

**Biol 4350- Immunology**  
Course Syllabus  
Spring 2026  
MWF, 11:15 am-12:10 pm, RBS 02019

**INSTRUCTOR**

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**Office hours:** Tuesday and Wednesday, 1:00 – 2:30, or by appointment.

**REQUIRED COURSE MATERIAL**

**Textbook:** IMMUNOLOGY, 8<sup>th</sup> edition, Coico & Sunshine, WILEY Blackwell

Paperback: ISBN: Print: 9781119551430, 2021; eBook: 9781119551430, List Price: \$68.00. A brand-new book has a code for a free eText and discounted access to “CourseSmart”, a nice online resource, but it is not required in this course. For more information, please visit

<https://www.perlego.com/book/2068087/immunology-a-short-course-pdf>  
[www.vitalsource.com/software/bookshelf/downloads](http://www.vitalsource.com/software/bookshelf/downloads);  
[www.coursesmart.com/students](http://www.coursesmart.com/students)

**TENDANCE/PARTICIPATION**

Attendance and participation are essential to succeed in this class. If you miss class, it is your responsibility to contact another student (not the instructor) to get notes and other announcements made during class. Your attendance and participation will be recorded during each class period.

**COURSE DESCRIPTION**

This course will provide basic knowledge on the principles of the Immune System at the cellular and molecular level, illustrated with clinical case studies in immunodeficiencies and autoimmune diseases. Current topics include the development and physiological & pathological functions of humeral & cell-mediated immunity and immunotherapy.

**SPECIFIC OBJECTIVES**

1. Know the molecules, cells, and organs of the immune system
2. Learn the players of, differences between, and integration of innate and adaptive immunity
3. Comprehend the immunologic processes involved in targeting pathogens, transplants, and cancer cells.
4. Understand the molecular mechanisms behind pathologic functions of the immune system.
5. Develop critical thinking skills and problem-solving strategies through student-centered classroom discussions.

## GRADING POLICY

**Attendance and Participation** (10%): This will be an interactive class, and students are expected to read the assigned material before lecture sessions, participate in collaborative problem solving activities and classroom discussions, and take pop quizzes. Students are allowed to miss one lecture/each exam period without penalty.

**Class Quizzes** (20%): You will have a prescheduled online quiz at the conclusion of each chapter. The quiz will be given at the beginning of the following lecture session using the clicker. Just like attendance grades, these grades will comprise 20% of each major exam. No make-up quiz will be given. I will, however, drop one low quiz grade for each student. So, if you miss a quiz for any reason, including illness and excused travel absence, that quiz will be counted as a dropped quiz score.

**Four Exams** (70%): Each major exam will consist of multiple choice & True/False questions and will cover material from the lectures. **No make-up exams** will be given without prior notification or documented medical or family excuses. Chapter readings are to be used as reference material to assist with lecture and class discussions. Common courtesy is expected in class, so please silence your Phones; Stop navigating Webs; Pay attention, and Get in the zone!

No additional work for extra credit will be given at the end of the semester.

Letter grades will be assigned according to the following scale: A = 90-100, B = 80-89, C = 70-79, D = 60-69.

**Grade rounding:** If your final course grade is within 0.5 points of the next letter grade, it will be rounded up automatically. The only other adjustment that will be made is if the final percentage is within one point of the next letter grade and the student has missed <4 lectures throughout the semester.

**Academic Integrity:** Students should be aware that **absolute** academic integrity is expected of every student in all undertakings at The University of Texas at Tyler. Failure to comply can result in strong university-imposed penalties. **I will notify the University Administration of any cheating!**

**Copyright- Recording of class sessions:** Class sessions may be recorded by students enrolled in this course. Recordings that contain personally identifiable information or other information subject to FERPA shall not be shared with individuals not enrolled in this course unless appropriate consent is obtained from all relevant students. Class recordings are reserved only for the use of students enrolled in the course and only for educational purposes. Course recordings should not be shared outside of the course in any form without express permission.

**I RESERVE THE RIGHT TO MODIFY THIS SYLLABUS AT ANY TIME. THEREFORE, YOUR ATTENDANCE AND ATTENTION TO THE ANNOUNCEMENTS IN CANVAS ARE CRUCIAL BECAUSE THEY WILL ASSIST YOU IN REMAINING CURRENT ON THE MATERIAL AND KNOW WHEN THE SYLLABUS MAY BE MODIFIED.**

**GENERAL INFORMATION** \_ *Resources for UT Tyler Students' Success*

Please refer to “Student Resources” and “University Policies and Information” on the course Modules/Canvas.

## Tentative Schedule

| Date                                 | Topics  | Chapter           |
|--------------------------------------|---|-------------------|
| Jan 12 - 30                          | Class orientation, Overview of the Immune System  | 1                 |
|                                      | Cells and Tissues of the Immune System  | 2                 |
|                                      | Cells of the Innate Immunity  | 3                 |
|                                      | Complement  | 4                 |
| 26                                   | Census Date – Deadline for Registrations & Schedule Changes   |                   |
| -----                                |   |                   |
| <b>Feb 2</b>                         | <b>Exam 1</b>   |                   |
| Feb 4 – 28                           | Immunogens and Antigens   | 5                 |
|                                      | Antibody Structure and Function   | 6                 |
|                                      | Organization and Expression of Lymphocyte Antigen Receptor Genes  | 7                 |
|                                      | The Major Histocompatibility Complex and Antigen Presentation   | 8                 |
| -----                                |   |                   |
| <b>March 2</b>                       | <b>Exam 2</b>   |                   |
| 9 – 13                               | Spring Break  |                   |
|                                      | B-Cell Development and Activation   | 9                 |
|                                      | T-Cell Development and Activation   | 10                |
|                                      | Cytokines   | 11                |
| 30 <sup>th</sup>                     | Last Day to Withdraw with an Automatic "W"  |                   |
| April 1-3                            | Tolerance and Autoimmunity  | 12                |
| -----                                |   |                   |
| <b>April 6</b>                       | <b>Exam 3</b>   |                   |
| April 8 – 24                         | Hypersensitivity Types I-IV (Lecture 13 PPs on Canvas)  | 13-15             |
|                                      | Resistance and Immunization to Infectious Diseases  | 19                |
|                                      | I doubt we will have time to cover the following chapters; however, they will be mentioned during “case study/pathophysiology” discussions. |                   |
|                                      | Immunodeficiency Disorder & Neoplasia of the Lymphoid System  | 16                |
|                                      | Transplantation   | 17                |
|                                      | Tumor Immunology  | 18                |
| -----                                |   |                   |
| <b>April 27 - May 1<sup>st</sup></b> | <b>Finals (Please check the academic calendar for this course).</b>   | <b>13 -15, 19</b> |