

Course Information

Course Title	Safety, Health and Environment
Course Prefix, Num. and Title	PTAC 1408 Safety, Health and Environment
Division	Vocational Science
Department	Process Technology
Course Type	WECM Course
Course Catalog Description	An overview of safety, health, and environmental issues in the performance of all job tasks.
Pre-Requisites	TSI satisfied in Reading or concurrent enrollment in INRW 0307
Co-Requisites	

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	4:3:2
Lab/Other Hours	
Equated Pay Hours	4
Lab/Other Hours Breakdown: Lab Hours	2
Lab/Other Hours Breakdown: Clinical Hours	Enter Clinical Hours Here.
Lab/Other Hours Breakdown: Practicum Hours	Enter Practicum Hours Here.
Other Hours Breakdown	List Total Lab/Other Hours Here.

Approval Signatures

Title	Signature	Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Additional Course Information

Topical Outline:

1.Introduction to Process Safety	One Week
2.Hazard Classification	One Week
3.Routes of Entry and Environmental Effect	One Week
4.Hazards: Gases, Vapors, Particulates, Metals, Liquids	One Week
5.Hazcom Identification	One Week
6.Fire and Explosion	One Week
7.Electrical, Heat, and Ergonomic Hazards	One Week
8.Operating Hazards	One Week
9.Personal Protective Equipment	One Week
10.Administrative and Engineering Controls	One Week
11.Regulatory Drivers: OSHA	One Week
12.Regulatory Drivers: EPA	One Week
13.Regulatory Drivers: DOT	One Week
14. PSM and Catastrophe Studies	Two Weeks

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

Describe the components of a typical plant safety and environmental program and the role of a process technician in relation to safety, health, and the environment; list the safety, health, and environmental equipment used.

Methods of Assessment:

Written exams

Hands on training

Oral Presentation

Completion of the OSHA 10-Hour General industry safety training program 21 interactive modules discussing various safety tips and procedures one should follow while in the workplace.

SKILL STANDARDS LEARNING OUTCOMES

The following list of learning outcomes are Key Activities from the Chemical/Refining Process Technician skill standards, developed by the North American Process Technology Alliance (NAPTA), and recognized by the Texas Skill Standards Board (TSSB). These outcomes have been integrated into the PTAC-1408 Safety, Health and Environment course.

1. Conduct Preventative SHE Inspections
2. Conduct SHE Incident and Hazard Investigations
3. Instruct Individuals Entering Operation Area in SHE Policies and Procedures

Required text(s), optional text(s) and/or materials to be supplied by the student:

Safety, Health, and Environment, CAPT (Center for the Advancement of Process Tech) ISBN-13: 978-0135572498
ISBN-10: 0135572495

Suggested Course Maximum:

30

List any specific or physical requirements beyond a typical classroom required to teach the course.

None

Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

Cross Disciplinary Skills (work ethic, safety, teamwork, housekeeping, independent thinking and problem solving, attitude, daily performance including preparation, computer proficiency)

Four major tests (including mid-term)

Hands on Training

Oral Presentation

Final examination

The following method is used to arrive at the final grade:

Daily Grade including Cross Disciplinary skills	10%
Four Major Tests	40%
Hands on Training	20%
Oral Presentation	10%
Final Exam	20%

A	Excellent	100-90
B	Good	89-80
C	Average	79-70
D	Poor (lowest passing grade)	69-60
F	Failure	59 and below

Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
 - Critical Thinking
 - Communication
 - Empirical & Quantitative Skills

Teamwork

Social Responsibility

Personal Responsibility

WECM Course -If needed, revise the Program SCANS Matrix and Competencies Checklist