Faculty is required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

DEPT.: Wind Energy Technology COURSE NUMBER: ELWT 2110

NUMBER OF CREDITS: 3 (2 lecture credits & 1 lab credit)

COURSE TITLE: Turbine Siting and Construction

CATALOG DESCRIPTION: Introduces students to the various aspects of wind turbine and wind farm siting, construction and commissioning. Students will be engaged in observation and discussions on the use of heavy equipment such as cranes, rigging and tower assembly. Students will analyze and discuss all the events leading to a Wind Tower Production facility being brought on-line.

AUDIENCE: Wind Energy Students

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: NA

LENGTH OF COURSE: 1 Semester

THIS COURSE IS USUALLY OFFERED:
Every other year  fall  spring  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. The student will be able to identify and understand the development of a wind farm
   b. The student will be able to understand siting and rigging for construction of a wind farm

2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:
   a. Understanding the steps to developing a wind farm
   b. Understand the construction of a wind farm
   c. Classroom discussions

3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:
   a. Signing of or developing different documents at different stages of a wind farm
   b. Overall class participation
4) HUMAN DIVERSITY: This course will help students recognize, understand, and appreciate human diversity through:
   a. Working with and discussion with others during class
   b. By being able to work with others having hands on with rigging and operation of equipment

TOPICS TO BE COVERED:
   SAFETY BEING NUMBER ONE!!!!
The use of different rigging options and hands on equipment use
Siting development of a wind farm

LIST OF EXPECTED COURSE OUTCOMES:
   Students will be able to understand the development of a wind farm and also be able to have hands on for rigging and equipment use
   Students will understand how IMPORTANT SAFETY is always important at a wind farm.

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                hands on use for outdoor construction equipment

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:
   The student will understand how a wind farm is developed and constructed.

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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