

Safety, Health, And Environment II (PTAC 2348)



Credit: 3 semester credit hours (3 hours lecture)

Prerequisite/Co-requisite: PTAC1308

Course Description

A continuation Instruction in the application of concepts presented in Safety, Health, and Environment Emphasis on emergency response concepts.

Required Textbook and Materials

1. Safety, Health, and Environment by Pearson Custom Publishing
 - a. ISBN number is 0-536-25843-0
2. Calculator

Course Objectives

Upon Completion of this course, the student will be able to:

- A. Demonstrate appropriate response to emergency situations. (SCANSC1.4, C3.3, C5.5, C7.5, C9.4, C12.5, C14.5, C15.5, C18.3, F1.5, F3.3, F4.3, F6.5, F9.4, F11.4, F13.5, F16.5, F17.5)
- B. Recognize hazardous situations for personnel, environment, and community. (SCANSC1.4, C3.3, C5.5, C7.5, C9.4, C12.5, C14.5, C15.5, C18.3, F1.5, F3.3, F4.3, F6.5, F9.4, F11.4, F13.5, F16.5, F17.5)
- C. Apply team skills in response to emergency situations. (SCANSC1.4, C3.3, C5.5, C7.5, C9.4, C12.5, C14.5, C15.5, C18.3, F1.5, F3.3, F4.3, F6.5, F9.4, F11.4, F13.5, F16.5, F17.5)

SCANS Skills and Competencies

Beginning in the late 1980's, the U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) conducted extensive research and interviews with business owners, union leaders, supervisors, and laborers in a wide variety of work settings to determine what knowledge workers needed in order to perform well on a job. In 1991 the Commission announced its findings in *What Work Requires in Schools*. In its research, the Commission determined that "workplace know-how" consists of two elements: foundation skills and workplace competencies.

Course Outline

- | | |
|---|-----------------------------|
| A. Introduction | G. Alarms and Indicators |
| 1. Introduction of faculty and students | 1. Fire alarms and shutdown |
| 2. Review syllabus | 2. Interlocks |
| 3. Review class policies | H. Process Upset Control |
| B. Natural disasters | 1. Closed Loop sampling |
| 1. Hurricanes, and storms | 2. Flares, relief valves |

Approved 07/2010

PTAC 2348
Course Syllabi

- 2. Emergency plans
- 3. Government agencies
- C. Physical and Cyber Security
 - 1. Terrorists and insiders
 - 2. Workplace violence
 - 3. Government regulations
- D. Ergonomic Hazards
 - 1. Ergonomic stress
 - 2. Lifting, working at heights
 - 3. Government and industry guidelines
- E. Environmental hazards
 - 1. Hazardous chemical classifications
 - 2. EPA regulations
- F. Hazard Controls
 - 1. Engineering, Administrative and PPE
 - 2. Why, When and How Controls are applied
- I. Administrative Controls
 - 1. Policies and procedures
 - 2. Training and Hazops
- J. Permitting Systems
 - 1. Lockout devices
 - 2. Hot work, blinding
 - 3. Scaffolding tags
- K. PPE and First Aid
 - 1. Respiratory and hearing
 - 2. Eye and face
 - 3. Foot and legware
- L. Monitoring Equipment
 - 1. Oxygen meters
 - 2. Process upset controls
- M. Emergency Response
 - 1. Fire and rescue brigades

Grade Scale

90 – 100	A
80 - 89	B
70 - 79	C
60 - 69	D
0 - 59	F

Course Evaluation

Final grades will be calculated according to the following criteria:

<i>Activity</i>	<i>Percentage</i>
Projects	10%
Quizzes	60%
Final Exam	30%

Late Penalties will be assessed on all work turned in late. 5 points per day

Course Requirements

1. Demonstrate proper procedures for handling safety hazards
2. Recognize hazardous situations
3. Use permitting systems and correct personal protective equipment
4. Use tools and procedures to respond to emergencies.

Attendance Policy

1. Missing more than 20% of classes will result in an automatic “F” for the course.
2. Absences are counted for unexcused, excused and coming to class late.
3. Missing more than 20% of a class period will count as an absence.
4. Being tardy 3 times equals 1 absence.

Course Policies

1. No food, drinks, or use of tobacco products in class.
2. No foul or harsh language will be tolerated
3. Turn off all Cell Phones during lectures
4. Headphones may be worn only upon Instructor approval
5. Do not bring children to class.
6. No Cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can and will be removed from the class for the semester. Cheating can result from expulsion from LIT.
7. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an ‘F’ in the course.
8. BACK-Ups. It is the student’s responsibility to make back-up copies of their work. Do not rely on the server to be their 100% of the time. I cannot help you if you lose your work. Remember that in order for your work to be graded, it must be in your account on the server.
9. Internet Usage
 - a. Classroom computers have access to the internet.
 - b. Student usage of the internet will be monitored.
 - c. Proper usage of the internet will be allowed. Used for classroom research or as directed.
 - d. Any unauthorized use of the internet will not be tolerated.
 - e. Improper usage of the internet, such as profanity, pornography, gambling, etc... will result in disciplinary action not limited to expulsion from LIT.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Course Schedule

PTAC 2348
Course Syllabi

Week	Topic	Reference
1	Course introduction and policies <ul style="list-style-type: none">• Lecture• Natural Disasters	Chapter 13
2	Physical & Cyber Security <ul style="list-style-type: none">• Lecture	Chapter 14
3/4	Ergonomic Hazards <ul style="list-style-type: none">• Lecture	Chapter 15
5/6	Test -1 Environmental hazards	Chapter 16
7/8	Hazard Controls & Alarm Systems <ul style="list-style-type: none">• Lecture• Test -2	Chapter 17&18
9/10	Process Upsets & Engineering Controls and Administrative policies <ul style="list-style-type: none">• Lecture	Chapters 19 & 20
11/12	Permitting Systems <ul style="list-style-type: none">• Lecture• Test-3	Chapters 21
13	PPE , First Aid and Monitoring <ul style="list-style-type: none">• Lecture	Chapter 22&23
14/15/16	Emergency Response Chapter 24 <ul style="list-style-type: none">• Test-4• Final Exam	

Contact Information:

Instructor: Mr. Donald Schnell
Office: Building: T1 Room: 111
Telephone: (409) 839-2056
E-mail: donald.schnell@lit.edu
Office Hours: 7-8 am M-F 11:30am -5pm T/TH