DEPT. Biofuels Technology                  COURSE NUMBER:  RNEW 1107

NUMBER OF CREDITS:  2

COURSE TITLE:  Industrial Safety

CATALOG DESCRIPTION : This course introduces workplace safety concepts as they are related to federal and state agencies and regulations. Topics covered in the course include recognition and identification of safety issues, governing agencies and industry organizations, and details about voluntary standards.

AUDIENCE : This course is designed for any individual that would like to increase their knowledge about safety standards and applications in the workplace.

FULFILLS MN TRANSFER CURRICULUM AREA(S) *(Leave blank if not applicable)*
Area:   by meeting the following competencies:
Area:   by meeting the following competencies:
Area:   by meeting the following competencies:

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE: None

LENGTH OF COURSE : One semester

THIS COURSE IS USUALLY OFFERED:
Every other year  ☐     fall X     spring X     summer ☐     undetermined ☐

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT: The academic objectives of this course are:
   a. To increase student knowledge regarding the common safety issues that are associated with workplace safety
   b. To recognize types of hazards and their effects in the workplace
   c. To identify and understand hazard controls
   d. To increase knowledge about governing and voluntary safety standards.

2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:
   a. Demonstrating their ability to identify workplace hazards
   b. Understanding the potential effects of workplace hazards
   c. Understanding how, when, and why hazard controls are applied
3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:
   a. Interactive participation in on-line classroom discussion
   b. Oral and written communications with faculty and fellow students.

4) HUMAN DIVERSITY: This course will help students recognize, understand, and appreciate human diversity through:
   a. Participation in the on-line discussions
   b. Recognizing safety constraints for some individuals and for some environments.

TOPICS TO BE COVERED:
• Types of Hazards and Their Effects
• Recognizing Chemical Hazards
• Recognizing Biological Hazards
• Equipment and Energy Hazards
• Fire and Explosion Hazards
• Pressure, Temperature, and Radiation Hazards
• Working Area Hazards
• Engineering Controls as They Relate to Workplace Safety
• Administrative Controls as They Relate to Workplace Safety
• Permitting Systems
• Personal Protective Equipment and First Aid

LIST OF EXPECTED COURSE OUTCOMES:
Upon completion of this course, you should be able to complete the following:
• Identify the common safety issues that are associated with workplace safety
• Realize the importance of practicing safe work habits
• Identify good housekeeping practices that promote workplace safety
• Look at safety concerns associated with proper use of tools, ladders, and energy sources
• Recognize ergonomic hazards
• Recognize environmental hazards

LEARNING/TEACHING TECHNIQUES used in the course are:
☐ Collaborative Learning  ☑ Problem Solving
☑ Student Presentations  ☐ Interactive Lectures
☐ Creative Projects  ☐ Individual Coaching
☑ Lecture  ☐ Films/Videos/Slides
☐ Demonstrations  ☐ Other (describe below)
☐ Lab

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:
☑ Reading  ☑ Tests  ☑ Individual Projects
☐ Oral Presentations  ☐ Worksheets  ☐ Collaborative Projects
☑ Textbook Problems  ☐ Papers  ☐ Portfolio
☐ Group Problems  ☐ Term Paper
☐ Other (describe below)

EXPECTED STUDENT LEARNING OUTCOMES:
Upon successful completion of this course, students will be able to:

- Identify workplace hazards
- Realize the effects of workplace hazards
- Understand some of the OSHA Standards that many industries are required to follow and enforce.
- Recognize the social, economic, and environmental benefits and concerns that relate to safe practices in the workplace.

The information in this course outline is subject to revision

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

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