

**American University of Beirut**  
**Faculty of Arts and Sciences**  
**Department of Biology**  
**Course Number and Title: BIOL 263 Immunology**

**Course Pre-requisites: Biol 202**

**1. Course learning outline**

This course will help each student to:

Develop interest in and appreciation for immunology

Gain insight about the complexity and efficiency of the immune system,

Understand the structure and function of the molecules, cells, and organs involved in immunity

Understand how cell-mediated and antibody-mediated immunity work to protect a host from pathogenic organisms and harmful substances

Study how imbalances in immune responses can result in hypersensitivity (allergy), autoimmunity, and transplant rejection

**2. Resources available to students**

Textbook: *Kuby's Immunology*, 4th Edition, Richard A Goldsby, Thomas J. Kindt and Barbara A. Osborne. Freeman.

The Internet as an invaluable resource

**3. Grading criteria**

Exam I	25%
Exam II	25%
Final Exam	50%

**4. Schedule**

<b>Week</b>	<b>Topic</b>	<b>Assignment</b>
1	Overview of the course and Immunity	
1 & 2	Innate Immunity and Cells and Organs of the Immune System	Ch. 1 & 2

3	Antigens	Ch 3
3 & 4	Immunoglobulins: structure and function	Ch 4
4 & 5	Immunoglobulin genes	Ch 5
5 & 6	Antigen-antibody interactions	Ch 6
6 & 7	Major histocompatibility complex	Ch 7
7 & 8	T-cell maturation, activation and differentiation	Ch 10
9	B- cell generation, activation and differentiation	Ch 11
10	Complement system	Ch 13
11	Cell mediated immune responses	Ch 14
12	Hypersensitive reactions	Ch 16
13 & 14 19	Autoimmunity and immunodeficiencies	Ch 20 &