

## **SAFE-2520 ENVIRONMENTAL MANAGEMENT 2 CREDITS**

### **SYLLABUS**

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#### **CATALOG DESCRIPTION**

This course introduces environmental management issues, programs, and regulations. An in-depth look is provided for these specific topics: Air Pollution Control and Mitigation, Water and Wastewater, Solid Waste, Hazardous Waste, Hazardous Materials Spills and Responses, and various management systems for environmental management.

Prerequisites:

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. Appraise environmental regulatory processes and discover why they are involved in environmental management
2. Apply principles of ecological regulatory programs to environmental management

3. Assess risk analysis, risk assessment, and risk management as it relates to the environment
4. Examine the four primary areas of environmental management
5. Explain the Federal Clean Air Act as the foundation for all air pollution control and mitigation programs
6. Analyze the basic scientific concepts of solid and hazardous waste management
7. Evaluate the environmental laws and regulations pertinent to water and wastewater management
8. Describe the fundamental science and regulatory requirements applicable to hazardous material spills and responses
9. Describe the environmental issues and the need for air pollution control and mitigation
10. Identify the regulatory and compliance issues for controlling and preventing air pollution among industrial settings
11. Summarize the control technologies used in industrial settings and the various methods for controlling pollutants
12. Identify the safety and health issues for landfills, recycling facilities and waste management
13. Recognize the criteria for identifying the characteristics of hazardous waste
14. Perform a hazard assessment and how to conduct responses to hazardous spills or releases
15. Describe the basic components of Environmental Management Systems (EMS) and the cultural and economic benefits of implementation of an EMS