Course Number: ESCI 5490.003  
Instructor: Thuy Fleming

Credit Hours: 3  
Semester: Spring 2013

Class Room: NRC-1101  
Meeting Time: 5:30-8:20 pm W.

Instructor's Office: NRC-1104  
Office Hours: 
Walk-in: Monday & Tuesday (12 - 1 PM) 
Other times: by appointment

Phone: 825-3055  
E-mail: thuy.fleming@tamucc.edu

Course Title: Advanced Industrial Toxicology

COURSE DESCRIPTION: This course provides a brief review on human physiology, general concepts of toxicology: dose-response relationship, interactions between the host and the agents, risk assessment. This course emphasizes the principles of toxicology specifically applicable to the interactions of human & toxic agents in industrial setting.

Course audience: Graduate students in the Environmental Science M.S. program.

Course Objectives: Successful participation and study in this course will enable students to:

1. Understand and demonstrate a fundamental knowledge on human anatomy and physiology.
2. Understand and demonstrate a fundamental knowledge on terms and concepts of Toxicology.
3. Understand and identify toxic agents that target organs (liver, blood, kidney, skin, pulmonary, nervous system, reproductive system, etc.)
4. Understand and demonstrate a fundamental knowledge on carcinogens and mutagens.
5. Understand and demonstrate a fundamental knowledge of the toxic effects of metals, pesticides, and organic solvents.
6. Do research and presentation on effects of a specific toxic agent in the workplace.
7. Train workers on toxicology effects & hazard prevention (group project)

Course Requirements:

1. Regular class attendance will be documented. Students who must miss a class are responsible for obtaining notes and instructions or assignments from other class members.
2. Quiz at every meeting after the first lecture.
3. Two examinations will be given during the semester. Students are expected to be prepared and complete these exams on the scheduled exam dates (see topic schedule.) Exams will include multiple-choice, true/false, filling in the blank, and short essay questions. Students with an excused absence from the instructor must make up the exam prior to the next class period.
   (Note: Having more than one exam on the same date does not warrant an excused absence.)
   Unexcused absences for a scheduled exam will result in a grade of “0” for that exam.
Assignment:
- Design a pamphlet to raise awareness of potential hazards of a process involving chemicals. The pamphlet must be designed on a single sheet of paper (letter size & 3 hole punched) with graphics & text printed on both sides. The topics and due dates will be assigned to you on the first meeting. Five points will be deducted from the total score for every day late in the process.
- Leadership Projects: Work with undergraduate students in your group to coach them in pamphlet assignment and term paper.

Graduate Level Presentation: Term paper and presentation: Topic choices will be announced in class.
- Term paper must be typewritten. Term paper is not limited in length; however, 10 to 12 pages of in-depth and concise narratives, not including the cover page and bibliography, are sufficient.
- Student will also prepare a PowerPoint presentation for the class. The presentation is limited to 20 minutes.

General Information:

Emergency Procedures:
1. Evacuation: Use either the east, west, or front exit and proceed to meet the class at the Harte Research Institute’s parking lot, or the Blucher’s parking lot depending on the location of the hazard.
2. Accident or Injury:
   a. Call 911 for an ambulance, provide all essential information such as the location, the type of emergency and the condition of the victim.
   b. After calling 911, call 825-4444 to inform University Police Department of the location of the victim so they can lead the emergency personnel to the location.

Make Up Exams: Make up exams will only be given for University excused absences to attend University sanctioned events (i.e. athletic teams, Health & Safety conference) or documented medical reasons. In those cases it is the responsibility of the student to arrange for scheduling of a make-up exam no later than one week after the regular scheduled exam.

Students With Special Needs: The Environmental Science Program complies with the American with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you need disability accommodations in this class, please see me as soon as possible. Please have your accommodation letter from TAMU-CC Services for Students with Disabilities Office with you when you come see me. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.) please contact the Services for Students with Disabilities Office (CCH-116, phone # Main Office: 361.825.5816, Fax: 361.825.2536, Text: 361.850.3180, Exam Services: 361.825.2259). It is important that you contact them in a timely fashion as it may take several days to review requests and prepare accommodations.

Class Conduct: All students are expected to follow proper Classroom behavior and treat other students and the instructor with respect. Disruptive behavior will cause the student to be asked to leave the class for the day. Repeated disruptive behavior will make the student subject to dismissal from the class for the semester. Cell phones and pagers will be turned off during class time. If cell phones disrupt the class, the student will be asked to leave and not return that class period.

Academic Integrity and Honesty: All students are expected to conform to college-level standards of ethics, academic integrity and honesty. By enrolling in this course, you agree to be bound by the Regulations and Procedures published in the TAMU-CC STUDENT HANDBOOK. Students are
expected to do their own work and not duplicate that of others. Duplicate work will be considered cheating and the student will receive a zero on that assignment/exam.

Grade Appeal Process: As stated in University Rule 13.02.99.C2, Student Grade Appeals, 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 upon 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, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at 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.

Academic Advising: The College of Science and Technology requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. The College’s Academic Advising Center is located in CI-350, and can be reached at (361) 825-5777

Evaluation Criteria:

1. Quizzes (20 points each) 200 points max
2. Mid Term Exam 150 points max
3. Pamphlet assignment 75 points max
4. Cumulative Final Exam: 200 points max
5. Term paper 75 points max
6. Presentation 50 points max
7. Leadership Pamphlet & Term paper projects 50 points max

TOTAL: 800 points max

An accumulated score of 720 points or greater: A
An accumulated score from 640 to 719 points: B
An accumulated score from 560 to 639 points: C
An accumulated score from 480 to 559 points: D
An accumulated score below 480: Fail