

Hagerstown Community College
OFFICIAL MASTER SYLLABUS DOCUMENT

COURSE: AET 108 Wind Energy Installation

Credits: 3

INSTRUCTOR:

SEMESTER/YEAR: Spring 2018

COURSE DESCRIPTION:

This class will provide students with the skills needed enter the field of wind turbine installation. Students will learn the principles behind turbine design and operation. Students will learn how evaluate a site and specify the components of wind energy system. Students will be able to install, startup, and test a typical wind energy system. Students will be able to trouble-shoot and maintain a typical wind energy system. Hands-on labs are included. Prerequisites: AET 101, AET 102, INT 109. Three credits.

TEXTBOOK:

Wind Turbine Maintenance Level 1 Volume 2 Trainee Guide NCCER Level 1 Volume 2
Pearson Publishing 13: 9780132718967

Class Methods:

The class will be taught using lecture, discussion, laboratory projects, research assignments and group activities.

STUDENT LEARNING OUTCOMES

On successful completion of this course, students should be able, at entry level, to:

- Specify and install a typical wind energy system.
- Collect and evaluate data from a wind energy system.
- Start up a wind energy system.
- Maintain and trouble-shoot a wind energy system.
- Work safely and efficiently.
- Calculate basic electrical load.

MINIMUM CLOCK HOURS REQUIRED FOR THIS COURSE

Total Hours of Coursework:

To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute “academic” hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of coursework per credit.

For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework.

Assignment/Assessment	Clock Hours
In-class Instruction	45
Textbook Chapter Readings	15 hours
Study of Manuals for Hands-on Activities	15 hours
Chapter Review Questions and Answers	15 hours
Research Assignments	15 hours
Exam Preparation	20 hours
	Total hours=125 hours

Services for Students with Disabilities: Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at dss@hagerstowncc.edu or at 240-500-2530