

## **ENGY-130 SAFETY, HEALTH, & ENVIRONMENT 3 CREDITS**

### **SYLLABUS**

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#### **CATALOG DESCRIPTION**

This course is a general overview of safety, health, and environmental concepts for the process industry. The contents range from the technicians role, accidents in the work place to hazard recognition, engineering control of hazards and process hazards, and process sampling and testing.

Prerequisites: None

Semester Offered: All

#### ***COMMON STUDENT LEARNING OUTCOMES***

*Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...*

##### **BROAD AND SPECIALIZED LEARNING**

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

##### **CRITICAL THINKING**

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

##### **CULTURAL AND CIVIC ENGAGEMENT**

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

##### **EFFECTIVE COMMUNICATION**

Students will exchange ideas and information with clarity in multiple contexts.

##### **INFORMATION LITERACY**

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

##### **INTEGRATING TECHNOLOGIES**

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

#### **COURSE LEARNING OUTCOMES**

*Upon successful completion of the course, the student will be able to...*

1. Recognize the Safety, Health, & Environmental evolution and how human error has contributed to accidents and injuries in the process industry workplace.

2. Identify and recognize the types of hazards in the process industry workplace.
3. Recognize the additional hazards (fire, pressure, steam, electricity, vibration, temperature, sampling) employees are exposed to in the process industry workplace.
4. Identify different forms of engineering and administrative controls to minimize hazard exposure, and when these controls are not effective then know what personal protective equipment is used to meet the HAZCOM and process Safety Management standards of OSHA.
5. Identify and define different regulatory requirements for OSHA, HAZWOPER, DOT, and EPA.
6. Identify some other hazards which may be encountered in the workplace.