COURSE DESCRIPTION:

This course will provide the student with a basic introduction to the discipline of Toxicology. A combination of human, animal, systemic and environmental toxicology will be discussed. This course will introduce the students to basic functional processes like absorption rates, toxicokinetics, and factors that influence the ability to enhance or block absorption of toxicants. It will also introduce the students to synthetic toxicants as well as naturally occurring toxins and biotoxins, pharmacological toxicity and the risk of chemical exposure.

LEARNING OBJECTIVES:

The student will be able to:
1. Understand the types of exposure such as occupational, accidental and intentional and the pathological consequences.
2. Discuss the disposition of chemicals in the biological systems.
3. Discuss the toxicology of food additives and contaminants.
4. Understand the different types of pesticides, the various aspects of environmental pollution and poisoning with household products.
5. Understand testing of chemicals for toxicity and assessment of risk from chemicals.
6. Understand toxic responses of some organs and tissues.
7. Understand the basic mechanisms of pharmacological toxicity.

GRADERS:

The final grade will be based on the following:

1. Tests = 60 %  
   Two examinations will be given during the course of the lectures and also the last exams at the listed time. Exam formats will be multiple choice questions.
   Exam # 1 = 15 %
   Exam # 2 = 15 %
   Exam # 3 = 30 %
2. Problem Portfolio = 20%
The problem portfolio will be made up of the student’s solutions to Toxicology related problems. All students are allowed to use information from in-class discussions in their portfolios. However, the portions of the problems not discussed in class are to be answered by each student individually without any help from anyone or anything other than cited sources. Each solution in the portfolio is to include references cited page that includes all sources consulted in answering the problem. On-line sources can be used, but students are cautioned to use credible scientific sites. Students also need to be aware that the sources cited will be checked against the student’s solution to make sure that the student’s answers are not plagiarized. Any plagiarism will result in a grade of 0 for that particular problem. The intent of having students complete the problems is to measure the level at which students are capable of understanding the information covered in class, and applying that information to solving toxicological problem. These assignments are in part about right and wrong answers, but also in part about the method at which the student arrives at particular solution.

3. Literature review = 20%
• Students will be assigned articles to review and present to the class.

The following scale will be used to report grades:
A 90 - 100
B 80 - 89
C 70 - 79
D 60 - 69
F below 60

GRADE APPEALS:

As stated in the Texas A&M University-Corpus Christi University Rules and Procedures (Section B [Academic Program], Pat 13 [Students]: 13.02.99.C2 [Student Grade Appeals] and 13.02.99C2.01 [Student Grade Appeal Procedures]), a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is on the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, consult the University Rules and Procedures specified above (accessible through the University Rules and Procedures website at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html)). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.
ATTENDANCE:

Students are expected to attend all lectures. If you know in advance that you will miss an exam due to official University business, you must provide the Professor with official documentation of the absence at least fourteen days prior to missing. It is the student’s responsibility to obtain official documentation in timely fashion. Once the documentation has been verified, the Professor will decide how to handle the absence. In the overwhelming majority of cases, assignments and exams will be turned in or completed prior to the planned, official absence. Exams given outside regularly scheduled times may vary in format and content at the discretion of the faculty member. Absolutely nothing may be turned in late by anyone for any reason.

HONESTY:

As stated in the university catalog, "University students are expected to conduct themselves in accordance with the highest standards of academic honesty." Therefore, cheating will not be tolerated and will result in a failing grade for the course. **Unannounced quizzes may be given throughout the course of the semester.**

There is no provision for making up late work and/or missed exams or quizzes. A grade of zero will be entered for any late or missed exam or quiz due to an unexcused absence. The only excused absences are personal illness, immediate family medical emergency or immediate family funeral.

AMERICANS WITH DISABILITIES ACT (ADA):

Texas A&M University-Corpus Christi is committed to providing persons with disabilities an equal opportunity to access campus facilities, resources and programs. The ADA is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation for their disabilities. Support and accommodations are also available for returning veterans who experience cognitive and/or physical access issues in the classroom or on campus. Our Office of Disability Services arranges such support and academic accommodations. To make a request for aid, or for more information, call (361) 825-5816 or visit the office in Driftwood 101. It is important to contact the Office of Disability Services in a timely fashion as it will take time for them to review requests and prepare accommodations and accommodation letters.

RECOMMENDED TEXTS:


REQUIRED LABORATORY: None
Mon, June 3: Introduction to Toxicology and Syllabus Discussion  
Tue, June 4: Disposition of Toxicants  
Wed, June 5: Toxicokinetics  
Thu, June 6: Types of Exposure

Mon, June 10: Toxic Responses  
Tue, June 11: Toxic Responses  
Wed, June 12: Pharmacologic Intoxicants and Exam I  
Thu, June 13: Pharmacologic Intoxicants

Mon, June 17: Food Additives and Contaminants  
Tue, June 18: Industrial Toxicology  
Wed, June 19: Environmental Toxicology  
Thu, June 20: Biotoxins

Mon, June 24: Pesticides  
Tue, June 25: Toxicity Testing & Risk Assessment  
Wed, June 26: Household Products and Exam II  
Thurs, June 27: Forensic Toxicology

Mon, July 1: Regulatory Toxicology  
Tue, July 2: Class Presentations and Review  
Wed, July 3: Exam III  
Thu, July 4: Independence Day Holiday

General Disclaimer:
The instructor reserves the right to modify the schedule when necessary. These changes will be announced during regularly scheduled lecture periods. In case of absence during this announcement, it is the responsibility of the student to obtain the information as no effort will be made to contact students who were absent when the announcement was made.