INSTRUCTOR       Ali Azghani, Ph.D.  
                 Professor of Biology  
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OFFICE HOURS  
W. Th. 11:00 -12:00 AM or by appointment.

TEXTBOOK  
None

Several reference e-books on Host-Pathogen, Microbial Pathogenesis, and Immunology are available at UT Tyler library.

Assigned primary research articles (Classic and Recent) for class presentation and discussion will be posted on Canvas for all to read in advance.

COURSE DESIGN  
I will introduce the topic and at least two journal articles for a follow up, student-led discussions on the current understanding and major questions in the field. Each and every student’s participation will be expected to ensure high level analysis and evaluation sessions for which students will be evaluated along with a presentation and in-class or take-home exams.

COURSE DESCRIPTION  
This course will explore the cellular and molecular basis of the interplay between microbes and their hosts. We will discuss the mechanisms developed by the host of your interest (human, animals, or plants) to overcome particular infections as well as the ecology and evolution of the disease.

SPECIFIC OBJECTIVES  
1. Know the elements of the immune system and their evolutionary pathway.  
2. Learn the evolution of model pathogens and virulence factors  
3. Recognize the ecology of nosocomial infections as a model  
4. Understand how increasing global changes affect emergence and transmission of infectious diseases.

Goals: This is a problem-based course focused on the molecular and cellular basis of microbial pathogenesis with emphasis on mechanisms of specific virulence, interplay between bacteria and their hosts, and rationale for emerging infection phenomena. In addition, the impact of current molecular biology and biomedical techniques including genomics and proteomics will be discussed in the context of the molecular mechanisms of bacterial infections. We will not cover detailed symptoms and treatment modalities. Students will select their microbe of interest and
complete a literature search to select most recent peer-reviewed articles. Students will choose “hypothesis driven” articles with advanced or unique molecular technologies for class presentation and discussion. Each student will give a 50-min presentation and lead the class discussion of 30 min. In addition, students will extract 5 questions (4 short answers and one essay) from the main papers and send them to me as an attachment. I will use these questions as my “test bank” for final exam.

Students are expected to post their select articles on Canvas one week prior to their presentation date. We all must read the assigned papers before the corresponding class period and participate actively in the Q/A and discussion sessions following each presentation.

ASSIGNMENTS/GRADING
Project 1: Class readings and discussions 20%
Project 2: Presentation of your topic of interest 40%
Midterm Exam 20%
Final Exam: (20%)

GENERAL
Students should log onto Canvas for new announcements, messages, and assigned articles.

EXAM/QUIZ MAKE-UP POLICY: If a student is unable to take an exam as scheduled, a make-up will be arranged only if the reason is legitimate and documented, and the instructor is notified in advance of the time the exam is scheduled, either through the telephone or e-mail. Students who fail to make appropriate arrangements will most likely receive a grade of “0” for the exam missed.

ACADEMIC INTEGRITY:
Examinations
• Are to be taken individually, without input or assistance from anyone else, including students that have taken the exam, quiz or course previously. This course contains material that you must know for future classes and for your profession. Therefore using old exams, or asking other students about exam content will only hurt you in the long run. The grades you earn are not as important as what you actually learn in this course.
• The use of your notes, text or any other reference material during exams is prohibited.
• Possession of anything containing course content will be considered cheating, whether or not you actually refer to it during the exam.
• Talking during an exam to anyone other than the instructor or proctor will automatically be considered cheating. It does not matter what you were talking about.
• Any use of cell phones (even if they call you) or any other electronic device that could be used to record or transmit test material is prohibited. Phones must be out of sight in a pocket, purse or backpack, and turned off or on vibrate.
• Hats worn during exams must be turned or removed so that the face is not covered in any way.

STUDENTS RIGHTS AND RESPONSIBILITIES AT UT TYLER:
To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: http://uttyler.cmsiq.com/en/2015-2016/Catalog/Student-Affairs
Manual of Policies and Procedures for Student Affairs Chapter 8
Student Conduct and Discipline
Sec. 8-802. Scholastic Dishonesty

a. The judicial officer or a faculty member may initiate disciplinary proceedings under section 8-300 against a student accused of scholastic dishonesty.

b. "Scholastic dishonesty" includes, but is not limited to, cheating, plagiarism, collusion, falsifying academic records, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor, providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment), or the attempt to commit such an act.

1. "Cheating" includes, but is not limited to:
   A. copying from another student's test paper; using during a test materials not authorized by the person giving the test;
   B. failing to comply with instructions given by the person administering the test;
   C. possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes." The presence of textbooks constitutes a violation only if they have been specifically prohibited by the person administering the test;
   D. using, buying, stealing, transporting, or soliciting in whole or part the contents of an un-administered test, test key, homework solution, or computer program;
   E. collaborating with or seeking aid from another student during a test or other assignment without authority;
   F. discussing the contents of an examination with another student who will take the examination;
   G. divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructor has designated that the examination is not to be removed from the examination room or not to be returned to or kept by the student;
   H. substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
   I. paying or offering money or other valuable thing to, or coercing another person to obtain an un-administered test, test key, homework solution, or computer program, or information about an un-administered test, test key, homework solution, or computer program;
   J. falsifying research data, laboratory reports, and/or other academic work offered for credit;
   K. taking, keeping, misplacing, or damaging the property of the university, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
   L. misrepresenting facts, including providing false grades or résumés, for the purpose of obtaining an academic or financial benefit for oneself or another individual or injuring another student academically or financially.

2. "Plagiarism" includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another's work and the submission of it as one's own academic work offered for credit.

3. "Collusion" includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration.
with another person to commit a violation of any section of the rules on scholastic dishonesty.

**SOCIAL SECURITY AND FERPA STATEMENT:**
It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

**EMERGENCY EXITS AND EVACUATION:**
Everyone is required to exit the building when a fire alarm goes off. Follow your instructor’s directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do Not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

**SCHEDULE**
Will be determined by students in the first week of the semester.