IMMUNOLOGY
BIOL 4458

COURSE DESCRIPTION

Basic survey of the immune system with focus on the human and mouse models. Covers the origin and differentiation of the hematopoietic system; antibody structure and function; and basic serologic techniques, such as ELISA, fluorescence microscopy, agglutination, precipitation and gel diffusion.

Course times: M/W/F: 10:00 – 10:50 am

STUDENT LEARNING OUTCOMES

- Communicate understanding of current information in written form
- Indicate the location of major immune organs
- Describe the major immune cells and molecules with respect to anatomical features and function in immune response
- Differentiate between characteristics and components of the innate versus the adaptive immune systems
- Describe how antigen is processed, presented, and recognized by immune cells
- Describe the process by which self-tolerance is generated and violated

REQUIRED MATERIALS

Basic Immunology
- Abul K Abbas, Andrew Lichtman, Shiv Pillai
- Sixth Edition
- ISBN: 0323549438

COURSE INSTRUCTOR

Dr. Lindsay M. Porter

Miller Science, Room 200
Lindsay.porter@sfasu.edu
936.468.2232

Grading Policy

Final grades are calculated as a final percentage according to the information outlined in this syllabus

Grading Scale
A = 90-100%
B = 80-89.9%
C = 70-79.9%
D = 60-69.9%
F = 0-59.9%

Final grades are final and ‘rounding up’ is not guaranteed. Extra credit opportunities are not guaranteed but may be offered. However, no extra credit opportunities will be given to individual students or to any/all students after the final exam.
Attendance Policy
Students are expected to attend all classes and other course-related activities on a regular and punctual basis.

COVID-19 MASK POLICY
Masks (cloth face coverings) must be worn over the nose and mouth at all times in this class and appropriate physical distancing must be observed. Students not wearing a mask and/or not observing appropriate physical distancing will be asked to leave the class. All incidents of not wearing a mask and/or not observing appropriate physical distancing will be reported to the Office of Student Rights and Responsibilities. Students who are reported for multiple infractions of not wearing a mask and/or not observing appropriate physical distancing may be subject to disciplinary actions.

Course Evaluations
In accordance with the College of Sciences and Mathematics, and adopted by the Department of Biology the completion of an end-of-semester on-line student evaluation is required by all students enrolled in this course. Instructions and location of the course evaluations can be found on MySFA.

Classroom Incivility
All students are expected to conduct themselves in the classroom in a way that is not distracting to the instructor or to other students. I reserve the right to ask any student creating a distraction to leave the room.

***TENTATIVE/PROPOSED*** Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug 24th, Aug 26th, Aug 28th</td>
<td>Introduction to the Immune System</td>
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<tr>
<td>2</td>
<td>Aug 31st, Sep 2nd, Sep 4th</td>
<td>Innate Immunity</td>
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<td>3</td>
<td>Sep 7th, Sep 9th, Sep 11th</td>
<td>Antigen Capture and Presentation to Lymphocytes</td>
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<td>4</td>
<td>Sep 14th, Sep 16th, Sep 18th</td>
<td>Antigen Recognition in the Adaptive Immune System</td>
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<td>5</td>
<td>Sep 21st, Sep 23rd, Sep 25th</td>
<td>T cell-Mediated Immunity</td>
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<td>6</td>
<td>Sep 28th, Sep 30th, Oct 2nd</td>
<td>Effector Mechanisms of T cell-Mediated Immunity</td>
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<tr>
<td>7</td>
<td>Oct 5th, Oct 7th, Oct 9th</td>
<td>Humoral Immune Response</td>
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<tr>
<td>8</td>
<td>Oct 12th, Oct 14th, Oct 16th</td>
<td>Effector Mechanisms of Humoral Immunity</td>
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<td>9</td>
<td>Oct 19th, Oct 21st, Oct 23rd</td>
<td>Immunological Tolerance and Autoimmunity</td>
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<td>10</td>
<td>Oct 26th, Oct 28th, Oct 30th</td>
<td>Immunology of Tumors and Transplants</td>
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<td>11</td>
<td>Nov 2nd, Nov 4th, Nov 6th</td>
<td>Hypersensitivity</td>
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<tr>
<td>12</td>
<td>Nov 9th, Nov 11th, Nov 13th</td>
<td>Congenital and Acquired Immunodeficiencies</td>
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<td>13</td>
<td>Nov 16th, Nov 18th, Nov 20th</td>
<td>Flex Time &amp; Work on Paper</td>
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<td>14</td>
<td>Nov 21st - Nov 29th</td>
<td>Thanksgiving Break</td>
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<tr>
<td>15</td>
<td>Nov 30th, Dec 2nd, Dec 4th</td>
<td>Review for Final Exam, Grad Presentations</td>
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<td>16</td>
<td>Dec 9th, Dec 15th</td>
<td>Final Exam: 10:45 AM - 1:15 PM</td>
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**Withheld Grades**

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

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**Academic Integrity**

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

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**Definition of Academic Dishonesty**

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

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**Students with Disabilities**

To obtain disability related accommodations alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

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**Office Hours**

Wednesday: 11:00 am – 12:00 pm & 1:00 pm – 2:00 pm
Thursday: 8:00 am – 11:00 am
Course Activities & Weighting

- Project Report 50%
- Project Presentation 30%

Overall Grading Policy

Lecture – 75%
Lab – 25%

Lab Attire

In this lab, you will perform real experiments. This means you will work with real molecular equipment and reagents. Consequently, you must come to lab dressed appropriately. This means that you must have your legs and feet completely covered. If you do not come appropriately dressed, you will have to leave and may only return with the appropriate attire.

Materials Required

Notebook, computer, or other medium for taking notes. Detailed notes are mandatory in order to prepare a sufficient lab report and presentation.

Course times: T: 4:00 – 6:50 pm