BIOL 6301-Environmental Pathobiology
CRN#12721
Fall, 2017

T/Th 12:00-1:20 pm
CRBL C304

Dr. Marc Cox 747-5429; mbcox@utep.edu
emergency contact: Lisa Norman (915) 747-5802
Office Hours: Biosciences 3.128, open door policy

Course Objectives: This course is designed so that you will have an understanding of the following learning outcomes at the completion of the course.

1. Have a broad understanding of basic toxicological principles.

2. Understand how those basic principles apply to current issues of toxicological concern.

3. Understand from where and how to obtain the necessary information to make informed decision about environmental pollutants and the risks they pose to human health.

Assessment of Course Objectives: A learning outcomes evaluation (self-assessment) will be handed out for you to complete at the same time that the course evaluation forms are completed.

Textbook: None Required. Handouts will be provided for all topics covered.

Course Activities/Assignments:

Emerging Topics: You will each select a current (within the last 5 years) research article in which the major focus is a specific environmental contaminant (chemical or microbiological). The specific article/topic selected may be something of personal interest or even something currently in the news. If needed, I can provide a list of suggested topics. You must turn in your selected article to me no later than one week prior to your assigned date. You will each give a 20-minute introductory presentation to the class covering possible sources, likely routes of exposure, distribution and metabolism within the body, and possible pathological outcomes associated with exposure to your selected contaminant. This will be followed by a journal club style presentation of your chosen article. You will each provide a one-page handout to the class summarizing the information discussed.

Grading: The emerging topics presentation is worth 20% of your final grade. Each examination is worth 20% of your final grade. Grading scale: A=90-100%; B=80-89%; C=70-79%; D=60-69%; F is <60%.

Make-up Policy: If you miss an exam or assignment you will be expected to make-up the missed assignment and/or exam no later than 1 week (7 days) from the date you return to class. Failure to do so will result in a grade of 0% for that assignment and/or exam

Absence and Drop Policy: It is your responsibility to attend class regularly. If you have a serious illness or a legitimate excuse (includes military personnel called to active duty or training) for being out-of-town, make arrangements with me before you leave. **November 3rd** is the last day students may drop with an automatic "W".

Academic Integrity Policy: UTEP's policies regarding academic integrity apply in this course. Information on this policy can be found at http://academics.utep.edu/Default.aspx?tabid=23785

Civility Statement: Please be respectful of all students' right to learn without disruptions. In line with this statement please make an active effort to keep the talking to a minimum during lectures and presentations. Also make an active effort to either turn cell phones off or turn them to vibrate mode prior to the start of class.

Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

Course Schedule:

Date		Topic	Assignment
8/29	T	Introduction to Environmental Toxicology	
8/31	Th	History and Principles of Toxicology	
9/5	T	Mechanisms of Toxicity	
9/7	Th	Risk Assessment	
9/12	T	Dose Response Assessment	
9/14	Th	Xenobiotic Absorption, Distribution, Biotransformation, and Metabolism	
9/19	T	Carcinogenesis	Emerging Topics Due
9/21	Th	Endocrine Disrupting Chemicals	
9/26	T	**EXAM #1**	
9/28	Th	**Emerging Topics –** Dioxin	
10/3	T	**Emerging Topics –** Lithium	
10/5	Th	**Emerging Topics –** Cosmetics	
10/10	T	**Emerging Topics –** Rotenone	
10/12	Th	**Emerging Topics –** Anthrax	
10/17	T	**Emerging Topics –** Terpenes	
10/19	Th	**Emerging Topics –** Chemical Warfare Agents	
10/24	T	**Emerging Topics –** Environmental Obesogens	
10/26	Th	**Emerging Topics –** Radiation	
10/31	T	**Emerging Topics –** Parabens	
11/2	Th	**Emerging Topics –** *M. tuberculosis*	
11/7	T	**EXAM #2**	
11/9	Th	**Emerging Topics –** Arsenic	
11/14	T	**Emerging Topics –** Pthalates	
11/16	Th	**Emerging Topics –** Insect Repellants	
11/21	T	**Emerging Topics**	
11/23	Th	**NO CLASS - Thanksgiving**	
11/28	T	**Active Learning – Case studies**	
11/30	Th	**Active Learning – Case studies**	
12/5	T	**Active Learning – Case studies**	
12/7	Th	**EXAM #3**	
		Final Exam TBD	