then those conditions in which there is a failure of immunity: immunopathology, including allergy, autoimmunity, immune complex disease, and immunodeficiency. The course is the central theme that organizes much of human biology in health and disease. It has close ties to pathology and microbiology, and also rheumatology and clinical immunology.

Course Objectives: Successful students will be able to:

- 1. Describe the function of the major components of the immune system in health and disease.
- 2. Articulate the reasons for immunization.
- 3. Explain common immune diseases in terms of the underlying basic principles.
- 4. Locate reliable information on immunology for the rest of their careers.

Requirements

<u>Required Texts</u>: No required text. The course notes are comprehensive for our purposes. They are available online at <u>http://immu7630.CafeSciColorado.org</u>

<u>Recommended Texts:</u> Recommended texts are described here: <u>http://immu7630.cafescicolorado.org/textbooks.htm</u>

<u>Evaluation:</u> There will be two multiple-choice tests, one at midterm and the other a final. Each will last 2 hours, and will consist of approximately 30 multiple choice questions in a variety of formats. Because these questions are carefully constructed and tested for validity, all exam copies must be turned in to the instructor at the end of the exam, and although the tests will be discussed and explained, they will not be returned and possession of a copy outside of an exam period is a serious violation of the honor code.

If at any stage of the course you are concerned that you are not understanding the material satisfactorily or have other issues that interfere with learning, please contact the instructor for help, which he is very willing to provide in confidence.

<u>Required course blog:</u> Instead of a term paper, which takes a lot of time and is seen only by the student and the instructor, we have since this course began used an online Blog. It is shared with an undergraduate course at the University of Arizona, Tucson. All students in IMMU 7630 are required to post at least one blog "article" before 16 November 2010, and to comment at least 4 times on blogs posted by others in IMMU 7630 or the Arizona course. Levels of detail are posted on the Blog site at <u>http://inflammablog5.blogspot.com</u> The emphasis is on clarity of explanation for a widely mixed audience, not technical jargon or excessive detail. Courtesy is essential. Plagiarism is not allowed.

<u>Grades:</u> The Graduate School requires the full **letter grade** (A-F) scoring system. We do not grade on the curve. After each test the performance of each item is evaluated; items that do not perform reliably are discarded and the remaining items re-graded. Because of the nature of immunology, the final exam will be cumulative, but the stress will be on the second half of the course. The sum of the midterm and final scores, plus the score for Blogging, expressed as a percent, will determine the student's grade according to the arbitrary list provided by the Registrar. Midterm and final will be equally weighted at 30% of the grade. Up to 40% of the grade can be achieved by excellent posts and comments on the Blog, so early and frequent posting is the most effective thing a student can do to perform well in this course.

All test items will be related to, and only to, the learning objectives.

<u>Course Policies</u>: Class attendance is optional, although rational persons will not miss a class if they can help it. The learning objectives may be modified at any time, with due notice. If you cannot take a test for any reason, it is imperative that you (or a friend) inform the instructor before the test takes place.

We very rarely use PowerPoint for teaching. The Learning Objectives are the essence of what you should be able to do at the end of each session. Most but not all the material will be in the course notes. We do not allow video recording of lectures except in the case of a justified accommodation request.

► The instructor expects everyone to read through the day's lecture notes *before* class. They will not be read or repeated to you, but class time will be used to expand on, explain, and illustrate the topics in the notes and learning objectives. If you have only one hour to study each lecture, spend that hour before class, not afterwards. This is HIGHLY valid behavior from an educational standpoint. Read through the notes and then try to respond to the Learning Objectives. Mark any area you did not fully understand or might want to hear more about in class.

An important objective of this course is to communicate freely, like colleagues. Please let JJC know if there are topics you'd like to discuss, or if you have suggestions for improving the course, or you just want to talk. JJC is trained in medicine, but spent most of his career in basic science (immunology), and is now very involved in learning theory. I especially focus on study skills and preparation for exams, so you might want to take advantage of that.

<u>Access, Disability, Communication</u>: "The University of Colorado at Denver and Health Sciences Center is committed to providing reasonable accommodation and access to programs and services to persons with disabilities. Students with disabilities who want academic accommodations must register with Disability Resources and Services (DRS), 177 Arts Building, 303-556-3450, TTY 303-556-4766, FAX 303-556-2074. I will be happy to provide approved accommodations, once you provide me with a copy of DRS's letter."

<u>Class schedule:</u> <u>http://immu7630.cafescicolorado.org</u> For a printable copy: <u>http://immu7630.cafescicolorado.org/PDF%20files/Schedule%207630%20Fall%202011c.pdf</u>