



BIOLOGY 350: Immunology

INSTRUCTOR: John Yarotsky, PhD

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LECTURES: Tues & Thurs 1-2:30 GITC 1400

OFFICE HOURS: Monday 1-4

DESCRIPTION:

The objective of this course is to facilitate an understanding of preliminary knowledge of the immune system in humans and other mammals. Students will be able to translate a basic understanding of the immune system and how that knowledge translates to further understanding medicine, research topics in cell biology, and broad topics in public health policy.

TEXTBOOKS:

KINDT, THOMAS. (2007) IMMUNOLOGY SIXTH EDITION. W.H. FREEMAN AND COMPANY, NEW YORK, NEW YORK. ISBN-13: 978-1-4292-0211-4

BIOLOGY 350:Immunology

COURSE OUTLINE: CLASSES WILL BE HELD VIA WEBEX FROM JANUARY 20TH THROUGH THE 31ST. CLASSES WILL BE IN PERSON FROM FEB 3RD AND ON. THERE WILL BE NO WEBEX LECTURES AFTER THE END OF JANUARY AND STUDENTS MUST ATTEND CLASS IN PERSON. THE LECTURE WEBEX LINK WILL BE POSTED IN THE “GENERAL” MODULE ON THE COURSE’S CANVAS PAGE.

WEEK	DATES	TOPICS
Week 1	Jan 18-20	Introduction to Immunology and Course Requirements Chapter 1: Overview of the Immune System
Week 2	Jan 25-27	Chapter 2: Cells and Organs of the Immune System Chapter 3: Innate Immunity
Week 3	Feb 1-3	Chapter 4: Antigens and Antibodies Chapter 5: Organization and Expression of Immunoglobulin Genes
Week 4	Feb 8-10	Chapter 6: Antigen-Antibody Interactions Chapter 7: The Complement System
Week 5	Feb 15-17	Exam 1 Chapter 8: The MHC Complex and Antigen Presentation
Week 6	Feb 22-24	Chapter 9: T-Cell Receptor Chapter 10: T-Cell Maturation, Activation and Differentiation
Week 7	March 1-3	Chapter 11: B Cell Maturation, Activation and Differentiation Chapter 12: Cytokines
Week 8	March 8-10	Chapter 13: Leukocyte Activation and Migration Chapter 14: Cell-Mediated Cytotoxic Responses Tolerance,
Week 9	March 15-17	Spring Break-No class
Week 10	March 22-24	Chapter 15: Hypersensitivity Reactions Exam 2
Week 11	March 29-31	Chapter 16: Tolerance and Autoimmunity Chapter 17: Transplant Immunology
Week 12	April 5-7	Chapter 18: Immune Responses to Infectious Diseases Chapter 19: Vaccines
Week 13	April 12-14	Chapter 20: AIDS and other Immuno-deficiencies Chapter 21: Cancer and the Immune System

Week 14	April 19-21	Cancer Immunotherapy Immunotherapy Technologies
Week 15	April 26-28	Advances in Cancer Exam 3



Course Syllabus

Spring 2022

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EXAMINATIONS:

⊕ Your final letter grade is based on lecture exams, class attendance along with participation, and quizzes. The exams will each be worth 25% of your grade. The remaining 25% of your grade is based on attendance/class participation, and quizzes.

Exams will be multiple choice tests consisting of 50-60 questions.

⊕ Extra credit is not an option.

ATTENDANCE POLICY:

Attendance is mandatory. Participation in the class is also mandatory. During the first two weeks of classes the Webex policy is as follows:

You must have a computer of some kind with both a working webcam and microphone. The class will be held via Webex and participation and attendance are required portions of the class. Your webcam must be turned on and your face must be visible. You will have your microphone muted unless you are speaking. Speaking is not only encouraged but necessary during this class but feedback will result if everyone leaves their mics on at all times. So, please self monitor and be diligent about turning your mic on and off at appropriate times. **If your webcam is not turned on during class, you will not be counted as having attended class.**

Grade Scale:

A=90-100

B+=85-89

B=80-84

C+=75-79

C=70-74

D=65-69

F=64 or lower

This course will strictly adhere to the [NJIT Honor Code](#)!! Both the lecture and the lab will have zero tolerance for violations to the NJIT's [University Code on Academic Integrity](#)!!

