



## **BIOLOGY 350: Immunology**

**INSTRUCTOR:** John Yarotsky, PhD

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**LECTURES:** Tues & Thurs 1-2:30 Kupf 106

**OFFICE HOURS:** Wed 3-6

### **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**

WEEK	DATES	TOPICS
<b>Week 1</b>	Jan 17-19	Introduction to Immunology and Course Requirements Chapter 1: Overview of the Immune System
<b>Week 2</b>	Jan 24-26	Chapter 2: Cells and Organs of the Immune System Chapter 3: Innate Immunity
<b>Week 3</b>	Jan 31 Feb 2	Chapter 4: Antigens and Antibodies Chapter 5: Organization and Expression of Immunoglobulin Genes
<b>Week 4</b>	Feb 7-9	Chapter 6: Antigen-Antibody Interactions Chapter 7: The Complement System
<b>Week 5</b>	Feb 14-16	<b>Exam 1</b> Chapter 8: The MHC Complex and Antigen Presentation
<b>Week 6</b>	Feb 21-23	Chapter 9: T-Cell Receptor Chapter 10: T-Cell Maturation, Activation and Differentiation
<b>Week 7</b>	Feb 28 March 2	Chapter 11: B Cell Maturation, Activation and Differentiation Chapter 12: Cytokines
<b>Week 8</b>	March 7-9	Chapter 13: Leukocyte Activation and Migration Chapter 14: Cell-Mediated Cytotoxic Responses Tolerance,
<b>Week 9</b>	March 13-17	<b>Spring Break-No class</b>
<b>Week 10</b>	March 21-23	Chapter 15: Hypersensitivity Reactions <b>Exam 2</b>
<b>Week 11</b>	March 28-30	Chapter 16: Tolerance and Autoimmunity Chapter 17: Transplant Immunology
<b>Week 12</b>	April 4-6	Chapter 18: Immune Responses to Infectious Diseases Chapter 19: Vaccines
<b>Week 13</b>	April 11-13	Chapter 20: AIDS and other Immuno-deficiencies Chapter 21: Cancer and the Immune System
<b>Week 14</b>	April 18-20	Cancer Immunotherapy Immunotherapy Technologies
<b>Week 15</b>	April 25-27	Advances in Cancer <b>Exam 3</b>



## **BIOLOGY 350: Immunology**

### **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.

### **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](#)!!