COURSE SYLLABUS

Principles of Safety Engineering
Title

OSHT 2310
Number

2 - 4 - 3
Lecture - Lab - Credit

April 27, 2012
Date

This syllabus has been reviewed and is current on the date indicated.

Prepared By      Date
Wayne Dillon/George Kezerle         April 27, 2012

Reviewed By

_________________________________________  ______________________________
Wayne Dillon
Division Director/Designee          Date

_________________________________________  ______________________________
Brenda Murrell
Curriculum Coordinator          Date

ORIGINAL ON FILE IN OFFICE OF CURRICULUM COORDINATOR
I. Instructor Information

Name: George Kezerle, OHST, CHS-III      Phone: 903-923-3314

Campus Office: 229    email: george.kezerle@tstc.edu

Office Hours: M 8:00 a.m.-5:00p.m  Advisement Hours: Posted on Office Door

Division Director: Wayne Dillon       Director email: wayne.dillon@tstc.edu

II. Class Times, Location

8:00 – 11:55 am, Monday  Section 50HA
South Building, Room 329

III. Program Outcomes

A. Graduates have the ability to develop applicable environment, health, and/or
   safety plans and programs that ensure workplace ability to comply with the
   requirements of Federal, State, local regulatory standards, and applicable
   industrial standards.

B. Graduates are proficient in evaluating equipment engineering requirements, plant
   layout techniques, fire protection systems, materials handling equipment
   specifications for a typical industrial workplace.

C. Graduates are able to develop, implement, and maintain appropriate EHS training
   and tracking records (OSHA injury and illness records as well as training records)
   as required by applicable regulators and regulations.

D. The student will able to develop and implement accident prevention forms and
   programs specific to various industries, and to investigate accidents.

E. Graduates will meet the requirements to take the National Occupational Health &
   Safety Technologist (OHST) examination administered by the Council on
   Certification of Health, Environmental and Safety Technologists.

F. Graduates have acquired life skills that will enable them to be successful in the
   workforce, including effective and accurate written and oral communication skills

IV. Course Description & Information

Methods to predict, eliminate, or reduce unsafe conditions at the design and construction
stage utilizing engineering controls. Includes methods of analysis, prioritization, and
implementation, of control measures for potentially hazardous situations in the
workplace.

V. Course Competencies

Upon completion of this course the student will be able to:

A. Identify unsafe conditions in a typical construction and/or manufacturing
   workplace. (Links to Program Outcome B, E)

B. Analyze control measures for potentially hazardous situations in the workplace
C. Select engineering controls used to eliminate or reduce unsafe conditions in a given workplace. (Links to Program Outcome B, E)

D. Analyze the safety requirements for workers with disabilities. (Links to Program Outcome A, B, & E)

E. Evaluate blueprints for unsafe conditions (Links to Program Outcome B, E)

F. Develop engineering controls for unsafe conditions in a typical fabrication layout. (Links to Program Outcome A, B, & E)

G. Demonstrate engineering principles in designing a manufacturing facility. (Links to Program Outcome A, B, & E)

VI. Learning Outcomes
The Student will:

A. Describe the safety engineering issues of a typical industrial workplace.

B. Evaluate blueprints to predict unsafe conditions for construction and other industrial sites.

C. Analyze the safety requirements for workers with disabilities.

D. Select applicable safety engineering requirements for equipment, automated lines, systems and/or processes as protective devices.

E. Employ safety engineering principles in designing a manufacturing facility.

F. Develop engineering controls for unsafe conditions in a typical fabrication layout.

VII. Assessment Method & Grading Policy

Labs (Exercises)
Notebook Required, to be graded at the end of each lab 15% A 90 – 100
Class Participation / Group Work 10% B 80 – 89
Unit Tests 10% C 70 – 79
Class Projects 20% D 60 – 69
Midterm Exam 20% F 0 – 59
Final Exam 25%

A. Makeup tests will result in an automatic letter grade reduction for that test (A to B, B to C, etc.). No makeup tests after one week of original exam date.

B. Daily/Pop Quizzes cannot be made up; students who miss these quizzes will receive a ‘0’ for that Daily/Pop Quiz.

C. All course work, (including but not limited to, assignments, worksheets, labs) turned in after the due date will receive 10% off the grade for that particular assignment or lab. That is; the student will start with 90% before grading instead of the normal 100% for the assigned course work.

D. Lab – This course will use chapter assignments/exercises found at the end of each chapter, as assigned by the instructor, for this course.

E. Unit Tests – Will consists of mastery tests from Clarity Net and ToolingU supportive On-Line course work assigned as part of this course.
1. Question and Answer
2. Practical
3. Rubrics – You will be provided with a rubric listing of the types of tasks in the practical portion of the unit tests.

F. Class Projects – You will be given guidelines and a scoring rubric to help you know what is expected for these assignments.

G. Mid-Term Exam and Final Exam – These examinations will be given at the appropriate times for Mid-Term and Final Exam as published in the class schedule provided by the instructor. These examinations will be administered online and will consist of the following types of questions:
1. Multiple Choice
2. True/False
3. Matching
4. Short Answer, fill-in the blank

H. Pop Quizzes – This type of quiz will be administered periodically to determine level of mastery of the previously presented course material. The pop quiz will consist of; multiple choice, true/false and short answer type questions.

VIII. Textbook/Reference Materials
B. Tooling U online (www.toolingu.com)
   Purchase subscriptions from campus bookstore. Each student must purchase 180 day subscription. (Required)
C. Internet access for: (Required)
   1. Moodle (Learning Management System (LMS)) access for this course.
   2. Coastal Technologies LMS system access for assigned Clarity Net Courses supplemental to this course.
   3. TOOLINGU LMS system access for assigned courses
IX. Additional Resources & Supplies  
(To be provided by student):
A.  3 Ring Binder
B.  Notebook paper
C.  Graph paper
D.  Pencils/pens
E.  Calculator, Scientific, TI-36 or equivalent
F.  Ruler, 12" with standard & metric scales
G.  Access to MS Visio PC Program

X. Class Participations Policy & Student Conduct
A. Texas State Technical College challenges students to be learners who assume responsibility for being a part of a community of scholars. Student presence and participation in the classroom is an important component of this challenge. Furthermore, as part of its mission, TSTC offers an education that prepares student for professional employment. Each student is encouraged to develop a professional work ethic that reflects responsibility, initiative, and teamwork.
B. Students are expected to attend all classes. Students who are absent from class miss opportunities to contribute to the learning environment of the classroom and are developing patterns that will not be tolerated in the professional workplace.
C. In light of the above, the student is responsible for all assigned course work and cannot be absolved of this responsibility. When enrolled in a particular course, the student is obligated to do all of the work assigned. Punctual and regular attendance is vital to the discharge of this obligation and absences, excused or not, do not alter this responsibility.
D. Students whose absences exceed 15 percent of the scheduled classes and laboratories may receive an “F” for the course.
E. Student Conduct:
   1. Students are expected to conduct themselves in a professional manner and to dress in the appropriate attire for the class being presented.
   2. Each student is expected to act responsibly and take the consequences for his/her action or inaction as appropriate.
F. Classroom Etiquette:
   1. An atmosphere of mutual respect will be expected of all within the classroom.
   2. Any open displays of prejudice, harassment, etc. will not be tolerated.
   3. Any student who disrupts the classroom will be asked to leave and will receive a zero on all work due that day and counted absent for the day.
   4. A second disruption by that student will be grounds for the student to be administratively dropped from the class and other disciplinary action will be taken as appropriate.
   5. There will be no smoking, dipping, chewing tobacco or use of profane language in the classroom.
G. Cheating / Plagiarism Policy
TSTC expects all students to engage in scholastic pursuits in a manner that is beyond reproach. Students are expected to maintain complete honesty and integrity. Any student found guilty of scholastic dishonesty is subject to disciplinary action. Scholastic dishonesty includes, but is not limited to, cheating on academic work (such as copying, bribing, or buying/selling tests), plagiarism (claiming another’s work as one’s own without acknowledgement INCLUDING Internet data), and collusion (unauthorized collaboration). See College Catalogue for additional information.

XI. Safety
All students in this course will comply with all general safety rules, which apply to the type activity in progress in each class. Specific safety instruction will be either posted in the classroom or provided directly by the instructor. Violation of course safety rules can result in grade reduction and/or other appropriate disciplinary action.

XII. Special Needs
If you are a student with a disability and would like to request special accommodations, please notify the Counseling Office. Requests should be made before the 12th class day to receive special accommodations for the present semester. Proper documentation of your disability will be required.
This is to acknowledge that I have received a copy of the syllabus for the course OSHT 2310, Principles of Safety Engineering. I understand that it is my responsibility to read and understand the syllabus and to abide by the guidelines presented therein.

Printed Name  

Signature  

Date