

## Introduction to Immunology (3 credit hours)

**Course Number:** VTPB 409

**Meets:** M/W 2:25-3:40pm NCTM 120

**Instructor:** Mike Criscitiello, Ph.D.  
Assistant Professor, Veterinary Pathobiology  
Office 372 VRB  
Office Hours: Monday 3-5pm  
Phone (979) 845-4207  
[mcriscitiello@cvm.tamu.edu](mailto:mcriscitiello@cvm.tamu.edu)

**Prerequisites:** Jr/Sr classification or permission of instructor. Microbiology, cell biology and genetics all will be helpful.

**Textbook:** *Basic Immunology: Functions & Disorders of the Immune System*: Abul K. Abbas & Andrew H. Lichtman– 4<sup>th</sup> Edition. W. B. Saunders Co./Elsevier (ISBN-978-1-4160-5569-3). Three copies of the required text book are reserved in the Medical Science Library. You may certainly use many other (better, more expensive) texts, but you are accountable for what is in this wee one.

**Grading:**

Midterm Exams (2, 25% each)	50%
Quizzes (11, drop one, 10% each)	20%
Accumulative Final Exam	30%

100-90=A, 80-89.9=B, 70-79.9=C, 60-69.9=D, <60=F

**Attendance:** Attendance at all scheduled examinations is required. Documentation from a physician is required for missing a midterm or final examination. Make-up exams may be a different format including essay. Make-ups are to be arranged with the instructor as soon as possible after the absence. Attendance at all lectures is strongly encouraged, but attendance will not be taken. Every attempt will be made to begin and end each class on time.

**Assignments:** Power points of lectures will be provided, and reading material is assigned on the attached schedule. Exams will be a mainly multiple choice with the possibility of some short answer/essay. Short pop quizzes will be given approximately weekly through eLearning to discourage students from falling behind. If you think my wording or grading of a question incorrect, please email me an argument supported with references within a week of the test. I welcome your input in crafting better assessment in this course.

**Course Rationale:** This is a first level immunology course designed for students who have had no previous exposure to the subject. The goal of this course is to familiarize the student with the many basic features of the immune system and with the nomenclature employed by immunologists. This is a rigorous course that should provide excellent preparation for graduate and professional study in the biomedical sciences.

### Course Objectives

1. Define, describe, use, and/or apply terms, concepts and theories of fundamental importance in immunology.
2. Describe and discuss types of immunity and their importance in the defense against infections.
3. Describe and discuss the impact of immunity on human health. This includes describing and discussing the interaction of factors, both host and microbial, involved in causing disease; describing and discussing abnormalities of the immune system, and their role in disease.

### Americans with Disabilities Act (ADA) Policy Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Cain Hall or call 845-1637.

## Course Outline and Schedule:

Mon 01/13/2013: *Chapter 1: Introduction to the Immune System*

Wed 01/15/2013: *Chapter 1: Introduction to the Immune System*

Fri 01/17/2013: **Online Quiz #1** - *Chapter 1: Introduction to the Immune System*

Mon 01/20/2013: holiday

Wed 01/22/2013: *Chapter 1: Introduction to the Immune System*

Fri 01/24/2013: **Online Quiz #2** - *Chapter 1: Introduction to the Immune System*

Mon 01/27/2013: *Chapter 2: Innate Immunity*

Wed 01/29/2013: *Chapter 2: Innate Immunity*

Fri 01/31/2013: **Online Quiz #3** - *Chapter 2: Innate Immunity*

Mon 02/03/2013: *Chapter 3: Antigen Capture and Presentation to Lymphocytes*

Wed 02/05/2013: *Chapter 3: Antigen Capture and Presentation to Lymphocytes*

Fri 02/7/2013: **Online Quiz #4** - *Chapter 3: Antigen Capture and Presentation to Lymphocytes*

Mon 02/10/2013: *Chapter 4: Antigen Recognition in the Adaptive Immune System*

Wed 02/12/2013: *Chapter 4: Antigen Recognition in the Adaptive Immune System*

Fri 02/14/2013: **Online Quiz #5** - *Chapter 4: Antigen Recognition in the Adaptive Immune System*

Mon 02/17/2013: *Chapter 4: Antigen Recognition in the Adaptive Immune System*

Wed 02/19/2013: **Exam I**

Mon 02/24/2013: *Chapter 5: Cell Mediated Immune Responses*

Wed 02/26/2013: *Chapter 5: Cell Mediated Immune Responses*

Fri 02/28/2013: **Online Quiz #6** - *Chapter 5: Cell Mediated Immune Responses*

Mon 03/03/2013: *Chapter 6: Effector Mechanisms of Cell Mediated Immunity*

Wed 03/05/2013: *Chapter 6: Effector Mechanisms of Cell Mediated Immunity*

Fri 03/07/2013: **Online Quiz #7** - *Chapter 6: Effector Mechanisms of Cell Mediated Immunity*

Mon-Fri 03/10-14/2013: holiday

Mon 03/17/2013: *Chapter 7: Humoral Immune Responses*

Wed 03/19/2013: *Chapter 7: Humoral Immune Responses*

Fri 03/21/2013: **Online Quiz #8** - *Chapter 7: Humoral Immune Responses*

Mon 03/24/2013: *Chapter 8: Effector Mechanisms of Humoral Immunity*

Wed 03/26/2013: *Chapter 8: Effector Mechanisms of Humoral Immunity*

Fri 03/28/2013: no quiz before exam

Mon 03/31/2013: **Exam II**

Wed 04/02/2013: *Chapter 9: Immunological Tolerance and Autoimmunity*

Fri 04/04/2013: **Online Quiz #9** - *Chapter 9: Immunological Tolerance and Autoimmunity*

Mon 04/07/2013: *Chapter 9: Immunological Tolerance and Autoimmunity*

Wed 04/09/2013: *Chapter 10: Immune Responses Against Tumors and Transplants*

Fri 04/11/2013: **Online Quiz #10** - *Chapter 10: Immune Responses Against Tumors and Transplants*

Mon 04/14/2013: *Chapter 10: Immune Responses Against Tumors and Transplants*

Wed 04/16/2013: *Chapter 11: Hypersensitivity*

Fri 04/18/2013: **Online Quiz #11** - *Chapter 11: Hypersensitivity*

Mon 04/21/2013: *Chapter 11: Hypersensitivity*

Wed 04/23/2013: *Chapter 12 Congenital and Acquired Immunodeficiencies*

Fri 02/25/2013: **Online Quiz #12** - *Chapter 12 Congenital and Acquired Immunodeficiencies*

Mon 04/28/2013: *Chapter 12 Congenital and Acquired Immunodeficiencies*

Tues 05/06/2013: **Final Examination** 3:30 – 5:30 pm.