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 1150

NUMBER OF CREDITS: 2 (2 lecture credits)

COURSE TITLE: Wind Turbines

CATALOG DESCRIPTION: Presented will be turbine types, their development and their current status. The evolution of current models and sizes offered by existing companies will be traced to earlier models/sizes. The operating experiences, track record and the number of turbines in operation will be evaluated for the major players in the industry. Students will be expected to carry our research and present reports on selected turbine companies.

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 different wind turbines
   b. The student will be able to identify different companies in the industry
   c. The student will be able to understand the evolution of the wind industry

2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:
   a. Complete research of wind industry companies
   b. Classroom discussions
   c. Understand the basics of a wind turbine parts

3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:
   a. Their own class presentation
   b. Overall class participation
4) HUMAN DIVERSITY: This course will help students recognize, understand, and appreciate human diversity through:
   a. Working with others and discussion with others during class
   b. The different thoughts of everyone associated with class

TOPICS TO BE COVERED:
   The basics of a wind turbine
   Different companies in the wind industry

LIST OF EXPECTED COURSE OUTCOMES:
   Students will be able to understand the evolution of the wind industry and wind turbines
   Students will gain the confidence of discussing the wind industry

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
- Oral Presentations
- Individual Projects
- Textbook Problems
- Collaborative Projects
- Group Problems
- Portfolio
- Term Paper
- Other (describe below)

EXPECTED STUDENT LEARNING OUTCOMES:

   The student will be able to understand the basics of the wind turbine, the wind industry, and be able to take part in discussions with confidence.

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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