

DISEASE AND THE ENVIRONMENT: HEALTH DISPARITIES IN THE BORDER REGION II (BIOL 1108) – SPRING 2018

Instructor: Drs. Jennifer Apodaca and Jeffrey Olimpo

Office: B226 Biology Building (Fri. 11:00am - noon)*

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*These are hours when I (Dr. Apodaca) am **guaranteed** to be in my office. If these times do not work for you, please send me an e-mail, and we can arrange another time to meet. I'm here to help!

COURSE DESCRIPTION

Welcome to *a study of life*! This course offers students a unique opportunity to explore the relationship between disease, the environment, and public health through an intensive, self-driven research experience. As opposed to traditional laboratory coursework, this means that *you* will be determining your own research questions, methods to use, types of experiments to perform, and “next steps” in the research process based on obtained conclusions. We (as your instructors) seek to promote an environment where (reasonable) risk is rewarded, overcoming failure is part of true scientific inquiry, and the contributions *you* make to science are invaluable.

COURSE OBJECTIVES

This course is designed to provide students with an authentic research opportunity in the biological sciences. Upon completion of the course, students will be able to:

- Utilize scientific process skills to make informed decisions throughout all aspects of the experimental process
- Apply principles of scientific inquiry to conduct a descriptive and/or analytic study of their choosing within the fields of health disparities, environmental health, molecular epidemiology, and public health bioinformatics
- Demonstrate an increased understanding of qualitative and quantitative research methods, as evidenced in written and oral deliverables
- Make meaningful empirical connections between diseases and the environment
- Describe, succinctly, the results of their research to both lay and scientific audiences
- Describe the impact of their research to communities of practice *outside* of the classroom

COURSE MATERIALS & CO-REQUISITES

1. Completion of BIOL 1107 *and* prior or concurrent enrollment in BIOL 1306
 2. Laboratory notebook (a *non-spiral* bound composition book will suffice) and pen
 3. Personal Protective Equipment (PPE) needed: laboratory coat; goggles
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ACADEMIC INTEGRITY

As members of a scholarly community dedicated to healthy intellectual development, students and faculty are expected to share the responsibility of maintaining high standards of honesty and integrity in their academic work. All material for this course must be your work and no one else's. **Cheating or plagiarism in any form will not be tolerated.** This includes, but is not limited to, copying someone else's work on an assignment. Please note that all suspected instances of plagiarism or academic dishonesty will be referred to the Dean of Students' Office, in accordance with UTEP policies and procedures.

The honor code also states that all members of the UTEP community are entrusted with the responsibility to uphold and promote five fundamental values: Honesty, Trust, Respect, Fairness, and Responsibility. These core elements foster an atmosphere, inside and outside of the classroom, which serves as a foundation and guides the UTEP community's academic, professional, and personal growth. Endorsement of these core elements by students, faculty, staff, administration, and trustees strengthens the integrity and value of our academic climate.

COMMUNICATIONS

When you e-mail me, please include a proper subject, any message you are responding to, the course name and CRN, as well as your name. Please use your UTEP account to ensure the e-mail is not blocked by the university's spam filter. If you e-mail directly from the Blackboard course, essential information like the course name and section will automatically be included. I will do my best to respond to your e-mail within 24-48 hours. If you do not receive a response within this timeframe, I ask that you please re-send your e-mail. Please be sure to regularly check the e-mail account listed for you in Blackboard, as this is where all course correspondence will be sent.

CENTER FOR ACCOMMODATIONS AND SUPPORT SERVICES

Students needing special accommodations in this course must be registered with the Center for Accommodations and Support Services (CASS) Office in Room 106 of the Union East Bldg. You may contact them at (915) 747-5148 or cass@utep.edu for more information. Once you are registered with the CASS Office, please notify me as soon as possible so that we may meet to discuss appropriate accommodations, as recommended by CASS.

TECHNICAL SUPPORT

The IT Support Team can assist with Blackboard, password resets, and student e-mail accounts. Hours and other helpful information can be found at <http://www.helpdesk.utep.edu>.

COURSE GRADING & EXPECTATIONS

COURSE GRADING:

- Weekly Research Updates 15%
- Participation/Attendance 15%
- Laboratory Notebook 10%
- Research Poster 20%
- Individual Development Plan (IDP) 5%
- Personal Statement 5%
- Résumé *or* Curriculum Vitae (CV) 5%
- Community Outreach Presentation 25%

A = 90 - 100%	D = 60 - 69%
B = 80 - 89%	F = <60%
C = 70 - 79%	

ATTENDANCE

Your attendance is **required** for all laboratories, unless otherwise noted. Class will begin promptly at **4:30pm** and will run no later than **6:45pm**. If, for whatever reason, you cannot make it to class on time, please do your best to enter quietly when you do arrive. More than two absences will result in an automatic grade of "F."

LABORATORY CONDUCT

Please make every effort to be courteous to your fellow students and myself. Policies regarding responsible conduct of research and ethics are expected to be adhered to (we will discuss these in class) and are essential not only in a "local" sense but in a broader, professional sense as well. Transparency and open lines of communication in the laboratory are critical. Therefore, please report all laboratory accidents, suspected instances of research misconduct, etc. to me ASAP.

BLACKBOARD

This course makes extensive use of Blackboard® (<https://adminapps.utep.edu/blackboardlearn>). You will use Blackboard to access research techniques modules, submit assignments, download or

print additional course materials, and check your grades. Please note that your login and password are the same as you would use to access your UTEP e-mail account.

LABORATORY SCHEDULE

Wk.		Date	Laboratory Topics	Assignment(s) Due
1	T/R	Jan. 16	-- NO LABS --	-
2	T	Jan. 23	Orientation (Welcome)	-
	R	Jan. 25	Research Project "Reboot"	Weekly Update
3	T	Jan. 30	Independent Research	-
	R	Feb. 1	Independent Research	Weekly Update
4	T	Feb. 6	Independent Research	-
	R	Feb. 8	Independent Research	Weekly Update
5	T	Feb. 13	Independent Research	-
	R	Feb. 15	Independent Research	Weekly Update
6	T	Feb. 20	Independent Research	-
	R	Feb. 22	Independent Research	Weekly Update
7	T	Feb. 27	Independent Research	-
	R	Mar. 1	Poster Presentation Wkshop	-
8	T	Mar. 6	Poster Presentation Wkshop	-
	R	Mar. 8	Poster Presentations	Poster; NB
9	T	Mar. 13	~~ SPRING BREAK ~~	-
	R	Mar. 15	~~ SPRING BREAK ~~	-
10	T	Mar. 20	Careers in Science Wkshop	IDP
	R	Mar. 22	Research Internships	-
11	T	Mar. 27	Public Health Outreach (I)	Résumé; Statement
	R	Mar. 29	Public Health Outreach (II)	Outreach Plan
12	T	Apr. 3	Civic Engagement/Outreach	-
	R	Apr. 5	Civic Engagement/Outreach	Weekly Update
13	T	Apr. 10	Civic Engagement/Outreach	-
	R	Apr. 12	Civic Engagement/Outreach	Weekly Update
14	T	Apr. 17	Civic Engagement/Outreach	-
	R	Apr. 19	Civic Engagement/Outreach	Weekly Update
15	T	Apr. 24	Data Analysis Wkshop	-
	R	Apr. 26	Presentation Wkshop	-
16	T	May 1	Com. Outreach Presentations	Presentation; NB
	R	May 3	* End-of-Semester Potluck *	-

* Please note that the course drop date is March 29th.

** Disclaimer: I reserve the right to change the contents of this syllabus due to unforeseen circumstances. Students will be given notice of relevant changes through Blackboard and e-mail.