

BSC 420 Immunology

Instructor: Dr. JP Slovak

Office: Science 231

Hours: MWF 11-12, TR 11-12, W 1-3

Phone: 903.886.5368

Email: john.slovak@tamuc.edu

Course description: This course is designed for majors with a well-rounded background in biology. Therefore, this course provides students with an understanding of basic immunological principles and the functional organization of living systems. Emphasis will be placed on human physiology and the cooperative interplay between innate and acquired immunity. Students are expected to learn the basic principles and concepts of immunology both at the molecular and cellular levels, to learn to reason scientifically, and to understand and describe the function of immune systems in the human body.

Student Learning Outcomes:

1. *Students can distinguish between innate and adaptive immunity.*
2. *Students can explain the process of clonal selection.*

Grading

Exam 1	50 points
Exam 2	50 points
Exam 3	50 points
FINAL Comprehensive EXAM	100 points
Writing/presentation	50 points
Total	300 points

A >270
B 240-269
C 210-239
D 180-209

Writing/Presentation A total of ten abstracts will be written over the semester. These will consist of a summary of a current article more recent than 2002. Each paper should be between 1-2 pages. Limit your reading to refereed journals or respected popular science journals. These 10 articles should have a common theme as you will compile them into a research paper. Each student will give a powerpoint presentation on their completed paper at the end of the semester. The abstracts will be due weekly except for weeks in

which tests are scheduled or as instructed. You will also be asked to discuss your paper during class time. The weekly papers and discussion will account for 40% of your writing grade. It is imperative that you attend class and participate in the class discussion of the papers.

Textbook: How the Immune System Works. Lauren Sompayrac. 4th Edition

All student enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (see Student's Guide Handbook, Policies and Procedures, Conduct).

Plagiarism is a criminal activity. You must cite all sources of information.

Copying of

material, whether parts of sentences, whole sentences, paragraphs or entire articles, will result in a score of zero for your assignment and can result in further disciplinary action

Students with Disabilities: The Americans with Disabilities Act (ADA) is a federal antidiscrimination 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 have a disability requiring an accommodation, please contact:

**Office of Student Disability Resources and Services, Texas A&M
University-Commerce, Gee Library, Room 132, Phone (903) 886-5150 or
(903) 886-
5835, Fax (903) 468-8148, StudentDisabilityServices@tamu-commerce.edu**

Schedule (Tentative)

Introduction

Innate Immunity

B cells and antibodies

Antigen Presentation

T cell activation

T cells at work

Lymphatic system

Restraining the immune system

Tolerance

Memory

Vaccines

Autoimmunity

Immunodeficiency

Cancer
Conclusion

Attendance and Absences: You are expected to attend ALL scheduled lectures and labs and take the exams as scheduled. You will be held responsible for all information covered in lecture. Sign-in sheets will be circulated; please sign your name clearly. Do not sign anyone's name but your own... signing in for someone else is a form of academic dishonesty and will not be tolerated. Excessive unexcused absences will result in loss of points from your grade. For each five unexcused absences a reduction of ten (10) points will be subtracted from your final grade.