



BSC 520.01W -Advanced Immunology

Spring 2026
East Texas A&M University
Online Course

Hyun-Joo Nam, Ph. D. *she/her*
Email: hyun-joo.nam@etamu.edu
Office Location: NHS 331

Please e-mail me if you have a question. I will try to respond within 24 hours, except for weekends and holidays.

Office Hours: Wednesdays 3:30-5:00 PM or by appointment.
I enjoy teaching and talking with you. If you have questions, drop by my office or join the Zoom session (link below) during office hours. If the time does not work for you, feel free to email me, and we can set up a time that does.

Office Hour Zoom link:

<https://tamuc.zoom.us/j/7032367457?pwd=RkFQZmtkcm90emNnUGNDL0E0Sjg0UT09>

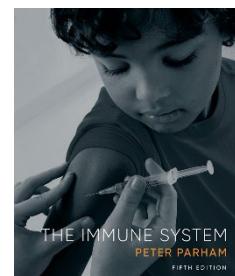
Meeting ID: 703 236 7457

Passcode: OH

Course Summary

Textbook(s) Required: **The Immune System** 5th Edition, **Peter Parham**, ISBN-13: 978-0393533354, eBook- 978-0393533347

This book is available for purchase or rental at the TAMUC bookstore and can be bought or rented from various local and online retailers.



Course Description:

This course is designed for graduate students with a thorough background in biology and cell biology. Therefore, this course provides students with a review of basic immunological principles and the generation of immune responses. Emphasis will be placed on human physiology and the cooperative interplay between innate and acquired immunity. An in-depth view of the immune system will be sought in the context of immune effector mechanisms as

The syllabus/schedule are subject to change.

well as the immune system in health and disease. Principles and applications of antibody-antigen interactions will also be discussed. Students are expected to learn the 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. Prerequisites: An undergraduate degree in Biology or related discipline or permission from instructor.

Course Student Learning Objectives (SLO):

Upon completion of this course, you should be able to:

1. Explain how the innate and adaptive immune responses coordinate to fight invading pathogens.
2. Compare and contrast humoral versus cell-mediated immune responses.
3. Understand the role of cytokines in immunity and immune cell activation; and be able to identify and characterize cytokines of particular immune importance
4. Identify immunomodulatory strategies, either to strengthen it against diseases or to reduce its activity in cases such as allergic reactions, organ transplants, or autoimmune conditions.
5. Articulate the ramifications of immunodeficiency with particular emphasis on acquired immunodeficiency.

Course Requirements

Minimal Technical Skills Needed:

Standard skills necessary to use web browsers to access course materials are required. Students should also be able to submit their work as required. Students should be able to use Microsoft Word and PowerPoint.

Instructional Methods:

This is a fully online course. All course materials will be posted in D2L. I will post announcements on the course's home page or send email notifications.

Student Responsibilities or Tips for Success in the Course

- ✓ **Checking both D2L and emails for course-related announcements.**
- ✓ Dedicated time to learn course materials.
Lecture videos will be uploaded each week. It is important to watch the videos and complete the assigned reading each week.
- ✓ Have the required technology (a computer, a secure and reliable internet connection, and other requirements detailed in this syllabus – please read the “Technology Requirements” section.
- ✓ **Take exams within the specified time.**
- ✓ **Submitting the assignment before deadlines.**
- ✓ If special accommodation needs to be made, notify the instructor in advance.

The syllabus/schedule are subject to change.

Assessments:

There will be 4 types of assessments that will contribute to the grade. These are:

- ✓ Quiz 1~4: 20 % (5% each)
- ✓ Exam 1~3: 45 % (15% each)
- ✓ Final Exam: 20 % Cumulative
- ✓ Assignment: 15 %

Exams and Quizzes consist of multiple-choice and short-answer questions. Questions are drawn from the same test pool. Therefore, some questions may be repeated. Students are expected to ensure they have the necessary device and a reliable connection.

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

Important information:

- 1. It is the student's responsibility to check emails and D2L for exam dates and homework/assignment postings & deadlines.**
2. There will not be additional points or extra credits. A student's grade will come from the points they earn in the listed assessments.
3. Exams and Quizzes: open-book and open notes
 - (a) You will have one to two minutes to answer each question.
 - (b) Please read the instructions, if any, carefully before beginning the exam.
 - (c) Exams and Quizzes are usually held on Fridays -Sundays. Students can take the tests online during this 72-hour time window. The schedule is subject to change.
 - (d) Make-up exam requests must accompany supporting documents (e.g., a doctor's note). The reasons for not taking an exam within the designated time should be acceptable, as outlined in your student handbook.
 - (e) Failure to take the exams within the designated time will result in ZERO credit.
4. The assignment should be submitted before the deadline. The assignment will be checked for plagiarism.

| Assessment | Time/Due dates | Percentage of the final grade |
|------------|----------------|-------------------------------|
| Quiz 1 | Feb 6-8 | 5 % |
| Exam 1 | Feb 20-22 | 15 % |
| Quiz 2 | Mar 5-8 | 5 % |
| Quiz 3 | Mar 27-29 | 5 % |
| Exam 2 | Apr 2-7 | 15 % |

The syllabus/schedule are subject to change.

| | | |
|------------|-----------|--|
| Quiz 4 | Apr 17-19 | 5 % |
| Exam 3 | Apr 24-26 | 15 % (final exam may replace the lowest grade) |
| Assignment | Due May 4 | 15 % |
| Final Exam | May 8-10 | 20 % (cumulative) |

COURSE OUTLINE / CALENDAR

| Week | Lectures | Textbook |
|------------|---|--------------|
| 1 1/12 | Introduction to Immune System | Chapter 1 |
| 2 1/20 | Innate Immunity | Chapter 2, 3 |
| 3 1/26 | Antibody | Chapter 4 |
| 4 2/2 | Antibody Diversity Quiz 1 (2/6-2/8) Chapter 1~4 | Chapter 4 |
| 5 2/9 | T-cell Receptor/MHC | Chapter 5 |
| 6 2/16 | B-cell maturation Exam 1 (2/20-2/22) Chapters 1~5 | Chapter 6 |
| 7 2/23 | T-cell maturation | Chapter 7 |
| 8 3/2 | T-cell immune response Quiz 2 (3/5-3/8) Chapters 6, 7 | Chapter 8 |
| 9 3/9 | Spring Break! | |
| 10 3/16 | B-cell immune responses | Chapter 9 |
| 11 3/23 | Vaccination and vaccines Quiz 3 (3/27-3/29) Chapters 8, 9 | Chapter 11 |
| 12 3/30 | Immune-system dysregulation by allergens Exam 2 (4/2-4/7) Chapters 6~9, 11 | Chapter 14 |
| 13 4/6 | Autoimmunity | Chapter 16 |
| 14 4/13 | Transplantation immunology Quiz 4 (4/17-4/19) Chapters 14, 16 | Chapter 15 |
| 15 4/20 | Immunodeficiency Exam 3 (4/24-26) Chapters 14, 15, 16 | Chapter 13 |
| 16 4/27 | Assignment due May 4 | |
| | FINAL EXAM (5/8-5/10) Cumulative: Include all the content covered in this semester | |

The *syllabus/schedule* are subject to change.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Zoom Video Conferencing Tool

https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@etamu.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

STUDENT RESPONSIBILITIES FOR COURSE

CWID and Password

The *syllabus/schedule* are subject to change.

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@etamu.edu.

Technology-Related Issues

Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a ETAMU campus open computer lab, etc.

TECHNOLOGY REQUIREMENTS AND SUPPORT

Minimal Technical Skills Needed

Students will need reliable computer and internet access for this course. Students must be able to effectively use myLeo email, myLeo Online D2L, and Microsoft Office.

Learning Management System (LMS) – D2L

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are the technical requirements:

- View the [Learning Management System Requirements Webpage](#).
- Learn more on the [LMS Browser Support Webpage](#).

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found on the [Brightspace Support Webpage](#).

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

If you have any questions or are having difficulties with the course material, please contact your instructor. Correspondence will always be through university email (your "myLeo" mail) and announcements in myLeo online (D2L). You will not RECEIVE email through D2L, so be sure to check your ETAMU email for communication. Students are encouraged to check university email daily.

Include the Following in Emails with Instructor:

The syllabus/schedule are subject to change.

- Course name and subject in the subject line
- Salutation (Good afternoon, Dr. Jackson)
- Proper email etiquette (no “text” emails – use proper grammar and punctuation)
- Student name and CWID after the body of the email (possibly add to student signature on email)

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The [Code of Student Conduct](#) is described in detail online in the [Student Guidebook](#).

Students should also consult the [Rules of Netiquette Webpage](#) for more information regarding how to interact with students in an online forum.

ETAMU Attendance

For more information about the attendance policy, please view the [Attendance Webpage](#) and the [Class Attendance Policy](#).

Academic Integrity

Students at East Texas A&M University are expected to maintain high standards of integrity and honesty in all their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty University Procedure 13.99.99.R0.03](#)

[Undergraduate Student Academic Dishonesty Form](#)

[Graduate Student Academic Dishonesty University Procedure 13.99.99.R0.10](#)

[Graduate Student Academic Dishonesty Form](#)

The syllabus/schedule are subject to change.

Use of Artificial Intelligence

East Texas A&M University acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources

Students with Disabilities-- ADA 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 have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

East Texas A&M University

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@etamu.edu

Website: [Office of Student Disability Services](#)

Nondiscrimination Notice

East Texas A&M University will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

The syllabus/schedule are subject to change.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M University buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and ETAMU Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all East Texas A&M University campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

East Texas A&M Supports Students' Mental Health – Counseling Services

The Counseling Center at East Texas A&M University, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Mental Health and Well-Being

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.



The syllabus/schedule are subject to change.