

Springfield Technical Community College
School of Engineering Technologies
Department of Electrical Engineering Technology
Course Syllabus

Course Title: Safety & Health in Industry

Course Number: EET-104

Course Credits: Lecture 1 cr.

Professor: Rick Jagodowski

Meeting Day/Time: M.W.F. 9:05-9:55, 9/5-10/6. **Date:** Fall 2017

Catalog Description:

This course is a cornerstone of preparation for working in an industrial environment. The course will emphasize topics and principles that can be applied in many circumstances to ensure the personal safety of oneself and others. Specific topics will include Safety Laws & Organizations, Personal Protective Equipment, Tool & Machine Safety, Safe Materials Handling, Electrical Safety & Protection, Fire Protection, Health Protection and Safe Work Practices. This course will meet for 5 weeks.

Course Description:

This lecture based course will present basic knowledge to help create and sustain a safe and healthy working environment. By applying the knowledge learned in this course it is hoped that the student will develop an awareness of safety and health concerns in their environment. Modern automated factories are a fascinating work environment but they often include electrical, mechanical, chemical and physical hazards. Being aware of them and knowing how to deal with them is critical for a safe and healthy work place.

Pre-requisites: None.

Corequisite(s): None, although EET-105 & EET-106 are recommended after completion of this course.

Student Learning Outcomes (SLO's)

Upon successful completion of this course, students will be able to:

- understand basic terminology regarding safety and health in industrial environments.
- understand the importance of safety laws and safety organizations.
- understand the need and use of personal protective equipment.
- understand the basics of electrical, fire and chemical safety & protection.
- understand fundamental hand-tool, power-tool and machine safety.
- understand techniques for safe materials handling.
- reinforce health protection and safe work practices.
- use professional written and oral communication skills.

Text & Materials:

Safety & Health, Basic Foundation Series 719, Schoolcraft Publishing , 2009. This text does not have an ISBN number and may be difficult to find other than the STCC bookstore.

The lecture content will be supplemented with handouts, web-links, pdfs, simulations and other relevant information. Most of this material will be posted on the Forums at cset.stcc.edu/forums/. Within the first two weeks of classes you will create an account and be required to use the Forums throughout the semester. Students

should regularly check the Forums at cset.stcc.edu/forums/ for current materials for EET-104. You are also expected to be able to use your STCC e-mail account.

Office Hours:

Bldg. 20 Rm. M120. Office hours posted on the door. 755-4594 E-mail: Jagodowski@stcc.edu
Other hours by appointment.

Grading Policy

*** Attendance:** Attendance is mandatory. Students absent from more than 2 classes may be removed from the class at the professor's discretion. It is the student's responsibility to make arrangements to make up any missed work. Missed work may only be made up if the professor allows. The schedule for any make up work will be at the instructor's discretion. If the student knows in advance he or she may not be in lecture it is the student's responsibility to notify the professor in advance. Attendance will be taken at each lecture session. Be sure to sign in or follow the instructor's guidelines to properly record your attendance.

*** Professionalism:** The "Professionalism" portion of the grade may be reduced due to being late to the class, "fooling around", inappropriate language or conduct in or out of class and lab, being a disruption to the educational process, having non-course related conversations during lecture/lab, or similar violations of the course rules & policies. During exams and quizzes we do not allow the use of cell phones or any device with wireless, infrared or similar communications capability.

*** Policy on course disruptions:** Students are expected to act in a respectful and mature manner. Course disruptions, loud or disruptive behavior, intimidation, violation of the policies and procedures set down in the STCC Student Handbook, or similar problems will result in the student being removed from the lecture.

Be sure to turn off all cell phones or other electronic devices before entering the lecture or lab. In many cases the professors allow cell phones during lab but not while lectures are in process. Talking, texting or causing disruptions while lecture is in process is also considered disruptive. At the professor's discretion he or she may attempt to correct the student's behavior or remove the student from the class.

The following is the STCC Code of Conduct from www.stcc.edu:

"Springfield Technical Community College recognizes that all students, as members of the college community, enjoy the freedom of speech and assembly, freedom of association, freedom of the press, right of petition and the right of due process. These rights do not come without responsibilities and respect for others in the College community. Attendance at the College is a privilege and not a right, and enrollment carries with it obligations in regard to conduct, both in and out of class. Students are responsible for knowing and understanding the contents of this Code. Students are responsible for abiding by the laws governing the College and are expected to observe standards of conduct set by the College."

*** Professional behavior:** Students are expected to act in a professional and mature manner at all times, in and out of class and lab. Improper behavior will result in a reduced grade and if not corrected may result in removal from the course.

*** Due Dates:** Late work may be depreciated by 25% every week or part of a week it is late. Solutions to homework and labs may be distributed. Once the solution is distributed no further homework will be accepted. It is the student's responsibility to be aware of all work assigned and the due dates.

*** Quality:** Submission of poor quality work will not be accepted. Submissions which do not meet minimum documentation standards set forth in class, are incoherent, or are illegible will be returned [not graded] to the student. These cases are treated as if no work was submitted.

* **Academic Honesty:** All students are assumed to do their own work. Using other's work is permitted, under some circumstances, with proper credit to the original author(s). Academic dishonesty of any manner is not tolerated. In the event it is discovered by the professor ALL PARTIES INVOLVED receive a grade of "F" [0.0]. No distinction is made between those "cheating" and those being "cheated from". If a student believes his/her work is being borrowed without consent it is her/his responsibility to report the incident. This is the only means to escape the consequences. All incidents are examined on a case-by-case basis by the professor whose decision is final.

***Homework:** Homework problems will be assigned frequently. Students are encouraged to keep their completed homework assignments in a notebook. The homework notebook may be collected at mid-semester and/or final exam time.

***Quizzes:** Approximately every 4 or 5 chapters (class days) you will be given a "quiz pack". These will be take-home assignments due the next class meeting. Each quiz pack will be graded as a series of 10 point quizzes with the actual number depending upon the chapters covered by each quiz pack.

***Exam:** There is one comprehensive final exam. The exam may be in-class, take home or a combination. It may also consist of closed book & notes or open book & notes formats. Specifics for the exam will be given at least one week before it is scheduled.

Grade Evaluation:

Lecture:	Professionalism:	20%
	Homework:	10%
	Quizzes:	30%
	Exam:	40%

Grade Determination:

Final Grade = Weighted average of assignments as specified above.

Class Organization

The course is presented in a combination lecture/lab format. Relevant questions and discussion are encouraged. Presentations may include a combination of blackboard & chalk, computer based presentations (e.g. PowerPoint) & computer simulation. Lectures and labs will include hands-on activities making use of available robotics, test & assembly equipment as well as computers and software applications. Internet research will be required for certain topics discussed in the course.

EET-104 Course Outline*

Week	Topic
1	Course Introduction, Introduction to Safety, Safety Laws.
2	Personal Protective Equipment, Chemical Safety.
3	Tool Safety, Safe Materials Handling, Machine Safety.
4	Electrical Safety & Protection.
5	Fire Protection, Health Protection, Safe Work Practices.
	Final Exam – Friday, October 6, 2017

*Note: The instructor reserves the right to modify the course outline as necessary to best serve the educational needs of the student.

NOTES:

It is important that you read and understand this syllabus! You will be asked to indicate that you have received, read and understand it. A pdf copy of this syllabus will be available on the CSET Forums.

It should be understood that the time to seek help with an academic problem is at the first sign of such a problem. Problems that are allowed to grow out of proportion are much more difficult to deal with and can often be insurmountable. Please make your needs known to me at the earliest possible time and DO NOT wait until a week before a test to seek help! Office hours are as posted or by arrangement.

Please note that at any time during the semester it may be necessary to alter the specified course outline. It is useful as a guide only and should not be taken as hard cold fact. Often during a semester, equipment failures and shortages of materials may hamper completion of a particular topic. We reserve the right to substitute, replace or delete any of the following scheduled lectures or labs.

Ethics criteria: In order to prepare students for the work place an ethical observation of each student will also be performed. Issues such as character, teamwork, appearance, language, productivity, respect, organizational skills, attitude, initiative, communication, courtesy and cooperation will be observed by the instructor. These criteria make up the *Professionalism* aspect of your grade.

Course Methodology and Philosophy

S.T.C.C. invests a considerable amount of resources into equipment for student and faculty use. As a member of the faculty, I will make use of all available teaching methods and tools. For lectures, most content will be delivered by a combination of Power Point/Computer Presentation and blackboard/whiteboard notes. Students are encouraged to actively participate by way of relevant questions and comments about the subject matter under discussion. It is my responsibility to make sure that the subject matter is presented in as clear a manner as possible. Your feedback is invaluable to my ability to accomplish this goal.

You, as the student, also have your share of responsibility:

Attendance: The scope of the material presented in this course is broad. Attendance is required to experience all the information as presented by the instructor. In addition, your input into the classroom discussion helps other students to better understand the material.

Preparation: It is your responsibility to complete all assignments, reading and written, in a timely manner. Thorough preparation will help instill greater confidence in the subject matter and will facilitate lively classroom discussions. Proper preparation for quizzes and tests is also expected.

Attitude and Behavior: It is your responsibility to make sure that your contributions to this course, and your attitude toward the people around you, are positive. Foul language and disruptive behavior will not be tolerated in this course. In addition, school property must be treated with respect at all times. This is especially true in laboratories. If you do not understand how to use a particular piece of equipment, you are encouraged to ask for assistance. You should report malfunctioning equipment immediately. Always return equipment and components to their proper locations. Leave your study or work area clean and neat for the next student.

Students with Special Needs

Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor privately to discuss your specific needs. Before any accommodations are put in place, you should contact the Office of Disability Services at 755-4785 or stop by Building 27/2nd Floor to coordinate reasonable accommodations for students with documented disabilities.