

Immunology

(Biology Elective; 303-40400)

Instructor: K.M. Providence, Ph.D. (274-3979)

Lecture Days: Monday, Wednesday, and Friday

Lecture Times: 11:00-11:50AM.

Lecture Location: CNS 206

Required Text: Immunology 5th Edition by: Goldsby, Kindt, Osborne, and Kuby.

Syllabus

Disclaimer: This lecture schedule is my best forecast of the order in which course material will be presented and related reading assignments. There is no guarantee that we will follow this schedule: any changes will be announced in class.

DATE

Aug 25 Introduction & overview

DATE

REQUIRED READING PRIOR TO LECTURE

Aug 27 Chapter 1 Innate, adaptive, and comparative immunity. Dysfunction & consequences.

Aug 30 Chapter 2 Cells & organs of the immune system.

Sep 1 Chapter 3 Antigens

Sep 3 Chapter 4 Antibodies

Sep 8 Chapter 5 Immunoglobulin genes & Antibody diversity

Sep 10 Chapter 6 Antigen-antibody interaction.

Sep 13 Chen et al., 2004 and Deforges et al., 2004 & Review for Exam #1

Sep 15

In-class Exam #1 (Multiple choice, short answer, and knowledge application)

Sep17 Chapter 7 Major Histocompatibility Complex

Sep 20 Chapter 8 Antigen processing and presentation

Sep 22 Chapter 9 T-cell receptor

Sep 24 Chapter 10 T-cell maturation, activation, differentiation

Sep 27 Chapter 11 B-cell generation, activation, and differentiation

Sep 29 Chapter 12 Cytokines

Oct 1 Chapter 13 The complement system

Oct 4 Chapter 14 Cell-mediated effector responses

Oct 6 Chapter 14 Cell-mediated effector responses

Oct 8 In-class review for Exam #2

Oct 11

In-class Exam #2 (Multiple choice)

Oct 18 Chapter 15 Leukocyte migration and inflammation

Oct 20 Chapter 15 Leukocyte migration and inflammation

Oct 22 Chapter 15 Leukocyte migration and inflammation

Oct 25 Chapter 16 Hypersensitive reactions

Oct 27 Chapter 17 Immune response to infectious diseases

Oct 29 Chapter 18 Vaccines

Nov 1 Chapter 18 Vaccines

Nov 3 Kuijpers et al., 1997.

Nov 5 In-class review for Exam #3

Nov 8 In-class Exam #3 (Multiple choice, and knowledge application)

Nov 10	Chapter 19 AIDS and other immunodeficiencies
Nov 12	Chapter 19 AIDS and other immunodeficiencies
Nov 15	Chapter 20 Autoimmunity
Nov 17	Chapter 20 Autoimmunity
Nov 19	Chapter 21 Transplantation Immunology
Nov 29	Chapter 21 Transplantation Immunology
Dec 1	Chapter 22 Cancer and the immune system
Dec 3	Chapter 22 Cancer and the immune system
Dec 6	Chapter 23 Experimental systems
Dec 8	Chapter 23 Experimental systems
Dec 10	Review for Exam #4

DATE to be announced Exam #4 (Short answer, and knowledge application)

Course Policies:

Attendance

In concurrence with the outlined policy as stated in the undergraduate handbook, I expect, and encourage all students enrolled in this course to attend each scheduled lecture. Excessive (3, or more) absences will result in a failing grade.

Standards of Academic Conduct

It is the responsibility of each student to familiarize him/herself with the institutions policy on acceptable academic conduct. Please refer to you student handbook for said policies. In short any student intentionally presenting work performed by others as his/her own will receive a failing grade in this course, and be referred to the Colleges judicial board for review.

Students with disabilities

Individuals should schedule an appointment with me, their advisor, and or the Office of Academic Support Services to discuss their needs.

Missed Examinations

Unexcused absences will result in a zero grade unless justified by a medical reason with accompanying formal documentation from a licensed medical professional. Justified absences will result in a make up examination being awarded.

Course evaluation

Final grade determination is the summation of 4 individual examinations each with a respective maximum point award of 25.

Office hours

Please reefer to posting on my office door. I will be available for a minimum of 9 hours per week this semester. No appointment is required, however it is highly suggested that you reserve time as needed.