

BY 440/640-1G

Fall 2007; M, W, F 2:00 – 2:50 PM

Room 145 EB

Office hours: Thursdays, 10 AM -12 noon or by calling 934-4482 to set up an appointment

Email: [vghanta@uab.edu](mailto:vghanta@uab.edu)

Last day to withdraw from the course with a “W”: October 22<sup>nd</sup> (Undergraduates only)

Textbook: Kuby Immunology, 6<sup>th</sup> Edition – Kindt, Goldsby, Osborne; W. H. Freeman & Co., 2007

Dr. Vital Ghanta

LHRB 146 or 150

Tel. 934-4482

<u>LECTURE #</u>	<u>DATE</u>	<u>SUBJECT</u>	<u>CHAPTERS</u>
1	Aug 22	Overview: introduction, innate and adaptive immunity, antigens	Chaps. 1, 3, 4
2	24	Overview: introduction, innate and adaptive immunity, antigens	
3	27	Overview: introduction, innate and adaptive immunity, antigens	
4	29	Cells and organs of the immune system	Chap. 2
5	31	Cells and organs of the immune system	
6	Sept 5	Cells and organs of the immune system	
7	7	Antibodies: Structure, classes, function, and variability	Chap. 4
8	10	Antibodies: Structure, classes, function, and variability	
9	12	Antibodies: Structure, classes, function, and variability	
10	14	Antibodies: Structure, classes, function, and variability	
11	17	Ag-Ab interactions: Principles and applications	Chap.6
12	19	Ag-Ab interactions: Principles and applications	
13	21	Ag-Ab interactions: Principles and applications	
	24	Examination 1 (Classes 1 - 13); 2:00 – 2:50 PM	
14	26	Ag-Ab interactions: Applications - Assay systems for measurement	Chap. 6
15	28	Ag-Ab interactions: Applications - Assay systems for measurement	
16	Oct 1	Ag-Ab interactions: Applications - Assay systems for measurement	
17	3	Major histocompatibility complex	Chap. 8
18	5	Major histocompatibility complex	
19	8	Immune response: humoral	Chap. 11
20	10	Immune response: humoral	
21	12	Organization and expression of Ig, T-cell receptor genes	Chaps. 5, 9
22	15	Organization and expression of Ig, T-cell receptor genes	
23	17	Organization and expression of Ig, T-cell receptor genes	

24	19	Cell-mediated cytotoxic responses	Chap. 14
25	22	Cell-mediated cytotoxic responses	
26	24	Cell-mediated cytotoxic responses	
	26	Examination 2 (Classes 14 - 26);	2:00 – 2:50 PM
27	29	Immune regulation and tolerance	Chap. 16 and Pages 80, 297-8, 421, 439
28	31	Immune regulation and tolerance	
29	Nov 2	Immune regulation and tolerance	
30	5	Complement: components, pathways, biological effects	Chap. 7
31	7	Complement: components, pathways, biological effects	
32	9	Complement: components, pathways, biological effects	
33	12	Complement: components, pathways, biological effects	
34	14	Hypersensitivity reactions	Chap. 15
35	16	Hypersensitivity reactions	
36	19	Hypersensitivity reactions	
37	26	Autoimmunity	Chap. 16
38	28	Autoimmunity	
39	30	Autoimmunity	
40	Dec 3	Cancer and the immune system	Chap. 21
41	5	Cancer and the immune system	
Friday	Dec 7 <sup>th</sup>	Examination 3 (Classes 27 - 41)	1:30 – 3:00 PM

**Course description and objectives:** BY 440 is designed to provide the student with an opportunity to gain basic knowledge of the immune system and its functions. Objectives: upon successful completion of BY 440, the student will describe the immune system, its components, and their role in health and disease.

**COURSE POLICIES:** 1. Make up examinations for absences will be given only immediately following the final (3<sup>rd</sup>) examination for the course. The student should inform the instructor as soon as possible about the absence. This should be only due to serious health problems, and also please provide a valid proof for the absence.

2. GRADES will be based on the average of the three examinations. Final letter grade for the course will be assigned according to the standard grading system: A  $\geq$  90, B  $\geq$  80, C  $\geq$  70, D  $\geq$  60, and F < 60.

3. An examination that is missed will be assigned a zero and will be included in the average for the final grade.

4. NS&M and the department of Biology policies will be applicable for any problems that may arise in this course (e.g., student misconduct, grade appeal, and others).