BIOL 6550: Immunology (Spring Semester 2011)

1. Course Information

• Course number and section: BIOL 6550 (A)

Course name: Immunology

Hours of credit: 4

- Pre requisites or co requisites as listed in university catalogue. Admission into the graduate program or permission of the instructor.
- Classroom location and room number: BC1024 (for the lecture, 10:00 am 10:50 am, MWF), BC2071 (for the lab, 12:00 2:50 pm, W)
- Department, College, University: Department of Biology, College of Arts and Sciences, Valdosta
 State University

2. Instructor Information

- Instructor name: Dr. Jonghoon Kang
- Instructor contact: BC2084, 229 333 7140, jkang@valdosta.edu
- Instructor office hours: MTW 8:30 am 9:30 am

3. Course Description

- Introduction to basic concepts of immunology, including antigen and antibody structure, the
 generation of diversity, the nature of T cell and B cell receptors, cellular cooperation, and the
 down regulation of immune responses.
- Required texts, resources, and materials: "How the Immune System Works" by Lauren M. Sompayrac from Wiley Blackwell; 3 edition (2008)
- Required out of class activities: Reading assigned lecture notes, presentation materials, and textbook. Performing assigned projects.

4. Standards, Goals, Objectives, or Outcomes

outcomes:

The General Education Outcomes

(http://www.valdosta.edu/academic/VSUGeneralEducationOutcomes.shtml).

- 5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices. They will understand the basic concepts and principles underlying scientific methodology and be able to collect, analyze, and interpret data. They will learn a body of scientific knowledge and be able to judge the merits of arguments about scientific issues. They will be able to perform basic algebraic manipulations and to use fundamental algebraic concepts to solve word problems and equations. They will be able to use basic knowledge of statistics to interpret and to analyze data. They will be able to evaluate arguments based on quantitative data.
- 7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written and visual materials. They will be skilled in inquiry, logical reasoning, and critical analysis.

They will be able to acquire and evaluate relevant information, analyze arguments, synthesize facts and information, and offer logical arguments leading to creative solutions to problems. The departmental educational outcomes (listed in the university catalogue).

- 1. To demonstrate competency in factual content and interpretation of the major biological concept areas of cell and molecular biology, genetics, organismal biology, and evolution and ecology.
- 2. To demonstrate the ability to identify significant biological research questions, develop research protocols, and properly analyze research questions through the use of the scientific method.
- 3. To produce a systematic and thoroughly researched thesis suitable for publication and appropriate to the thesis sub discipline.
- Course objectives or outcomes:

Describe basic terminology in immunology.

Describe the underlying physical and chemical principles in immunology.

Demonstrate an understanding of basic experimental and computational techniques in immunology.

Demonstrate literature analysis capability.

Interpret dinical cases using and! Imagetdampability.

7. Schedule of Activities or Assignments, including university scheduled final examitime (all schedule is tentative and may be subject to change)

Date 1/10^{··} 1/12 1/14 1/17" 1/19 1/21 1/24 1/31 2/2 2/4 2/9 2/11 2/16 2/18⁻ 2/21 2/23 3/2 3/4 .3/9 3/11 3/14 3/18 3/21 3/23 3/28 3/30 4/1 4/4 4/6 4/11 4/13 4/18 4/20 4/22 4/25 4/29 5/2 5/6

8. Classroom Policies

- Attendance and tardiness: Any absence policy should conform to the university policy.
 University Attendance Policy from the VSU catalogue:
 - "The University expects that all students shall regularly attend all scheduled class meetings held for instruction or examination. When students are to be absent from class, they should immediately contact the instructor. A student who misses more than 20% of the scheduled classes of a course will be subject to receive a failing grade in the course."
- Accommodations Statement:
 From VSJ's Access Office http://www.valdosta.edu/access/facresources.shtml):
 "Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in Farber Hall.
 The phone numbers are 245 2498 (V/VP) and 219 1348 (TTY)."
- Academic Integrity: You know that cheating is a bad thing to do. Students caught cheating will
 receive a grade of Ffor the test in question and will be reported to the Dean of Students. You
 are expected to follow VSU's Academic Integrity Code.
 From VSU's Academic Integrity