Course Number: ESCI 5490.001  Instructor: Thuy Fleming

Credit Hours: 3  Semester: Fall 2012

Class Room: CS-103  Meeting Time: 5:30-8:20 pm W.

Instructor's Office: NRC-1104  Office Hours: Thursday: 12:00-1:00pm  
                                          Friday: 12:00-1:00pm

Phone: 825-3305  E-mail: thuy.fleming@tamucc.edu

Course Title: Managing Occupational Safety & Accident Prevention Technologies

COURSE DESCRIPTION: This graduate course provides students with the knowledge of regulatory requirements of occupational safety and the skills to identify, evaluate, and recommend control measures to workplace issues regarding to health and safety issues.


Prerequisites: None

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. Recognize and identify potential health & safety hazards in the workplace and recommend corrective actions.
2. Conduct accident investigations, determine causes, and recommend corrective actions.
3. Apply techniques of accident prevention to the workplace.
4. Perform an ergonomic evaluation for a worker and his/her workstation.
5. Perform a job safety analysis and develop Safe Operating Procedures for that job.
6. Prepare and present 5-minutes safety topics to the shop workers.
7. Lead the group in assigned projects & lead the group to present one project to the class.
8. Do research on a specific workplace safety & health issue for the term paper and graduate presentation.
   - Research on potential hazards of a workplace issue such as Electrical, Ergonomic, or Ionizing Radiation Hazards. Issues will be assigned in class.
   - Research potential hazards, laws, regulations, and standards which are applicable to the issue.
   - Propose a written safety program to control hazards and ensure workplace safety.
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. 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.

3. Assignments: Topics and due dates will be announced on the first meeting.
   1) Individual project - Safety Short Presentation: Prepare and present to the class 5-minute segments on a workplace accident prevention topic. Please prepare your presentation without using powerpoint nor jargons. Visual aids or props are encouraged. The intended audience is the workers in a shop. Please anticipate questions from the audience. Topics and due dates will be announced in class.
   2) Group project – Lead the group in research & presentation.

4. 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, 8 to 10 pages (not including the cover and bibliography pages) of in-depth and concise narratives are sufficient. Student will also prepare a PowerPoint presentation for the class. The presentation is limited to 10 minutes.

General Information:

Emergency Procedures:
1. Evacuation: Use either the east, west, or front exit and proceed to 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. 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 (located in CCH-116) at 825-5816. 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 Faculty Center 178, and can be reached at 825-6094.

Evaluation Criteria:

1. Shop inspection before & after project 50 points max
2. Quizzes & reading assignment (20 points each) 200 points max
3. Safety Short - shop talk & poster (no power point allowed) 50 points max
4. Midterm exam 100 points max
5. Three group projects in class (20 points each) 60 points max
6. Leading final group projects 90 points max
7. Cumulative final exam # 2 200 points max
8. Graduate term paper & presentation 150 points max

TOTAL: 900 points max

An accumulated score of 810 points or greater: A
An accumulated score from 720 to 809 points: B
An accumulated score from 630 to 719 points: C
An accumulated score below 630: Fail