

University of North Texas at Dallas
5W2 Summer 2015
SYLLABUS

BIOL5335D : Biological Basis of Disease 3Hrs			
Department of	Life and Health Sciences	School of	Liberal Arts and Life Sciences
Instructor Name:	Dr. Aubrey Frantz		
Office Location:	Room 251, Building 2		
Office Phone:	972-338-1523		
Email Address:	aubrey.frantz@untdallas.edu *Please use your UNTDallas email address when communicating with the instructor		
Office Hours:	Monday – Thursday 12:00-1:00, or by appointment		
Classroom Location:	Founders Hall- DAL2, room 213		
Class Meeting Days & Times:	M,T,W,R 10:00 – 11:50am		
Course Catalog Description:	The biological mechanisms of health and disease at the molecular, cellular, individual, and societal levels. Topics include normal and abnormal anatomy, physiology and pathophysiology, basic microbiology and immunology, and public health.		
Recommended text:	Memmler's The Human Body in Health and Disease, 13th Edition By Barbara Janson Cohen ISBN-13: 000-1609139054		
Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fheg.follett.com		
Course Goals and Student Learning Objectives: At the end of this course, the student will			
1	Explain the mechanisms by which the human immune system defends against infection as well as the involvement of the immune system in autoimmune diseases and immune deficiencies		
2	Recognize the role of the inflammatory response in the defense against infection and its role in many diseases associated with inflammation		
3	Understand basic cancer biology, pathology and terminology.		
4	Describe many clinically relevant infectious organisms and understand what makes them virulent.		
5	Distinguish between infectious and non-infectious causes of disease		
6	Critically read, analyze, interpret and communicate primary scientific data and literature.		

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by the instructor in class.

TIMELINE	TOPICS	Assignment Due (before class)
7/13	Course Introduction Introduction to Health and Disease	
7/14	Lymphatic System	
7/15	Lymphatic System Immune System Overview – Lines of Defense	
7/16	Journal Club #1 – <i>Louveau et al.</i>	Perspective 1
7/20	EXAM I	
7/21	Innate Immunity	
7/22	Inflammatory Response	
7/23	Inflammatory Diseases - Student Presentations (3-4) Journal Club #2 – <i>Chassaing et al. and Anahtar et al.</i> Homeostasis, Inflammation and Disease Susceptibility Review	Perspective 2
7/27	EXAM II	
7/28	Adaptive Immunity	
7/29	Adaptive Immunity	
7/30	NO CLASS	
8/3	Autoimmune Diseases and Immunodeficiency – Student Presentations (3-4) Journal Club #3 - <i>Oftedal et al.</i>	Perspective 3
8/4	EXAM III	
8/5	Infectious Organisms – Bacterial infections	
8/6	Infectious Organisms – Viral infections	
8/10	Infectious Diseases – Student Presentations (3-4) Journal Club #4 – <i>Lund et al.</i> and the Hygiene Hypothesis Review	Perspective 4
8/11	Heredity and Hereditary Diseases	
8/12	Complete Student Presentations Journal Club #5 <i>Broden et al. and Rook et al.</i> Review	Perspective 5
8/13	EXAM IV	

You must notify the instructor in advance of any absences due to mandatory professional training and/or professional development. If you miss class due to mandatory professional training/development, you are responsible for any missed course content and assignments. MISSED EXAMS MUST BE MADEUP NO LATER THAN THE NEXT EXAM DATE. You are responsible for communicating and coordinating makeup exams with the instructor. There are no makeup exams for unexcused absences. *Please use your UNTDallas email address when communicating with the instructor.

Exams – written tests designed to measure knowledge of presented course material – You will be given four in-class exams. Each exam is worth 100 points. The exams will consist of a combination of multiple choice, labeling and short answer questions. **Attendance is required for all exams.** Any student found cheating on any exam will receive a zero for that exam and may face disciplinary action(s).

Journal Club – Several of the course goals and SLO are served by analyzing primary literature. Reading these journal articles exposes you to the process of scientific investigation and recent advancements in the field. Through these readings, you should gain insight into how scientists design experiments to answer hypotheses and into the way scientists analyze data to draw conclusions. **Preparation, attendance and class participation in the journal club is essential.**

Presentations – You will be required to give a 10-15 minute presentation on a specific disease of interest that is relevant to the week's topic of discussion. Your presentation will include general characteristics of the general disease characteristics, disease pathology, diagnosis and treatment/control. Additional instructions and guidelines will be given in class.

Journal club perspective papers: Prior to each journal club, you are expected to read the selected paper(s) and write a 1-2 page perspective describing the main findings of the paper and evaluating the research. Instructions for these writing assignments will be posted on Blackboard and distributed in class. Prior to the journal club discussion, your perspectives should be submitted via Blackboard. **Late perspective papers will not be accepted.**

Class participation – Class discussion is an essential part of this course. You will receive 10 points per class session for contributing to the class discussion, **journal club and student presentations**. If you miss class, there is no make-up for attendance/class participation points.

Grading Matrix:

Instrument	Value (points)
Exams (4 x 100 points)	400
Journal Article Perspectives (4 x 25 points)	100
Attendance & Participation	50
Presentation	50
Total:	600

Grade Determination:

A = 90% or better

B = 80 – 89 %

C = 70 – 79 %

D = 60 – 69 %

F = less than 60%

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200

Student Evaluation of Teaching Effectiveness Policy: *The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching.*

Exam Policy: *Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).*

Academic Integrity: *Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at <http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic%20Integrity.pdf> for complete provisions of this code.*

Attendance and Participation Policy: *The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class.*