

SPRING 2011 COURSE INFORMATION

Immunology:	Biology 4200.001
LOCATION:	Lecture Room Visual Arts 223; Laboratory Room 114
TEXT:	Immunology – Goldsby et al, <i>Immunology</i> , 5 th edition, W. H. Freeman & Co.
Instructor:	Art Goven Biology 210 (940) 565-3590 Email: goven@unt.edu Office hours: TR-9 am and 9:30 am; TR-11 am and 11:30 am; or by appointment
Course Description	This course is designed to introduce students to the immune system. The course surveys aspects of the non-specific and specific immune response. Topics include the anatomy of the immune system; phagocytosis and inflammation; antigen and immunogen characteristics; immunoglobulin structure, generation, genetics, and regulation; complement; cell mediated immunity including delayed hypersensitivity and cytotoxic responses. A key focus of the course is the study of the immune system and clinical conditions including antibody mediated and delayed-type hypersensitivity; autoimmunity; immunodeficiency; transplantation; neoplasia; and response to infectious disease.
Course Objectives	By the end of the course, students will have an understanding of: <ul style="list-style-type: none"> • An Overview of the Immune System • Innate and Adaptive Immunity • Immunochemistry, Immunogenetics, and Immunobiology • Infection and Immunity • Immune Dysfunction and its Consequences
Course Requirements	Attendance: Attendance is mandatory. Lectures will contain information vital to do well on exams and quizzes Required text: The text is required. Students will be expected to supplement class lectures with readings from the text.
Exams:	Four lecture exams will be given. Each exam will be worth 100 points. There are 400 possible points. The last exam will be the final; there is no comprehensive final exam. Quizzes will be given during class periods throughout the semester. Quiz grades will be added to the overall possible points and will be averaged into the final grade.
Missed Examinations	No make-up exams will be given without a valid written reason from the appropriate university personnel (coach, organization sponsor, etc.). Students should inform the instructor when an exam will be missed due to sickness or an exceptional event prior to its administration when possible (telephone or email are acceptable). The material to be tested on and the date of the makeup will be decided upon by the instructor
Readings:	The text is required. Readings will be assigned from the text. These readings are designed to expand class material and help you to understand the lecture topics discussed in class.
Suggestions:	Do not miss lecture. Review your lecture notes after every class. Ask questions in class for clarification. Most test questions will come from the lecture notes. The class is run in an informal manner-----relax.

Disability Accommodation: In accordance with Section 504 of the federal Rehabilitation Act of 1973 and the ADA of 1990, UNT endeavors to make reasonable adjustments in its policies, practices, services and facilities to ensure equal opportunity for qualified persons with disabilities to participate in all educational programs and activities. Please see me if you have ADA concerns.

IMPORTANT CLASS DATES:

Exam dates: The following dates are the tentative days for the four lecture exams. Due to weather, schedule changes, instructor's professional obligations, and most importantly our ability to comprehend the course material these dates may change. All exams will be during class time, except the final exam.

EXAM I	February 10 th
EXAM II	March 10 th
EXAM III	April 14 th
EXAM IV	May 12 th @ 8:00 AM

See Schedule for important class dates, especially course drop dates in the Academic Calendar.

**Immunology, Biology 4200
Spring 2011**

	General Lecture Topic
1.	Introduction. Overview of the immune system. Aspects of natural, nonspecific and acquired immunity.
2.	Anatomy of the immune system. Cells and organs of the immune system. General immunophysiology.
3.	Antigens. Foreign material -- antigens, immunogens, haptens.
4.	Immunoglobulins / Antibodies. Structure and function.
5.	The complement system.
6.	Genetic control of the immune response. Organization and expression of immunoglobulin genes. Major histocompatibility complex.
7.	Cellular -- cytokine interactions in the generation of the immune response. Antigen processing and presentation. T-lymphocyte receptors. T-lymphocyte activation, maturation and differentiation. Cytokine production and effects.
8.	Generation of the humoral immune response. Immunoglobulin mediated immunity (antibody).
9.	Cell-mediated immunity, Cytotoxic lymphocytes (T _{CTL}). Delayed type hypersensitivity lymphocytes (T _{DTH}). Antibody dependent cell cytotoxicity (ADCC). Natural killer (NK) cells.
10.	Regulation of the immune response.
11.	Antibody mediated hypersensitivity. Type I, Type II, Type III reactions.
12.	Delayed-type hypersensitivity. Type IV reaction.
13.	Autoimmunity. Loss of self tolerance.
14.	Immunodeficiency disease / conditions.
15.	Transplantation immunobiology.
16.	Neoplasia and the immune system / response.
17.	Immune response to infectious disease. Vaccines / immunizations.

Sections of the text (specific pages) will be assigned for each lecture topic. Lecture material will be divided into four sections to facilitate testing.

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.