ADVANCED IMMUNOLOGICAL CONCEPTS
BIOL 5326 –001

Lecture Schedule: Tuesday and Thursday 12:00-1:20 PM
Location: Tu/Th; ONLINE

Course Director: Charlotte M. Vines, Ph.D.
4.126 Biosciences; ext. 8126
e-mail: cvines@utep.edu

Note that several faculty will participate in this course and their participation is outlined in the schedule below.
Office hours will on Tuesdays for 15 minutes immediately after the class ends. Faculty will also be available by appointment.

Format:
The lectures will be based upon experimental approaches and designed for students who have had an introductory immunology course. Students will be expected to actively participate in discussion and preparation of lecture material.

Readings:
Our text book is Cellular and Molecular Immunology, 9th edition, Abbas, Lichtman and Pillai ISBN-13:978-0323479783 ISBN-10: 9780323479783. In addition reading of primary research articles or up-to-date review articles will be emphasized. Participation during faculty and student presentations will be taken into consideration for the final grade.

Presentation Format:
Each student will be expected to present two PowerPoint lectures on primary research articles on a topic related to the faculty lectures. Each presentation counts for 20% of your grade. You will need to submit your paper, so that everyone can read it prior to the class, ONE WEEK in advance. You will be expected to design a quiz and submit it on Blackboard at least 24 hours before presenting your paper. Everyone in the class will be expected to complete the quiz BEFORE class. Ideally, the presentations should last at least 45 minutes. Quiz grades and class participation will constitute 20% of your grade. The paper you select for your presentation must be a research paper. Since this is an advanced immunology course for graduate students, you will be expected to be able to explain and graded on:
1) Why was the paper written in the first place? What was the gap in the knowledge that this paper was trying to fill?
2) Why was each experiment conducted in the paper? Specifically how the work was done in each figure of the paper, why the figure was included, what the figure added to the paper, do you agree with the interpretation of the data.
3) What was the conclusion? Did the authors address the gap in the knowledge?
<table>
<thead>
<tr>
<th>Date</th>
<th>Instructor</th>
<th>Subject</th>
<th>Assigned reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 19 - CV</td>
<td>CV</td>
<td>Introduction and Overview</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>Jan 21 - RA</td>
<td>RA</td>
<td>Cells and Tissues of an Immune Response</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>Jan 26 - CV</td>
<td>CV</td>
<td>Leukocyte Circulation and Migration into Tissues</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>Jan 28 - RA</td>
<td>RA</td>
<td>Student Presentations #1- CCR7 Chemokine Receptor Inducible Inc-Dpf3 Restrains DC migration</td>
<td>Michael Brissette</td>
</tr>
<tr>
<td>Feb 2 – CV</td>
<td>CV</td>
<td>Innate Immunity</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>Feb 4 – CV</td>
<td>CV</td>
<td>Student Presentations #2-Re-Evaluation of human BDCA-2+ DC during acute sterile skin inflammation</td>
<td>Serina Batson</td>
</tr>
<tr>
<td>Feb 9 – CV</td>
<td>CV</td>
<td>Antibodies and Antigens</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>Feb 11 – CV</td>
<td>CV</td>
<td>Student Presentations #3- Molecular determinants and mechanism for antibody cocktail preventing SARS-CoV2 escape</td>
<td>Barbara Castellano</td>
</tr>
<tr>
<td>Feb 16 – CV</td>
<td>CV</td>
<td>Antigen Presentation to T Lymphocytes and MHC</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>Feb 18 – CV</td>
<td>CV</td>
<td>Student Presentations #4 Cyto-Immuno-Therapy for Cancer: A Pathway Elicited by Tumor-Targeted, Cytotoxic Drug-Packaged Bacterially Derived Nanocells</td>
<td>Rebecca Pellerano</td>
</tr>
<tr>
<td>Feb 23 – CV</td>
<td>CV</td>
<td>Immune receptors and Signal Transduction</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>Feb 25 – CV</td>
<td>CV</td>
<td>Student Presentations #5- T cell receptor-dependent S-acylation of ZAP-70 controls activation of T cells</td>
<td>Axel M Hidalgo</td>
</tr>
<tr>
<td>Mar 2 – CV</td>
<td>CV</td>
<td>Lymphocyte development and antigen receptor gene rearrangement</td>
<td>Chapter 8</td>
</tr>
<tr>
<td>Mar 4 – CV</td>
<td>CV</td>
<td>Student presentations #6 -AIM2 in regulatory T cells restrains autoimmune diseases</td>
<td>Aldo Pizana</td>
</tr>
<tr>
<td>Mar 9 – CV</td>
<td>CV</td>
<td>Exam Review</td>
<td></td>
</tr>
<tr>
<td>Mar 11</td>
<td></td>
<td>Midterm</td>
<td></td>
</tr>
<tr>
<td>March 15-19</td>
<td></td>
<td>Spring Break</td>
<td></td>
</tr>
<tr>
<td>March 23 – CV</td>
<td>CV</td>
<td>Activation of T lymphocytes</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>March 25 – CV</td>
<td>CV</td>
<td>Student presentations #7</td>
<td>Diana Vielma</td>
</tr>
<tr>
<td>March 30 – CV</td>
<td>CV</td>
<td>Effector T cells CD4 and CD8</td>
<td>Chapters 10 and 11</td>
</tr>
<tr>
<td>April 1 – CV</td>
<td>CV</td>
<td>Student Presentations #8</td>
<td>Serina Batson</td>
</tr>
<tr>
<td>April 6 – CS</td>
<td>CS</td>
<td>Minor immune cells with a major function</td>
<td></td>
</tr>
<tr>
<td>April 8 – CS</td>
<td>CS</td>
<td>Student Presentations #9</td>
<td>Barbara Castellano</td>
</tr>
<tr>
<td>April 13 – CS</td>
<td>CS</td>
<td>Immune Tolerance and Autoimmunity</td>
<td>Chapter 15</td>
</tr>
<tr>
<td>April 15 – CS</td>
<td>CS</td>
<td>Student Presentations #10</td>
<td>Rebecca Pellerano</td>
</tr>
<tr>
<td>April 20 – GR</td>
<td>GR</td>
<td>Jak/STAT Signaling in normal and cancer cells</td>
<td>Chapter 17</td>
</tr>
<tr>
<td>April 22 – GR</td>
<td>GR</td>
<td>Student presentations #11</td>
<td>Axel M Hidalgo</td>
</tr>
<tr>
<td>April 27 – GF</td>
<td>GF</td>
<td>Immunotherapy</td>
<td>Chapter 18</td>
</tr>
<tr>
<td>April 29 – GF</td>
<td>GF</td>
<td>Student presentations #12</td>
<td>Aldo Pizana</td>
</tr>
<tr>
<td>May 4-CV</td>
<td>CV</td>
<td>Student Presentations # 13</td>
<td>Diana Vielma</td>
</tr>
<tr>
<td>May 6-CV</td>
<td>CV</td>
<td>Student Presentations #14</td>
<td>Michael Brissette</td>
</tr>
<tr>
<td>May 7-CV</td>
<td>CV</td>
<td>Final Exam Due</td>
<td></td>
</tr>
</tbody>
</table>
COURSE POLICIES

POLICY ON CIVILITY: Please come to our online class on time. It is disturbing and distracting everybody if people enter late. Please do not hold private conversations during lectures, but feel free to ask questions or start a discussion at any time. **Cell phones MUST be turned OFF during class.** **DO NOT TEXT or answer phones while in class.** If you violate the cell phone policy, your participation grade will be deducted and returned at the end of the class period.

DISABILITY STATEMENT: If a student has or suspects she/he has a disability and needs an accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148, dss@utep.edu, cass@utep.edu or go to Room 106 Union East Building. For additional information please visit the CASS website at [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass). The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.

MILITARY STATEMENT: If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact me directly.

TECHNOLOGY REQUIREMENTS
This content for this course is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. **Google Chrome** and **Mozilla Firefox** are the best browsers for Blackboard; **other browsers may cause complications**. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You will need to have access to a computer/laptop, scanner, a webcam, and a microphone to use Blackboard Collaborate. You will need to download or update the following software: Microsoft Office, Adobe Acrobat Reader, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP’s Microsoft Office Portal. Click the following link for more information about [Microsoft Office 365](http://www.microsoft.com) and follow the instructions.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP Help Desk as they are trained specifically in assisting with technological needs of students. **Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!**

COURSE COMMUNICATION: How will we stay in contact with each other?
Because this is an online class, we won’t see each other in the ways you may be accustomed to: during class time, presentations, and office hours. However, there are a number of ways we can keep the communication channels open:

- **Office Hours**: We will not be able to meet on campus, but we will still have office hours for your questions and comments about the course. Office hours will be held on Blackboard Collaborate on Tuesdays: for the first 15 minutes after class.

- **Email**: The “Contact the instructor” tab in BlackBoard is the best way to contact the instructors. As the course director, Dr. Vines will make every attempt to respond to your e-mail within 24-48 hours of receipt. When e-mailing me, be sure to use the “Contact Instructor” tab in BlackBoard. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to sign it with your first and last name, and your university identification number.

- **Discussion Board**: If you have a question that you believe other students may also have, please post it in the Help Board of the discussion boards inside of Blackboard. Please respond to other students’ questions if you have a helpful response.

- **Announcements**: Check the Blackboard announcements frequently for any updates, deadlines, or other important messages.

**NETIQUETTE**

As we know, sometimes communication online can be challenging. It’s possible to miscommunicate what we mean or to misunderstand what our classmates mean given the lack of body language and immediate feedback. Therefore, please keep these netiquette (network etiquette) guidelines in mind. Failure to observe them may result in disciplinary action.

- Always consider audience. This is a college-level course; therefore, all communication should reflect polite consideration of other’s ideas.
- Respect and courtesy must be provided to classmates and to the instructor at all times. No harassment, profanity or inappropriate postings will be tolerated.
- When reacting to someone else’s message, address the ideas, not the person. Post only what anyone would comfortably state in a face-to-face situation.
- Blackboard is not a public internet venue; **all postings to it should be considered private and confidential**. Whatever is posted on in these online spaces is intended for classmates and Dr. Vines only. You are forbidden to copy documents and paste them to a publicly accessible website, blog, or other space.

**COURSE POLICIES**: What you need to do to be successful in the course.

**ATTENDANCE AND PARTICIPATION**

Attendance in the course is determined by attendance at the lectures, participation in the discussion boards and case studies. Your participation in the course is important not only for your learning and success but also to create a community of learners. Participation is determined by completion of the following activities:
Reading/Viewing all course materials to ensure understanding of assignment requirements

Participating in engaging discussions with your peers in class and on the discussion boards (grading rubric provided in the “grading information” area of each forum)

Attending lectures

Because these activities are designed to contribute to your learning each week, they cannot be made up after their due date has passed.

EXCUSED ABSENCES AND/OR COURSE DROP POLICY

According to UTEP Curriculum and Classroom Policies, “When, in the judgment of the instructor, a student has been absent to such a degree as to impair his or her status relative to credit for the course, the instructor may drop the student from the class with a grade of “W” before the course drop deadline and with a grade of “F” after the course drop deadline.” See academic regulations in the UTEP Undergraduate Catalog for a list of excuse absences. Therefore, if I find that, due to non-performance in the course, you are at risk of failing, I will drop you from the course. I will provide 24 hours advance notice via email.

OR

I will not drop you from the course. However, if you feel that you are unable to complete the course successfully, please let me know and then contact the Registrar’s Office to initiate the drop process. If you do not, you are at risk of receiving an “F” for the course.

BLACKBOARD COLLABORATE SESSIONS

This class provides an opportunity for you to participate in scheduled Blackboard Collaborate sessions. The purpose of these sessions is for you to view live demonstrations of the course material and/or to participate in discussion groups with your classmates. These sessions will be held on Tuesdays 1:30-1:45 or longer if necessary.

DEADLINES, LATE WORK, AND ABSENCE POLICY

Midterm and Final Exams:

- Midterm Exam will be due on March 9, 2021 at midnight (11:59 PM). The final exam will be due on May 15th, 2021 at midnight. No late work will be accepted if the reason is not considered excusable. Each exam will count as 20% of your grade.

MAKE-UP WORK

Make-up work will be given only in the case of a documented emergency. Note that make-up work may be in a different format than the original work, may require more intensive preparation, and may be graded with penalty points. If you miss an assignment and the reason is not considered excusable, you will receive a zero. It is therefore important to reach out to me—in advance if at all possible—and explain with proper documentation why you missed a given
course requirement. Once a deadline has been established for make-up work, no further extensions or exceptions will be granted.

ALTERNATIVE MEANS OF SUBMITTING WORK IN CASE OF TECHNICAL ISSUES

You should always submit your work with plenty of time to spare in the event that you have a technical issue with the course website, network, and/or your computer. You should save all your work (answers to discussion points, quizzes, exams) in a separate Word document as a back-up. This way, you will have evidence that you completed the work and will not lose credit. If you are experiencing difficulties submitting your work through the course website, please contact the UTEP Help Desk. You can email me your back-up document as a last resort.

INCOMPLETE GRADE POLICY

Incomplete grades may be requested only in exceptional circumstances after you have completed at least half of the course requirements. Talk to me immediately if you believe an incomplete is warranted. If granted, we will establish a contract of work to be completed with deadlines.

ACCOMMODATIONS POLICY

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the UTEP Center for Accommodations and Support Services (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the CASS portal.

COVID-19 Accommodations

Students are not permitted on campus when they have a positive COVID-19 test, exposure or symptoms. If you are not permitted on campus, you should contact me as soon as possible so we can arrange necessary and appropriate accommodations.

SCHOLASTIC INTEGRITY

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected
violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more, please visit HOOP: Student Conduct and Discipline.

COPYRIGHT STATEMENT FOR COURSE MATERIALS

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

COVID-19 PRECAUTIONS

You must STAY AT HOME and REPORT if you (1) have been diagnosed with COVID-19, (2) are experiencing COVID-19 symptoms, or (3) have had recent contact with a person who has received a positive coronavirus test. Reports should be made at screening.utep.edu. If you know of anyone who should report any of these three criteria, you should encourage them to report. If the individual cannot report, you can report on their behalf by sending an email to COVIDaction@utep.edu.

For each day that you attend campus—for any reason—you must complete the questions on the UTEP screening website (screening.utep.edu) prior to arriving on campus. The website will verify if you are permitted to come to campus. Under no circumstances should anyone come to class when feeling ill or exhibiting any of the known COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, and alternative instruction will be provided. Students are advised to minimize the number of encounters with others to avoid infection.

Wear face coverings when in common areas of campus or when others are present. You must wear a face covering over your nose and mouth at all times in this class. If you choose not to wear a face covering, you may not enter the classroom. If you remove your face covering, you will be asked to put it on or leave the classroom. Students who refuse to wear a face covering and follow preventive COVID-19 guidelines will be dismissed from the class and will be subject to disciplinary action according to Section 1.2.3 Health and Safety and Section 1.2.2.5 Disruptions in the UTEP Handbook of Operating Procedures.

COURSE RESOURCES: Where can you go for assistance?

UTEP provides a variety of student services and support:

Technology Resources

- Help Desk: Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

Academic Resources

- UTEP Library: Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- University Writing Center (UWC): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- RefWorks: A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.

Individual Resources
- **Military Student Success Center**: Assists personnel in any branch of service to reach their educational goals.
- **Center for Accommodations and Support Services**: Assists students with ADA-related accommodations for coursework, housing, and internships.
- **Counseling and Psychological Services**: Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.